I. DEVELOPMENT GOALS

I. Development Goals

Planning implies the efficient use of a country's resources in accordance with certain rationally-determined priorities for the attainment of nationally-cherished goals. Since goals are culturally, historically and politically oriented, a country's development plan essentially reflects its fundamental values and principles.

The fundamental values and principles which guide Saudi Arabia's balanced development are expressed in the following goals:

- ☆ Maintain the religious and moral values of Islam.
- ☆ Assure the defense and internal security of the Kingdom.
- ☆ Maintain a high rate of economic growth by developing economic resources, maximizing earnings from oil over the long-term, and conserving depletable resources.
- ☆ Reduce economic dependence on export of crude oil.
- ☆ Develop human resources by education, training, and raising standards of health.
- ☆ Increase the well-being of all groups within the society and foster social stability under circumstances of rapid social change.
- ☆ Develop the physical infrastructure to support achievement of the above goals.

The Development Plan, 1395-1400 provides for further advance toward the social and economic goals listed above while maintaining the religious and moral values of Islam. These goals are elaborated and placed within the context of Saudi Arabia's internal policies in the discussion that follows.

1. **High Rate of Economic Growth**

The human and natural resources which God has given the Kingdom will be efficiently used to maintain a high rate of economic growth and to reduce the country's dependence on a single depletable asset, oil.

The Government recognizes that to achieve this goal requires diversifying the economy by encouraging expansion in agriculture, industry, and mining, with particular emphasis on petrochemical and mining industries in which the Kingdom enjoys a comparative advantage.

The Government will encourage the expansion of the private sector in these activities through providing the necessary facilities and incentives.

2. **Development of Human Resources**

All the people of Saudi Arabia will have access to educational and training facilities at all levels, and health services will be provided throughout the Kingdom.

Education and training — free of charge at all levels — will continue to expand and improve in quality, with the aim not only of eradicating illiteracy and promoting learning, but also to teach new skills, to stimulate research and the use of production and distribution techniques, and to inculcate the spirit of honest hard work.

To achieve the full potential of the Kingdom's human resources requires the creation of a healthy social and physical environment combined with an adequate free medical service throughout the country in fully-equipped hospitals, dispensaries, and health centers.

An economic climate will be created that enables the individual to find gainful employment in accordance with his capabilities, to depend on himself in earning his living, and to contribute to the development of his country.

3. **Social Well-being**

Social services will be developed to ensure that every group and individual, however disadvantaged, enjoys an adequate, dignified minimum standard of living; levels above this minimum will continue to be the reward of individual effort and achievement.

Towards realizing this goal, the Government intends to expand and intensify its programs in the following ways:

- ☆ Make essential goods, especially staple food items, available at stable and reasonable prices, subsidizing prices if necessary, with due regard to the effect on domestic production.
- ☆ Provide free education at all levels and create a clean and healthy environment with adequate medical facilities available free of charge.
- ☆ Arrange on easy terms suitable housing constructed at Government initiative for those with limited income, and encourage construction by others through granting interest-free loans with some subsidy; the ultimate goal is that every Saudi family owns its own house.
- ☆ Extend social security and other benefits, including assistance payments for the needy.
- ☆ Make credit available free of interest to those with limited incomes having temporary financial difficulties.

4. **Physical Infrastructure**

The Government will continue to expand and improve the physical infrastructure — transportation, communications, municipalities, and housing — as required to support achievement of the above economic and social goals.

5. **Economic Freedom Within Social Welfare**

The economic system of Saudi Arabia is based on the principles of free economy where a substantial part of the production and distribution of goods and services is left to individuals and groups enjoying freedom in their dealings and transactions. While the Government of Saudi Arabia will uphold the market system and encourage the private sector to play a fundamental role in the accelerated growth and development of the country, it will take all necessary measures to make the market system conform to the larger social interests of the country.

II. THE ECONOMY AND SOCIETY OF TODAY

II. The Economy and Society of Today

The general objectives of economic and social development policy for Saudi Arabia in the first development plan were to maintain its religious and moral values, and to raise the living standards of its people, while providing for national security and maintaining economic and social stability. This chapter reviews progress toward these goals, reports the growth of the labor force and of the economy over the period, and sets out the highlights of sectoral development under the first plan.

A. DEVELOPMENT PROGRESS

The most important features of development over the past five years have been the success achieved, through the Organization of Petroleum Exporting Countries (OPEC) and the Organization of Arab Petroleum Exporting Countries (OAPEC), in raising revenues from oil, and the acquisition of an increasing share of the ownership of the oil production industry of the Kingdom.

The first development plan was prepared in the prospect of severe financial constraint. Revenues began to improve during the first year of the plan and, by the second year, it became clear that financial resources should no longer be considered a constraint on development. A policy was then adopted of accelerating implementation of the plan and expanding it with new programs and projects that were consistent with the objectives of the plan and were economically and socially feasible.

The financial constraint existing when the budget for the first year of the plan was prepared led to severe restrictions being placed on new projects. As a result, growth of the non-oil-sectors in 1390–91 showedonly a modest improvement over the depressed rate of growth of the previous year and was well below target. This was more than offset by higher-than-expected growth in oil production and the first of a series of increases in posted prices.

The policy of accelerating plan implementation began to make a modest impact on the non–oil sectors in the second year of the plan and by the third the target growth rate for these sectors was being exceeded. Growth continued to accelerate in the fourth and final years of the plan and, during this last year, began to add domestic inflationary pressures to the inflation already being imported in the form of rising prices for food and industrial supplies. Meanwhile, oil production increased to almost 8.5 million barrels per day in 1974 and oil prices and revenues were raised by a series of increases culminating in a posted price of US $ 10.46 per barrel (Arabian Light — Ras Tanura) established on 1 November, 1974.

Progress under the first plan has been mixed. Many targets have been achieved and some have been exceeded, for instance, in girls' education and some other educational programs. Targets in some sectors, notably telecommunications, were not set high enough in relation to demands for services and were raised during the plan. Other targets have not been met, in particular those for hydrocarbon-based industry; and some programs, including the intra-Kingdom telecommunication network and the national health network, have fallen

behind schedule. Others again, for example, road construction targets, were found to be unrealistic to implement in the time given.

Some of the difficulties encountered in meeting targets were expected and mentioned in the plan, in particular, problems relating to manpower and the uncertainties associated with the establishment of large-scale hydrocarbon-based industrial enterprises.

Many of the programs completed or in progress during the first plan will greatly assist implementation of the second Plan; among these are the population census, the national transport survey, regional socio-economic and physical planning studies, the human resources development study, the Jubail industrial complex study, and numerous feasibility and design studies at the sectoral and program levels.

B. GROWTH OF THE LABOR FORCE

A complete census or the Kingdom's population and housing was conducted in Shaban 1394, and the results are expected in 1395. It will then be possible to prepare an up-to-date profile of Saudi Arabia's population and labor force including analysis of participation rates, regional populations, urbanization and migration, and the structure of employment by occupational group and economic activity. Meanwhile, the analysis of the growth of the labor force presented below has been based largely on a demographic survey of 1386, subsequent analyses by the Central Department of Statistics, and data collected by various ministries for their specific purposes.

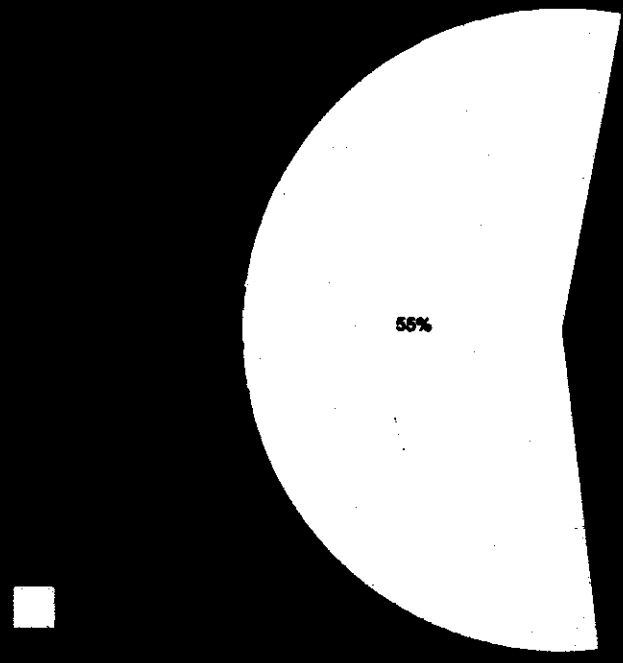
During the first plan period, Saudi Arabia's labor force has grown by an estimated 3.8 percent each year, from 1,328,000 in 1390 to 1,600,000 in 1395. The growth rate for Saudis was lower than for non-Saudis–3.7 percent compared with 4.2 percent–but Saudis still comprise about 80 percent of the labor force in 1395. The proportion of the total Saudi population participating in the labor force rose from 22.2 to 23.3 percent over the five years of the first development plan. The participation rate for Saudi men changed from 43.3 to 45.1 percent, and for Saudi women it rose from 0.5 to 1.0 percent. The rate for non-Saudi men grew very slightly, from 67.3 to 67.4 percent and for non-Saudi women from 3.6 to 3.8 percent.

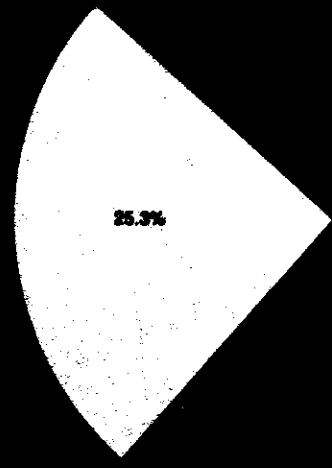
The large group of adults outside the labor force is composed mostly of women but includes also people in school, those who are ill or disabled, the retired, and the like.

Interregional Shifts of Workers

Migration of both Saudis and non-Saudis over the past ten years has lessened somewhat the dominance of the Western and Central regions as workers moved into the Eastern Region: immigrants with less than one year of residence in a region are predominantly in the Eastern Region. However, most of these are Saudi migrants; non-Saudis are still moving into the Western, Central, and Eastern regions.

A comparison of Saudi and non-Saudi workers in private establishments, who have less than one year of residence in each region, is shown in Figure II-1. Non-Saudi immigrants are about double the number of Saudi immigrants working in private establishments during the 1392-93 Survey of Employees. However, the proportion of the Saudis working in the Eastern Region is 55 percent compared with only 25.3 percent of the non-Saudi immigrants located in the Eastern Region.


55%


25.3%

Sources of Foreign Workers by Occupational Group

Foreign workers entering the Kingdom are an important source of labor at all occupational levels. Data on workers entering from other Arabian peninsula countries are unreliable since this group is not required to obtain work permits. Data from the Ministry of Labor indicate that other foreign workers entering the private sector (in 1393) were predominantly skilled operational and equipment workers, and technical and scientific workers. Figure II-2 shows the occupational structure of the foreign workers entering the private-sector labor force in 1393. Arabs from outside the Peninsula hold the largest share of the jobs in four of the seven categories: skilled operational and equipment, service, sales, and agricultural. Europeans dominate two other categories: technical and scientific, and management. Asians account for the largest share of the office workers.

Employment Changes by Economic Activity

The structure of the labor force is changing, as shown in Table II-1. Since 1390 there has been a marked decline in the agriculture sector and a sharp rise in the construction sector. The agricultural sector had a 40.4 percent share of total employment in 1390 but at present accounts for only about 28 percent. In contrast, the construction sector more than doubled and now accounts for 20.6 percent of the Kingdom's employment. Total private-sector employment grew at an average annual rate of 6.4 percent over the first plan while the public sector grew at 8.4 percent Total employment in the Kingdom increased by about 418,300 in the past five years—an average annual rate of 6.6 percent.

Wages are rising more rapidly in the private sector than in the government sector. The last two government wage increases were in 1393 and at the beginning of 1395. The first increase averaged about 15 percent. In 1395, the raise was 30 percent on salaries not exceeding SR 1,000 per month, 26 percent on salaries not exceeding SR 2,000 and 20 percent on salaries above SR 2,000 per month.

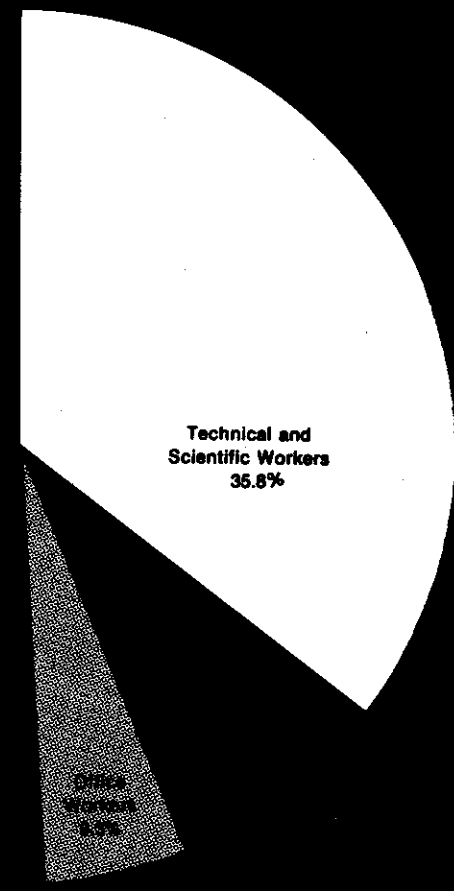

Technical and
Scientific Workers
35.8%

Table II-1
EMPLOYMENT BY ECONOMIC ACTIVITY, 1390 AND 1395

Activity	Number Employed (thousands) 1390	1395	Percent Change 1390-95	Percent Distribution 1390	1395
Agriculture, fishing					
Settled, fishing	311.9	311.2	(0.2)	28.3	20.5
Nomadic	133.9	114.9	(14.2)	12.1	7.5
	445.8	426.1	(4.4)	40.4	28.0
Mining and quarrying					
Crude petroleum, natural gas	12.0	19.2	60.0	1.1	1.3
Other	13.7	26.4	92.7	1.2	1.7
	25.7	45.6	77.4	2.3	3.0
Manufacturing					
Petroleum refining	1.4	2.1	50.0	0.1	0.1
Other	34.7	44.4	28.0	3.1	2.9
	36.1	46.5	28.8	3.2	3.0
Utilities	12.2	18.3	50.0	1.1	1.2
Construction	141.5	314.2	122.0	12.8	20.6
Commerce					
Trade, restaurants, hotels	114.3	191.7	67.7	10.4	12.6
Finance, insurance, real estate, business services	15.9	19.3	21.4	1.4	1.3
	130.2	211.0	62.1	11.8	13.9
Transport, communications, storage	62.1	103.2	66.2	5.6	6.8
Community, social and personal services	137.5	188.4	37.0	12.5	12.4
Subtotal private sector	991.1	1,353.3	36.5	89.8	88.9
Public Administration*	60.8	85.2	40.1	5.5	5.6
Education	38.5	62.5	62.3	3.5	4.1
Health	13.4	21.1	57.5	1.2	1.4
Subtotal public sector	112.7	168.8	49.8	10.2	11.1
Total	1,103.8	1,522.1	37.9	100.0	100.0

* Includes civilian Defense employees.

C. GROWTH OF THE ECONOMY

The first development plan states that the Kingdom's national policy objectives will be achieved by:

- ☆ Increasing the rate of growth of gross domestic product.
- ☆ Developing human resources.
- ☆ Diversifying sources of national income and reducing dependence on oil.

The first of these goals has been achieved beyond all expectations. In 1389-90, the year prior to the first plan, gross domestic product (GDP) at market prices was SR 17,149 million in current prices (excluding import duties). In 1392-93, just three years later, GDP was SR 39,952 million.

In terms of constant prices, the growth rate in GDP increased from 13.1 percent in 1389-90 to an average annual compound rate of 20.5 percent during the first three years of the development plan.

With respect to the third goal listed above, the contribution to GDP by the non-oil sectors of the economy stood at SR 7,802 million at current prices in 1389-90 and reached SR 11,857 million in 1392-93. The combined real growth of these sectors leaped from 3.9 percent in 1389-90 to an average annual rate of 9.9 percent over the next three years. Thus, despite the increasing dominance of oil, the increase in the rate of growth was relatively higher in the total of the non-oil sectors.

From the information currently available, it is clear that 1393-94 and the current year, 1394-95, will show substantially larger increases in both non-oil and total GDP. To bring the picture of the Kingdom's economy up-to-date, the Central Planning Organization has estimated value-added, by individual sector of industrial origin, to derive GDP for these last two years in current prices and in constant 1394-95 prices.

Size of the Economy

The data on GDP presented in Tables II-2, II-3, and II-4, indicate the magnitude of the changes anticipated during the complete period of the first plan. They also provide a base for the second plan projections discussed in the next chapter.

As already noted, GDP in current prices grew from SR 17,149 million in 1389-90 to SR 39,952 million in 1392-93. While this is a staggering increase in just three years, the GDP estimates for 1393-94 and 1394-95 are even more dramatic — SR 95,022 million and SR 148,717 million, respectively. GDP per capita is estimated to have risen from SR 3,185 in 1389-90 to SR 23,980 in 1394-95.

Table II–2
GROSS DOMESTIC PRODUCT IN CURRENT PRICES, 1390–95
(SR Millions at Producers' Values)

	1389–90	*1390–91*	*1391–92*	*1392–93*	*1393–94*	*1394–95*
Private						
Agriculture	984.1	1,015.5	1,058.7	1,138.7	1,243.1	1,409.0
Crude petroleum and natural gas	8,106.3	12,581.3	16,931.5	26,284.3	74,634.0	121,232.0
Other mining and quarrying	46.7	50.3	58.7	90.4	125.8	175.3
Petroleum refining	1,240.9	1,474.2	1,441.6	1,810.8	5,215.8	7,494.7
Other manufacturing	431.2	483.6	543.0	617.1	738.1	901.8
Electricity, gas, water, and sanitary services	273.1	297.9	302.2	319.1	353.6	333.3
Construction	933.9	1,007.0	1,173.8	1,808.9	2,791.7	4,362.0
Wholesale and retail trade, restaurants, and hotels	1,007.5	1,067.5	1,177.0	1,553.5	2,037.9	2,580.0
Transport, communications, and storage	1,242.5	1,479.3	1,567.4	2,121.3	2,787.6	3,637.8
Ownership of dwellings	661.0	727.0	800.0	1,000.0	1,293.6	1,636.7
Finance, insurance, real estate, and other business services	354.7	376.6	411.4	522.5	681.8	895.2
Community, social, and personal services	238.3	265.4	297.1	338.9	410.7	522.4
Less imputed bank service charges	(46.0)	(49.6)	(50.0)	(51.0)	(56.7)	(63.0)
Total private	15,474.2	20,776.0	25,712.4	37,554.5	92,257.0	145,117.2
Government						
Public Administration	657.8	693.2	827.6	934.9	1,055.3	1,291.4
Education	378.4	414.9	501.4	621.9	735.5	1,026.8
Health	89.3	98.2	102.1	136.7	160.9	256.5
Subtotal	1,125.5	1,206.3	1,431.1	1,693.5	1,951.7	2,574.7
Defense	549.5	584.5	641.1	704.0	813.6	1,025.4
Total government	1,675.0	1,790.8	2,072.2	2,397.5	2,765.3	3,600.1
GROSS DOMESTIC PRODUCT (excluding import duties)	17,149.2	22,566.8	27,784.6	39,952.0	95,022.3	148,717.3
Import duties	246.0	340.1	400.0	463.5	550.0	82.7
GDP (at market prices)	17,395.2	22,906.9	28,184.6	40,415.5	95,572.3	148,800.0
Summary						
Private sector						
Oil	9,347.2	14,055.5	18,373.1	28,095.1	79,849.8	128,726.7
Non-oil	6,127.0	6,720.5	7,339.3	9,459.4	12,407.2	16,390.5
Government sector	1,675.0	1,790.8	2,072.2	2,397.5	2,765.3	3,600.1
Total non-oil	7,802.0	8,511.3	9,411.5	11,856.9	15,172.5	19,990.6

Sources: The Central Department of Statistics is the source of the data for 1389–90 through 1392–93; all subsequent data are projections by the Central Planning Organization. The CPO has made some minor adjustments in the estimates for the government sectors throughout the series that have not yet been reviewed or approved by CDS.

Table II-3
IMPLICIT PRICE DEFLATORS
(1394–95 = 100.00)*

	1389–90	*1390–91*	*1391–92*	*1392–93*	*1393–94*
Private					
Agriculture	83.33	83.14	84.02	87.16	91.67
Crude petroleum and natural gas	15.53	19.69	21.15	26.24	67.73
Other mining and quarrying	68.97	71.08	73.21	80.55	89.66
Petroleum refining	20.28	22.06	22.41	26.64	73.08
Other manufacturing	83.33	83.33	83.33	85.84	91.67
Electricity, gas, water, and sanitary services	153.85	153.85	141.49	128.85	123.08
Construction	50.00	52.60	55.75	64.80	80.00
Wholesale and retail trade, restaurants, and hotels	68.97	70.03	70.83	78.93	90.84
Transport, communications, and storage	68.97	69.51	69.99	79.14	89.65
Ownership of dwellings	54.05	56.71	59.08	68.65	83.78
Finance, insurance, real estate, and other business services	58.82	61.48	64.09	73.21	85.29
Community, social, and personal services	68.97	72.34	75.39	81.38	88.06
Less imputed bank service charges	66.67	69.32	72.47	81.15	90.00
Total private	22.93	25.84	26.63	31.47	70.16
Government					
Public Administration	71.43	73.09	75.25	80.86	86.90
Education	71.43	74.51	78.57	82.46	86.53
Health	74.07	75.38	77.17	81.40	85.86
Subtotal	71.63	73.76	76.52	81.48	86.69
Defense	71.43	73.09	75.25	80.86	86.90
Total government	71.57	73.53	76.12	81.30	86.75
GROSS DOMESTIC PRODUCT (excluding import duties)	24.56	27.24	27.98	32.68	70.55
Import duties	71.43	73.09	75.25	80.86	86.90
GDP (at market prices)	24.79	27.50	28.23	32.90	70.63
Summary					
Private sector					
Oil	16.03	19.91	21.36	26.27	68.05
Non-oil	66.77	68.42	69.68	76.60	87.51
Government sector	71.57	73.53	76.12	81.30	86.75
Total non-oil	67.75	69.43	71.00	77.51	87.37

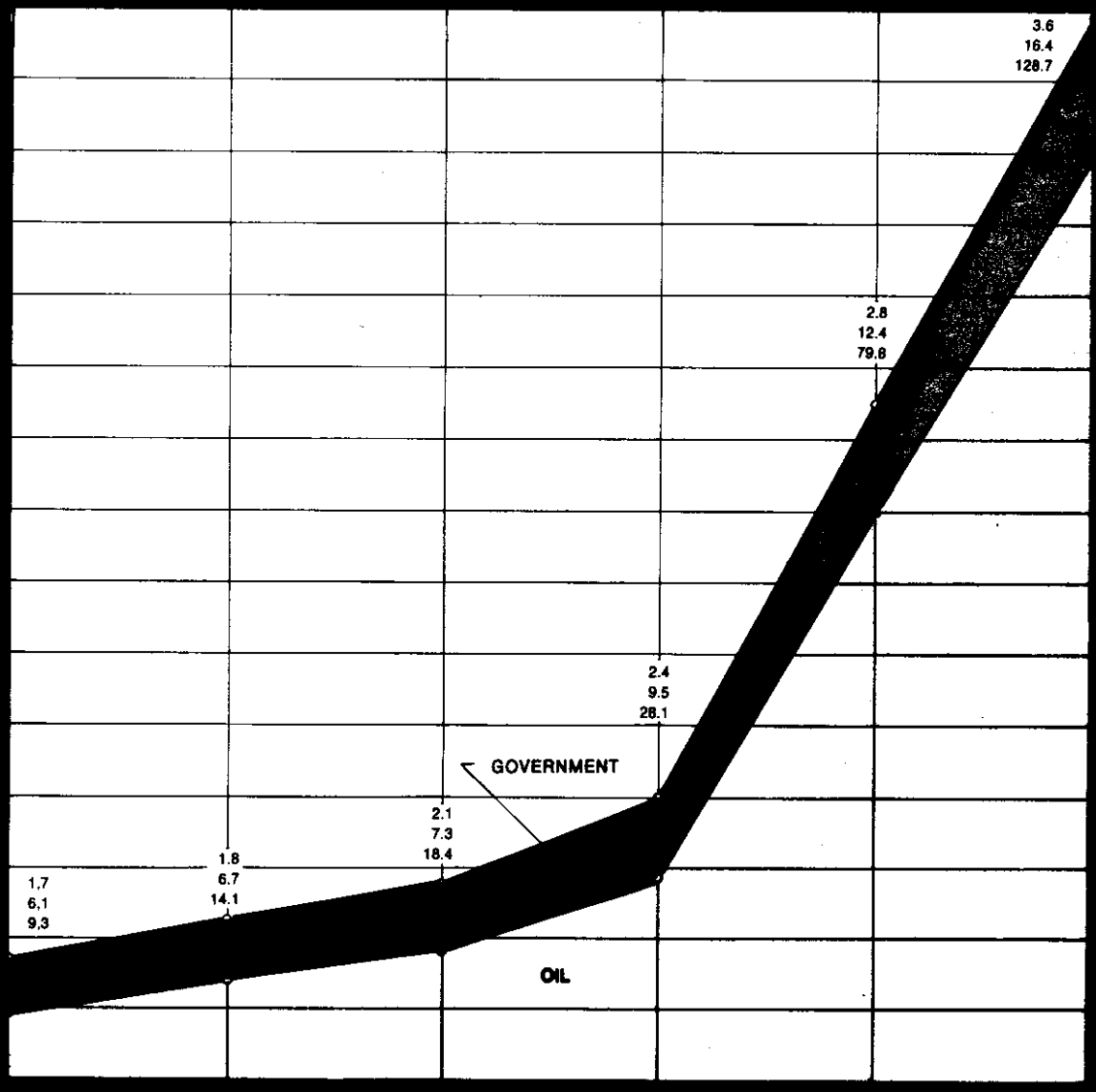
* For some sectors the CDS does not have the information necessary to construct deflators with all the desired characteristics. In these instances, substitute estimating equations have been used that may, on occasion, yield suspect results. Surveys will be conducted in the near future to improve the quality of this series. Also, in some instances the deflator was derived from given absolute estimates in current and constant prices and, because of rounding, the results are not exactly reversible.

Sources: As previous table.

Table II–4
GROSS DOMESTIC PRODUCT IN CONSTANT 1394–95 PRICES, 1390–95
(SR Millions at Producers' Values)

	1389–90	*1390–91*	*1391–92*	*1392–93*	*1393–94*	*1394–95*
Private						
Agriculture	1,181.0	1,221.4	1,260.1	1,306.4	1,356.1	1,409.0
Crude petroleum and natural gas	52,197.7	63,896.9	80,054.4	100,168.8	110,185.7	121,232.0
Other mining and quarrying	67.7	70.8	80.2	112.2	140.3	175.3
Petroleum refining	6,118.8	6,682.7	5,981.7	6,797.3	7,137.2	7,494.7
Other manufacturing	517.5	580.3	651.6	718.9	805.2	901.8
Electricity, gas, water, and sanitary services	177.5	193.6	213.6	247.7	287.3	333.3
Construction	1,867.8	1,914.4	2,105.5	2,791.5	3,489.4	4,362.0
Wholesale and retail trade, restaurants, and hotels	1,460.8	1,524.3	1,661.7	1,968.3	2,243.5	2,580.0
Transport, communications, and storage	1,801.5	2,128.2	2,239.5	2,680.4	3,109.3	3,637.8
Ownership of dwellings	1,222.9	1,282.0	1,354.1	1,456.7	1,544.1	1,636.7
Finance, insurance, real estate, and other business services	603.0	612.6	641.9	713.7	799.3	895.2
Community, social, and personal services	345.5	366.9	394.1	416.4	466.4	522.4
Less imputed bank service charges	(69.0)	(71.6)	(69.0)	(62.8)	(63.0)	(63.0)
Total private	67,492.7	80,402.5	96,569.4	119,315.5	131,500.7	145,117.2
Government						
Public Administration	920.9	948.4	1,099.8	1,156.2	1,214.0	1,291.4
Education	529.7	556.8	638.2	754.2	850.0	1,026.8
Health	120.6	130.3	132.3	167.9	187.3	256.5
Subtotal	1,571.2	1,635.5	1,870.3	2,078.3	2,251.3	2,574.7
Defense	769.3	800.0	852.0	870.6	936.2	1,025.4
Total government	2,340.5	2,435.5	2,722.3	2,948.9	3,187.5	3,600.1
GROSS DOMESTIC PRODUCT (excluding import duties)	69,833.2	82,838.0	99,291.7	122,264.4	134,688.2	148,717.3
Import duties	344.4	465.3	531.6	573.2	632.9	82.7
GDP (at market prices)	70,177.6	83,303.3	99,823.3	122,837.6	135,321.1	148,800.0
Summary						
Private sector						
Oil	58,316.5	70,579.6	86,036.1	106,966.1	117,322.9	128,726.7
Non-oil	9,176.2	9,822.9	10,533.3	12,349.4	14,177.8	16,390.5
Government sector	2,340.5	2,435.5	2,722.3	2,948.9	3,187.5	3,600.1
Total non-oil	11,516.7	12,258.4	13,255.6	15,298.3	17,365.3	19,990.6

Sources: As previous tables.


3.6
16.4
128.7
2.8
12.4
79.8
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9.5
28.1
GOVERNMENT
2.1
7.3
18.4
1.8
6.7
14.1
1.7
6.1
9.3
OIL

Figure II-3 demonstrates clearly the dominant role of oil in the economy. However, the non-oil sectors of the economy now total more than the complete GDP did in 1389-90, and their total is now more than two and a half times what it was in 1389-90 — SR 19,991 million in 1394-95 compared with SR 7,802 million then.

While inflation plays a significant role in this picture, it is considerably different from the inflation typical in industrial countries. In Saudi Arabia, all sectors except utilities have experienced some degree of inflation. The most severe price increases, however, have been in the sectors of crude oil production and petroleum, and practically all of the output of these sectors is exported*

The standard method of calculating real growth (by deflating a current price series to produce a constant price series which is a quantity index expressed in prices of a given year) would, in the case of Saudi Arabia, greatly understate crude and refined petroleum's actual contribution to the real growth of the economy. Because the great bulk of these products is exported, price increases in these products result in greater import purchasing power. Illustrating the importance of this impact, Table II-5 shows what happens when national income, expressed in constant prices, is adjusted by a "terms-of-trade effect". (The terms-of-trade effect is the difference between the value of exports deflated by an imports-price index and the value of exports deflated by an exports-price index):

$$V_x\left(\frac{1}{P_m}-\frac{1}{P_x}\right).$$

Table II-5

REAL NATIONAL INCOME**
(SR Millions in 1389–90 Equivalent Prices)

	1389–90	*1390–91*	*1391–92*	*1392–93*	*1393–94*	*1394–95*
Constant 1389–90 prices	13,573.7	14,794.4	16,732.0	20,405.8	29,004.2	33,086.6
Terms of trade effect	–	1,198.1	2,441.2	4,732.5	33,956.2	53,348.6
Real national income	13,573.7	15,992.5	19,173.2	25,138.3	62,960.4	86,435.2
Annual rate of increase (percent)	–	17.8	19.9	31.1	150.5	37.3
Average annual rate of increase (percent)				44.8		

* After more than a decade of imposed, artificially low prices, the OPEC nations have secured a number of successive agreements with the producing companies that have yielded more equitable returns to the host countries.

** This table has been calculated in terms of 1389–90 prices to illustrate the positive effect of the more rapid increase in petroleum prices vis-a-vis import prices. If calculated in 1394–95 prices, the terms of trade effect would appear as negative amounts for the years prior to 1394–95.

Source: CDS preliminary estimates and projections.

The average annual growth rate of 44.8 percent in real national income is a far better measure of the real change in the Kingdom's economic wealth during the first plan than the 19.5 percent growth rate yielded by the standard method of measuring output in constant prices. It should be recognized, however, that the "terms-of-trade effect" is double-edged. Continued rapid inflation in the price of imported goods, if not matched by an upward adjustment in oil prices, could eventually have a negative impact on the measurement of real national income.

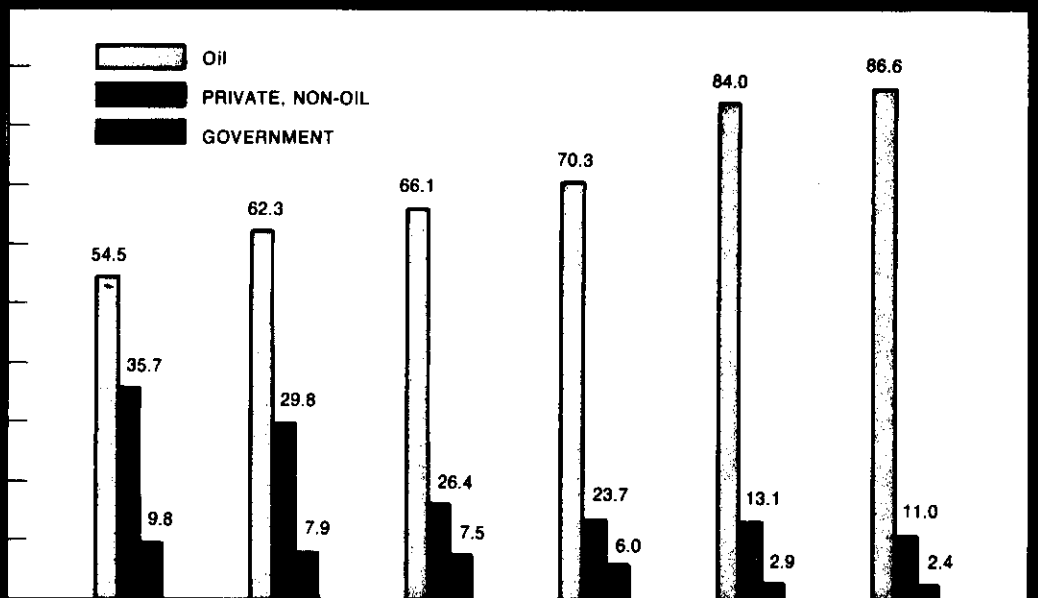
Structure of the Economy

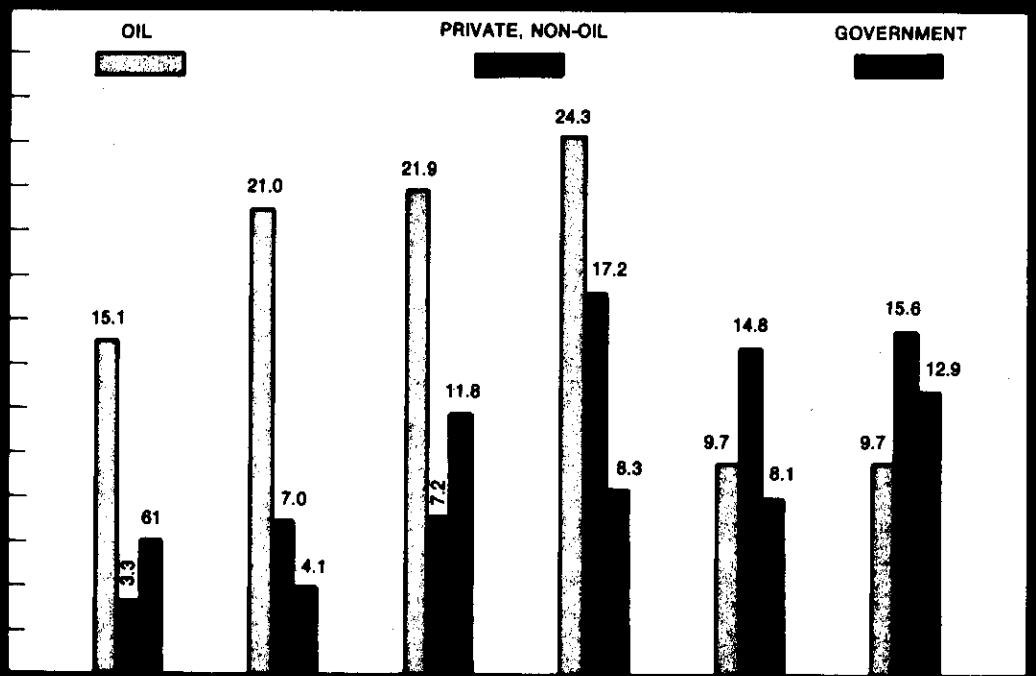
Estimates of relative shares in total value added, summarized below and illustrated in Figure II-4, show the increasing dominance of oil in the total economic picture. The relative shares of GDP at current prices are as follows (percent):

	Actual		*Estimated*
	1389-90	*1392-93*	*1394-95*
Oil	54.5	70.3	86.6
Private, non-oil	35.7	23.7	11.0
Government	9.8	6.0	2.4
Total	100.0	100.0	100.0

However, when the rates of growth shown in Figure II-5 for the same three divisions are examined, it is clear that 1394-95 probably marks the peaking of oil's dominance of the Saudi economy. These percentages, based on constant prices, are:

	Actual		*Estimated*
	1389-90	*1392-93*	*1394-95*
Oil	15.1	24.3	9.7
Private, non-oil	3.3	17.2	15.6
Government	6.1	8.3	12.9
Total	13.1	23.1	10.4


Oil
PRIVATE, NON-OIL
GOVERNMENT
54.5
35.7
9.8
62.3
29.8
7.9
66.1
26.4
7.5
70.3
23.7
6.0
84.0
13.1
2.9
86.6
11.0
2.4


OIL
PRIVATE, NON-OIL
GOVERNMENT
15.1
3.3
61
21.0
7.0
4.1
21.9
7.2
11.8
24.3
17.2
8.3
9.7
14.8
8.1
9.7
15.6
12.9

The Government's policy of using its oil revenues for the purpose of economic and social development has greatly stimulated all economic activity over the past few years. Figure II-6 shows that the sectors in the private, non-oil sphere with the highest rates of growth are mining and quarrying, manufacturing, utilities, construction, trade, and transport and communications. Of these, the most important in terms of size are transport and communications, trade, and construction. Table II-6 shows the relative shares of the sectors which comprise private, non-oil GDP (based on current prices).

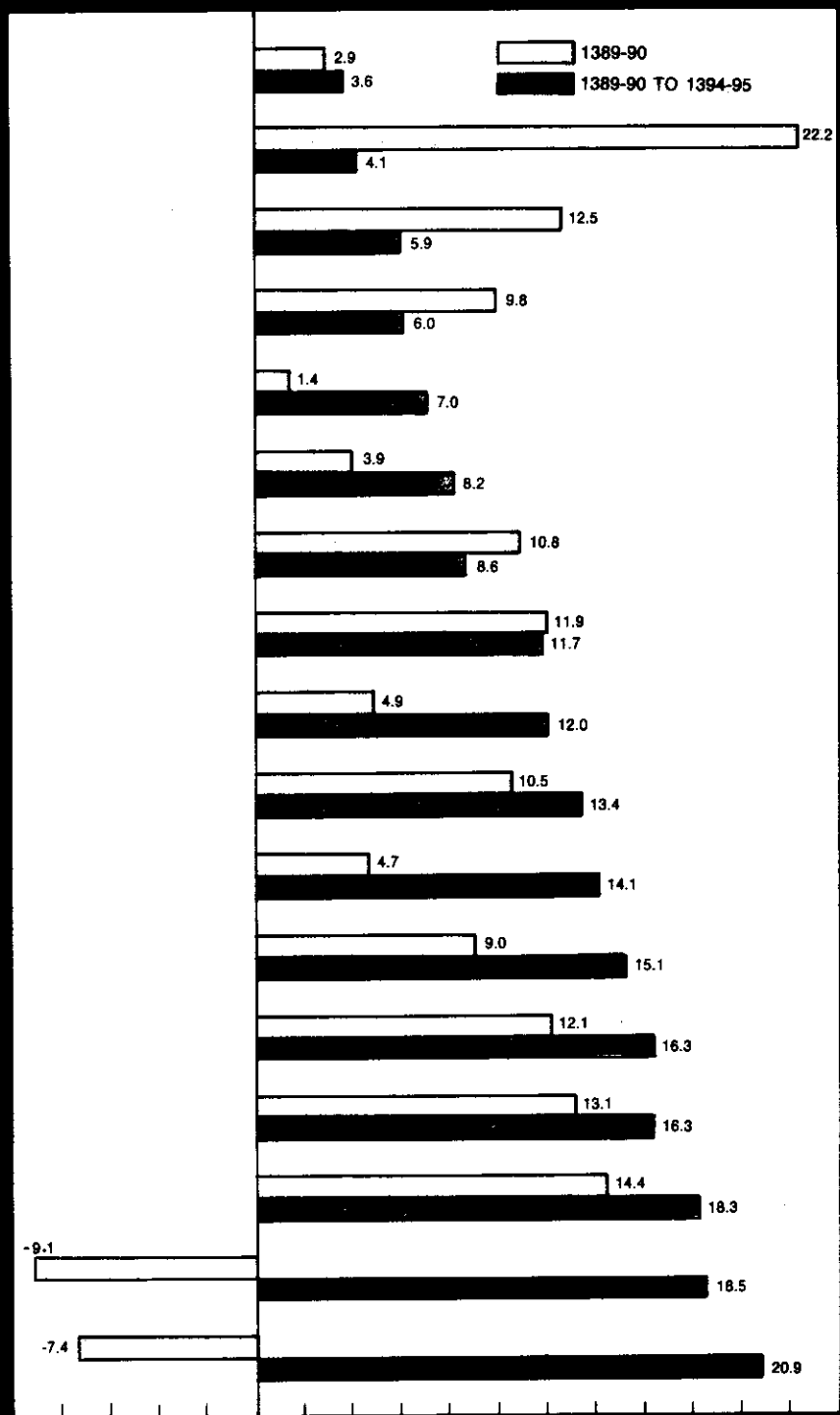
Table II-6
SHARES IN PRIVATE, NON-OIL GROSS DOMESTIC PRODUCT BY SECTOR
(Percentages Based on Current Prices)*

	Actual		*Estimated*
	1389-90	*1392-93*	*1394-95*
Agriculture	16.1	12.0	8.6
Mining and quarrying (excluding oil)	0.8	1.0	1.1
Manufacturing (excluding refining)	7.0	6.5	5.5
Electricity, gas, water, and sanitary services	4.5	3.4	2.0
Construction	15.2	19.1	26.6
Wholesale and retail trade, restaurants, and hotels	16.4	16.4	15.7
Transport, communications, and storage	20.3	22.4	22.2
Ownership of dwellings	10.8	10.6	10.0
Finance, insurance, real estate, and other business services	5.8	5.5	5.5
Community, social, and personal services	3.9	3.6	3.2
Less imputed bank service charges	(0.8)	(0.6)	(0.4)
Total	100.0	100.0	100.0

In keeping with the first plan's objectives, most of the growth in the non-oil parts of the economy has been in the private sphere. The estimates show an average annual growth rate for the private, non-oil sectors during the plan period of 12.3 percent, compared with only 3.3 percent in 1389-90.

The growth in value-added in the public sector was more modest — from 6.1 percent in 1389-90 to an estimated average annual rate of 9.0 percent for the whole plan period. In this connection, it is important to note that the average annual rates of increase over the first plan period estimated for General Administration and for Defense are only 7.0 percent and 5.9 percent respectively, whereas, for health and education, the estimated average annual rates are 16.3 percent and 14.1 percent respectively. It is clear from this that the Government's attention is being focused on the two areas most crucial to future welfare and progress.

* Source: Central Department of Statistics (no constant price series is available).


1389-90
1389-90 TO 1394-95
2.9
3.6
22.2
4.1
12.5
5.9
9.8
6.0
1.4
7.0
3.9
8.2
10.8
8.6
11.9
11.7
4.9
12.0
10.5
13.4
4.7
14.1
9.0
15.1
12.1
16.3
13.1
16.3
14.4
18.3
-9.1
18.5
-7.4
20.9

Capital Formation

After registering a small decline (1.3 percent) in 1389-90, gross fixed capital formation has followed the general pattern of accelerating growth, as the data* below show (SR millions in current prices):

	1389-90	*1390-91*	*1391-92*	*1392-93*
Government	1,213.9	1,203.9	1,442.6	1,985.2
Private non-oil	1,055.7	1,150.4	1,289.6	1,669.1
Oil	327.4	577.4	670.7	2,039.5
Total	2,597.0	2,931.7	3,402.9	5,693.8

To present a more current picture of this fundamental indicator of economic trends, and to provide a basis for discussing future developments in the next chapter, the above historical series has been projected for 1394-95 by relating it to the value-added estimates for construction as follows (SR millions, current prices)*:

	Actual				*Derived*	
	1389-90	*1390-91*	*1391-92*	*1392-93*	*1393-94*	*1394-95*
Construction value added	933.9	1,007.0	1,173.8	1,808.9	2,791.7	4,362.0
Percentage of capital formation	36.0	34.3	34.5	31.8	—— 34.15 ——	
Fixed capital formation	2,597.0	2,931.7	3,402.9	5,693.8	8,174.8	12,773.1

Note: The drop in construction to 31.8 percent of total capital formation in 1392-93 reflects the very large jump in oil construction for which materials are a larger share of total costs than in other types of construction. Since oil construction is expected to be high over the next two years, but less proportionately, the average figure of 34.15 percent was used to derive fixed capital formation from construction value-added as estimated in an earlier table.

While the totals estimated for fixed capital formation for the last two years are only 8.6 percent of GDP in both years, it is estimated that the rate of real growth in capital formation — that is, in constant prices — has been significantly higher than the rate in the overall economy. It has probably equalled the real growth in the construction sector, estimated to average 18.5 percent annually over the plan period.

* Source: CDS for 1389-90 to 1392-93 data; CPO for later estimates.

Over the past seven years (since 1386-87), construction has accounted for about 76.5 percent of total fixed capital formation. Applying this factor to the SR 12,773.1 million estimated above for gross capital formation in 1394-95 yields a gross output value for the construction sector of the economy of SR9,771 million for that year. A similar result is obtained by using a standard rule-of-thumb factor for estimating total construction value on the basis that value-added comprises 45 percent of the total. This formula applied to value-added in 1394-95 yields a value of SR 9,693 million for 1394-95. Both of these results agree basically with the estimate of SR 10,000 million in the construction section which was arrived at independently. Despite the absence of financial constraints, the requirements for additional materials and people — mostly from foreign sources — is awesome indeed if a real growth rate of 15 to 20 percent in construction output is to be sustained.

Foreign Trade and Balance of Payments

Oil exports accounted for almost 95 percent of the Kingdom's foreign exchange current account receipts in 1973, the last year for which complete balance of payments statistics are available.

The increase in foreign exchange earnings from oil exports is due to increases in both prices and production rates. In 1970, the average posted price per barrel (Aramco) was US $ 1.78; in 1973, it was US$ 3.28; and in 1974 it averaged approximately US$ 11.70; on 1 November 1974, the posted price of Arabian Light (Ras Tanura) was set at US$ 10.46. Average daily production during the first six months of 1974 was 8.34 million barrels compared with 7.45 during the first six months of 1973 and only 3.80 in 1970.

In December 1974, Aramco's production had declined to 7.8 million barrels per calendar day. Despite further declines to 7.4 mbpcd in January 1975, 6.5 mbpcd in February, and 6.4 mbpcd in March, receipts on current account from oil exports are running at a far higher rate than in 1973.

The payments side of the balance of payments ledger has also been growing at a prodigious rate. Rapid increases in foreign prices and the increasing acceleration of economic activity within Saudi Arabia have resulted in a growth in commodity imports of an estimated 60 percent in 1974 over 1973. This general trend will probably continue in 1975. If the Kingdom's port capacity and materials-handling capabilities permitted, the rate of expansion would be far higher.

Imports of goods and services combined are estimated as follows (SR millions in current prices, excluding factor income payments to abroad)*:

	1389-90	*1390-91*	*1391-92*	*1392-93*	*1393-94*	*1394-95*
Total	4,990.3	5,204.8	6,302.6	8,271.9	12,407.9	18,611.9
Percent increase	—	4.2	21.2	31.2	50.0	50.0

The rapid increase in investment income payments — from SR 6,446 million in 1971 to SR 8,496 million in 1972 and to SR 12,350 in 1973 — reflect, primarily, the repatriation of profits by foreign oil companies. As Saudi Arabia assumes an increasing share in the ownership and oil companies' profits fall, these payments will decline. However, many new ventures involving foreign capital, now in the discussion stage, could lead to substantial increases in this payment category in the future. Presumably, these would be more than matched — as in the case of oil — by even greater export earnings: the Saudi government is just now beginning to receive substantial returns on its foreign investments. This will be a significant — and could be the dominant — feature in future balance-of-payments accounting.

Government expenditures abroad, which include foreign exchange expenditures on various projects, aid to Arab countries, and other foreign transfers are the largest of the remaining payments items. These increased to almost SR 3,000 million in 1973. It is estimated that these payments will be substantially larger in 1974 and 1975.

The next largest item is "Other Services," about three-fourths of which is repatriation of earnings of foreign workers in the Kingdom. This item increased by 70 percent in 1973, from SR 1,138 million in 1972 to SR 1,932 million in 1973. Undoubtedly, substantial increases in these payments will be recorded for 1974 and 1975.

Table II-7 summarizes the balance-of-payments estimates for 1972 and 1973, including the Capital and Financing Account. Estimates for 1974 are not available. This is unfortunate because both receipts and payments will no doubt have increased enormously, and it would be extremely useful to know by just how much. In 1975, it is clear that payments will continue to grow at a substantial rate; however, it is difficult to predict what will happen to receipts, although they have been estimated to be about the same as in 1974. Despite this uncertainty and the anticipated rapid increase in payments, the Kingdom should record a substantial surplus in its balance-of-payments again in 1975.

* Sources: CDS for 1389-90 to 1392-93 inclusive; CPO estimates for years 1393-94 and 1394-95. Imports of goods and services are estimated by the CDS on a Hijra year basis whereas commodity imports are taken from balance of payments data which are on a Gregorian year basis. The import of services is embodied in other payments categories in the balance-of-payments statements.

Table II–7
BALANCE OF PAYMENTS ESTIMATES, 1971–73
(SR Millions)

	1971	1972	1973
Current Account			
Receipts			
Exports, f.o.b.	16,294[a]	21,795[a]	33,409[a]
Oil revenues from companies other than Aramco	353	420	448
Pilgrimage	485	653	909
Miscellaneous	478	655	1,123
Total receipts	17,610	23,523	35,889
Payments			
Imports, c.i.f.	4,226	5,769	7,359[b]
Non-monetary gold	42	40	50
Investment income payments	6,446	8,496	12,350
Government expenditures abroad, n.i.e.	1,232[c]	1,240[c]	2,986[c]
Travel and personal transportation, n.i.e.	649	793	1,050
Tapline expenditures abroad	212	195	180
Other services	798	1,138	1,932
Total payments	13,605	17,671	25,907
Current Accout surplus	4,005	5,852	9,982
Capital and Financing Account			
Direct investment(–indicates inflow)	–490	–1,487	–220[d]
Other capital (+indicates increase in foreign assets)	+762	+1,050	+3,978
Gold, foreign exchange holding, and investments of SAMA (+indicates increase)	+3,573	+5,480	+6,044
Commercial Banks' net foreign position (+indicates increase, –indicates decrease)	+103	+741	+125
Errors And Ommissions	+57	+68	+55

a On the basis of realized prices.
b Provisional.
c Including the aid granted by Saudi Arabia.
d Netted against compensation paid to Aramco for 25 percent participation in its oil production facilities.

Note: The US dollar/riyal parity prevailing in 1971 and 1972 was SR 4.50/$ and SR 4.145/$ respectively. In 1973, however, the parity changed twice; therefore, the trade conversion factor used for 1973 is SR 3.70/$ which is based on the daily average of the prevailing official parity with the dollar. Capital transactions are, however, at the year-end parities but for consistency necessary adjustments have been incorporated in the foreign assets of both the Monetary Agency and the commercial banks.

Source: SAMA Annual Report, 1392–93 A.H.

D. FISCAL AND MONETARY MANAGEMENT

The principal objective of fiscal management in the first plan was to evolve and implement policies and strategies that would provide the necessary resources to finance development while maintaining a stable and open economy. Other objectives and supporting policies reviewed below are the following:

- ☆ Maintaining foreign reserves equal to the value of imports for one and a half years.
- ☆ Obtaining a high rate of economic growth without adverse inflationary effects.
- ☆ Encouraging private enterprise.

When the first development plan was being prepared the Kingdom's ability to provide adequate financial resources to carry out all programs and projects was a matter of deep concern. At that time, 1389-90, the balance of payments had been showing a deficit for two years and the Government was drawing on its reserves to meet its budget commitments. Oil revenues had not increased appreciably since 1386-87.

During the first year of the plan, this picture changed significantly. Crude oil production grew by over 22 percent, the posted price (for Arabian Light) increased from US$1.80 to US$2.18, and then to US$2.285, and income taxes on oil were raised from 50 percent to 55 percent. Consequently, revenues from oil jumped almost 40 percent in 1390-91. Since then, oil production and prices have continued their upward surge, income taxes on oil have risen to 85 percent and royalties to 20 percent, and the Government has acquired a 60 percent equity in Aramco — and negotiations are in progress with respect to increasing this equity.

The remarkable increases in revenues during the plan period are shown below (SR Millions):

	Oil	*All Other*	*Total*
Base year (1389-90)	5,119	549	5,668
Plan years:			
1390-91	7,122	818	7,940
1391-92	9,685	1,435	11,120
1392-93*	13,206	2,162	15,368
1393-94*	38,400	2,900	41,300
1394-95*	94,432	3,815	98,247
Total plan period	162,845	11,130	173,975

Thus, the revenues actually received during the first plan period greatly exceeded the

* Provisional.

Source: Saudi Arabian Monetary Agency for data through 1392-93; CPO estimate for 1393-94; annual budget estimate for 1394-95, which does not reflect changes since 1 Rajab 1394 in the domestic tax structure or in posted prices and oil taxes.

amount estimated when the plan was prepared. This was not anticipated, however, when the budget was being prepared for the first year of the plan, and many projects were deferred during that year because of anticipated financial constraints. As a consequence, growth in the non-oil sectors of the economy was less than anticipated.

In preparing the budget for 1390-91 revenues were estimated at SR 6,380 million. After deducting SR 420 million* for aid to Arab countries, the appropriations for 1390-91 were practically the same as for 1389-90. Although actual revenues totalled SR 7,940 million in 1390-91, this did not become apparent until well into the fiscal year. As a consequence, actual expenditures out of the budget (excluding aid to Arab countries) totalled only SR 5,756 million, and the GDP of the non-oil sectors grew by only 6.4 percent in real terms.

In 1391-92, estimated revenues and appropriations totalled SR 10,782 million, of which SR 4,978 million was for economic and social development purposes, compared with only SR2,805 million the previous year. Actual expenditures from the budget (excluding Arab aid) reached SR 7,291 million, and real non-oil GDP increased by 8.1 percent.

In 1392-93, appropriations for economic and social development purposes were SR 6,317 million.**Total actual expenditures from the budget (excluding Arab aid) increased by 26.8 percent to SR 9,246 million, and non-oil GDP grew by 14.7 percent in constant prices.

Much of this greatly accelerated growth was due to the tremendous progress in construction activity, transportation, and trade — increases of 32.6 percent, 19.7 percent, and 18.5 percent respectively, all in terms of constant prices.

In 1393-94, estimated appropriations and revenues both totalled SR 22,180 million. Developmental appropriations rose by over 57 percent to SR 9,923 million.***Total budgetary expenditures (excluding Arab aid) are estimated to have been SR 11,715 million, an increase of 26.7 percent over the previous year. Non-oil GDP is estimated to have grown by 13.5 percent in real terms.

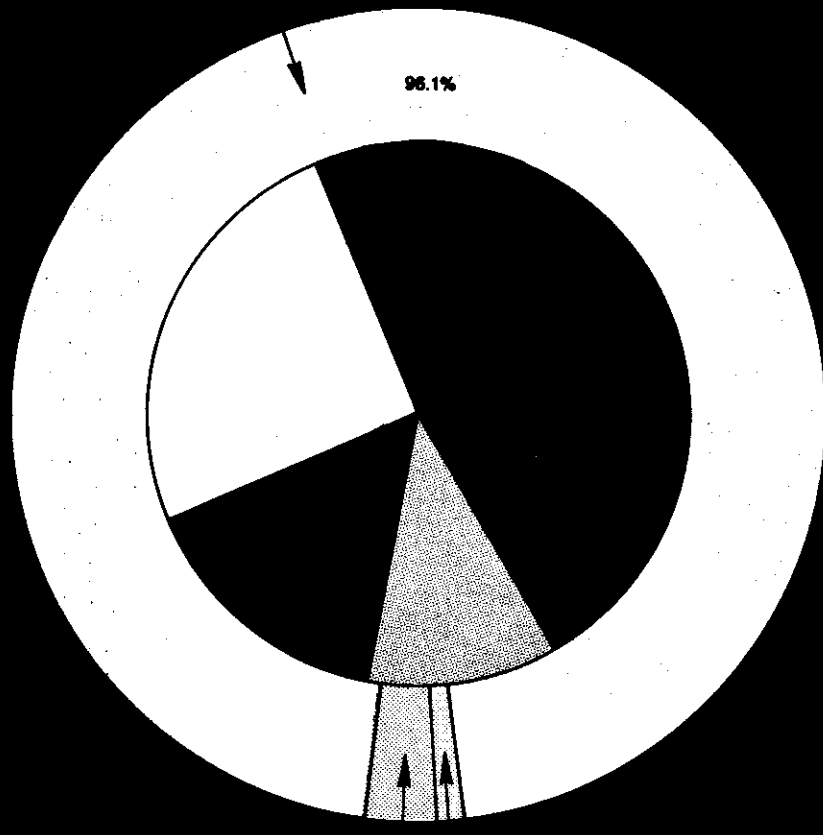
Compared with estimated revenues of SR 98,247 million for 1394-95, appropriations total SR 45,743 million. The balance is available for financing large-scale agricultural and industrial projects in the second Development Plan. Appropriations for normal budget purposes are SR 33,488 million and appropriations for developmental activities increased 85.7 percent over1393-94 to a total of SR 18,428 million. Figure II-7 compares revenues with appropriation and the distribution of the latter among the major activity categories.

If total normal budgetary expenditures (excluding Arab aid and other foreign transfers, and domestic transfers to reserves and special funds) increase by 26.7 percent over those estimated for 1393-94, they will reach SR 14,843 million in 1394-95. The corresponding estimated real growth in non-oil GDP is 15.1 percent.

* A further SR 242 million in aid to Arab countries was paid as an extra-budgetary expenditure out of surplus.

** Excluding appropriations to the Public Investment Fund.

*** This does not include the SR 3,204.6 million appropriated to purchase 25 percent participation in Aramco and to special funds, such as the Public Investment Fund and Items of Emergency Expenditure.


96.1%

As should be expected under these circumstances of rapidly rising revenues, appropriations have increased at a faster rate than actual expenditures. The growth in expenditures since 1390-91 is, however, an excellent achievement by any standards.

In addition to financing the development plan, the Government was committed to maintaining an open and stable economy without exchange or import restrictions. Since almost all of the Government's ample revenues are in the form of foreign exchange, maintaining the international stability of the riyal without exchange or import restrictions has not been a problem.

Important too, is that, despite the continuing crises in the international monetary system since the late 1960s, the Kingdom has carefully avoided any over-reactions that might have contributed to further instability, such as large purchases of gold, shifting of deposits, or radical changes in currency parities.

As an adjustment to changes initiated by the United States, the Government, in December 1971 and again in February 1973, changed its riyal/dollar parity only enough to reflect exactly the change in the dollar/gold parity. In August 1973, after substantial weakness in the dollar vis-a-vis several other major currencies, the riyal was revalued unilaterally by a modest 5.07 percent.

Continued weakness in the dollar led to mounting pressures for a further revaluation of the riyal. The Government responded in March 1975 by linking the riyal to the International Monetary Fund's special drawing rights (SDRs). The purpose of this action was to free the riyal from potential radical swings in the value of any single currency: the method of valuing the SDRs moderates even considerable fluctuations in the value of any of the individual currencies. Again, the change in the riyal/dollar parity was relatively minor–2.3 percent.

The cumulative effect of all changes during the past four years has been from a parity of US$ 1 = SR 4.50 to US$ 1 = SR 3.47, that is, the dollar has declined by 29.68 percent against the riyal. With respect to the German Deutschemark, in the same period the dollar has declined by 73.91 percent — from US$ 1 = DM 4.00 to US$ 1 = DM 2.30.*

As to internal monetary management, the money supply has increased quite rapidly (SR millions):

At End of Financial year	*Currency in Circulation*	*Demand Deposits*	*Total*	*Percent Increase*
1389-90	1,528.3	795.5	2,323.8	—
1390-91	1,641.6	944.9	2,586.5	11.3
1391-92	1,951.2	1,274.8	3,226.0	24.7
1392-93	2,487.8	2,191.3	4,679.1	45.0
1393-94	3,374.4	3,004.9	6,379.3	35.3

* Decline in value is based on the amount of extra dollars now required to purchase a given amount of foreign currency compared to a previous situation.

Source · SAMA Annual Report, 1392-93 A.H. and SAMA Statistical Summary, First Issue, 1394-95.

While much of the world has seen a decline in economic activity during the past year, the Kingdom's economy is rapidly accelerating. Ample evidence of this increased activity can be found not only in the rapid increase in the money supply, but in the number of checks cleared and their value. Check clearings increased from 413,522 totalling SR 7,610 million in 1392-93 to 532,335 totalling SR 14,860 million in 1393-94.

This rapid growth in money supply and in usage of checks reflects the substantial expansion of Government spending and general economic activity, and increased public reliance on the banking system.

In keeping with this general policy of emphasizing fiscal stability, Saudi law requires that all currency issued be backed 100 percent by gold or foreign exchange convertible into gold. Also, the first plan called for maintaining foreign reserves equal to one and a half year's imports. In the interests of international monetary stability, the Kingdom has refrained from increasing its stock of gold. At the end of 1392-93, gold holdings (including the Kingdom's subscription in the International Monetary Fund) totalled SR 574 million. In the next quarter, the total declined to SR 546 million and has remained at that level.

Other international reserves of the Saudi Arabian Monetary Agency (SAMA) have greatly increased in recent years (SR millions):

At End of Year	*Gold*	*Foreign Exchange*	*Foreign Investments*	*Total*
1390	574	2,909	785	4,268
1391	574	5,515	764	6,853
1392	574	10,833	983	12,390
1393	546	13,094	2,293	15,933
1394*	546	56,413	20,109	77,068

It is difficult to forecast just what the reserves situation will be at the end of 1394-95 (a little over six months after the last total shown above). Oil production has declined from approximately 8.5 to 6.4 million barrels per calendar day in March 1975. It is not easy to predict what level of oil production and export will be maintained over the next three months.

SAMA's preliminary estimate of total expenditures for 1393-94 is SR 19,500 million. This estimate suggests that other (non-budget) payments, transfers and foreign aid totalled some SR 7,785 million in 1393-94 (based on the estimate of normal budgetary expenditures of SR 11,715 million**). However, there is no adequate basis for projecting these types of outlays for 1394-95.

Given these uncertainties, it is obvious that the estimate of future reserves is highly tentative. However, barring any unforeseen, large-scale cuts in oil production or prices over the next few months, revenues will continue to exceed expenditures, and the difference will

* As of 5 Dhul Hijjah.

** Because total expenditures have been estimated by SAMA at SR 19,500 million, this estimate of normal budgetary expenditures may be low. However, it is based on an average annual rate of increase of 26.7 percent, which yields a growth of almost 160 percent in just four years. Even with rapid increases in prices, this is a very high rate of sustained increase.

Source: SAMA Annual Reports and interim statement for 5 Dhul Hijjah 1394.

manifest itself mainly in the further accumulation of international reserves. Therefore, reserves at the end of the first plan period could total as much as SR 100,000 million.

In the attempt to encourage a high rate of growth without adverse inflationary effects, it has not been possible to avoid widespread price increases. Because of its dependence on imports, and domestic shortages in housing and labor, Saudi Arabia exprienced a fairly high degree of inflation in the past two years (between 15 and 20 percent annually). The Government, in keeping with its prime objective of improving the well-being of its people, has undertaken a number of measures to mitigate this situation. It has eliminated a number of taxes and reduced others as rising oil revenues have rendered taxation for revenue purposes unnecessary. The road tax (a 2 percent levy on all personal incomes) and taxes on domestic petroleum products have been eliminated. Many customs duties and the 10 percent surcharge have been eliminated, and tariffs on the balance reduced to a token 3 percent.

Other important measures taken either to reduce or to offset the rise in living costs include a number of import subsidies: milk and milk products, flour, rice, sugar, meats, vegetable oils and fats, and medicines.The Government also has a program for encouraging bulk imports of certain products to reduce pressure on price increases.

The Government reduced electric rates from 20 halalahs to 14 halalahs per kWh and, on 1 Shaban 1394 (19 August 1974),to 7 halalahs (US$ .02) for normal consumption and 5 halalahs for industrial consumption. The electric companies are assured a reasonable profit margin through subsidies.

In accord with the target specified in the first plan, the Government has established a Real Estate Development Fund to provide interest-free loans of up to 70 percent of costs for housing construction by limited-income persons and up to 50 percent of costs for multi-housing units for commercial use and holtels. This program became operational during Rabi I, 1395.

The Saudi Credit Bank, also known as the Bank for People of Small Means, became operational in 1393. The purpose of this bank is to provide interest-free loans of up to SR 7,500 to people with limited incomes to meet urgent social needs (e.g., marriage) or unusual financial difficulties that may occur.

At the beginning of 1393 and again at the beginning of 1395, the Government granted substantial wage increases throughout the public sector. In percentage terms, the higher increases went to the lower-paid categories. These increases have stimulated wage increases in the private sector as well.

Other government measures designed to reduce inflation, increase family incomes, or expand welfare are discussed in later chapters.

In the long run, increased production of goods and services and higher productivity per worker are the only effective means of achieving a high rate of growth without adverse inflationary effects. The national Development Plan is the principal vehicle for achieving this

long-term objective. In addition, the Government has established several reserve funds for special programs and projects, and for emergencies that may arise which could not be specifically anticipated at the time the annual budgets were prepared. The availability of these funds reduces the implementation time of the activity to be undertaken.

Despite the preponderant role of the Government in this stage of Saudi Arabia's development, the Kingdom's fundamental philosophic commitment is to private enterprise. Eventually, it is anticipated that the Government's role in economic activity will be a far more modest one than today. In the interim, the Government must provide the infrastructure and other economic incentives to encourage and stimulate the private sector to play an ever larger role in productive activities.

Principal measures taken to encourage private sector development included revisions to the Mining Code — designed to encourage mineral exploration and development; publication of a statement of Saudi Arabian Industrial Policy — setting forth the many incentives offered to promote industrialization; issue of a comprehensive Guide for Industrial Investments; changes in the provisions for protection of domestic industries and encouragement of foreign-capital participation; the launching of the Industrial Development Fund to provide capital loans to industrial ventures; implementation of industrial estates at Jiddah, Riyadh, and Dammam where serviced land for industry can be obtained at nominal rents; and the provision of credit and a range of input and output subsidies to stimulate agricultural production.

Because of the financial constraints at the time of preparing the first plan, and because there was already an existing commitment to aid Arab countries — SR 662 million annually — the first Development Plan did not include any specific provisions for additional aid programs. However, with the large increase in revenues, the Government has taken a number of far-reaching steps to assist other nations in fulfilling their development aspirations. These actions include increasing Saudi Arabia's participation in the International Monetary Fund, making loans and outright gifts, and giving direct technical and financial assistance in foreign development projects. Some of the major institutions* established to handle such programs are:

- ☆ The Saudi Arabian Development Fund (For Foreign Aid) established 1974.
  Capital: SR 10,000 million.
  To contribute to the financing by loan of development projects in friendly countries.
- ☆ Islamic Development Bank, being established.
  Capital: Islamic Dinar 2,000 million (equivalent to US Dollars 2,400 million).
  Share of the Kingdom: Islamic Dinar 200 million.
  To support and promote the economic development and social progress of Islamic

* For further details see recent Ministry of Finance and National Economy publication "The Government Credit Programs in the Kingdom of Saudi Arabia and the Regional and International Companies and Corporations — Contributed to by the Kingdom of Saudi Arabia."

countries and communities by financing productive projects, assisting in promoting trade among the member states, providing aid to Islamic communities in non-member states, and providing technical assistance and training to member states.

☆ The Arab Bank for Economic Development in Africa, established in 1974.
Capital: US Dollars 206 million.
Share of the Kingdom: US Dollars 25 million.
To promote and support economic, financial, and moral cooperation between African and Arab countries through financing economic development of African countries, encouraging Arab funds to take part in African development, and contributing to technical assistance for the development of Africa.

☆ The Arab Company for Investments, established in 1974.
Capital: US Dollars 200 million.
Share of the Kingdom: US Dollars 30 million.
To invest Arab funds for the development of Arab resources through the implementation of productive projects in agriculture, industry, commerce, communications, and services.

☆ The Arab Fund for Economic and Social Development, established in 1968.
Capital: Kuwaiti Dinar 102 million.
Share of the Kingdom: Kuwaiti Dinar 18.8 million.
To take part in and promote the financing of economic and social development projects in Arab countries and provide technical expertise and aid in the various fields of economic development.

☆ Arab Company for Petroleum Investments, being established.
Capital: SR 3,600 million.
Share of the Kingdom: SR 204 million.
To participate in financing petroleum projects and industries and related activities for the benefit of member countries.

☆ The Arab Marine Company for Petroleum Transport, established in 1973.
Capital: US Dollars 500 million.
Share of the Kingdom: US Dollars 67.9 million.
To undertake marine transport of hydrocarbons and related activities.

☆ The Arab Company for Building and RepairingVessels, established 1973.
Capital: US Dollars 100 million.
To construct, repair, and maintain vessels, tankers, and marine transportation facilities for hydrocarbons.

☆ The Egyptian Suez Gulf Pipeline Company, established 1973.
Capital: US Dollars 440 million.

Share of the Kingdom: US Dollars 60 million.
To construct and operate a pipeline to transport petroleum from the Suez Gulf to the Mediterranean Sea.

☆ Saudi-Egyptian Company for Industrial Investments, being established.
Capital: SR 200 million.
To establish projects in Egypt either by Egypt alone or in collaboration with Arab or international partners.

☆ Saudi-Egyptian Company for Reconstruction, being established.
Capital: US Dollars 50 million.
To invest in real estate projects in Egypt, especially in the Suez area.

E. HIGHLIGHTS OF DEVELOPMENT 1390-95

The main features of development over the period of the first plan are summarized below. More detailed discussions are given in the "Present Conditions" sections of Chapters IV to VIII.

Numerous groundwater investigations were undertaken and an extensive program of hydrological data collection and analysis was continued to further define the *water* resources of the Kingdom.

Water supply projects for six major cities were undertaken, and about 1,000 wells were dug or restored and many distribution systems constructed to meet the immediate needs for water in other localities. Over 20 small dams for storage of surface runoff, flood protection, and aquifer recharge were constructed or approved for construction.

Five desalination plants on the Red Sea coast and two on the Arabian Gulf started operation and are together capable of producing almost 50,000 cubic meters of water per day and 60 megawatts of electricity. Other plants at various stages of planning and implementation are designed to produce over 330,000 cubic meters of water per day and 905 megawatts of electricity.

Production in *agriculture* continued to grow slowly in face of the many problems inhibiting rapid agricultural development. Subsidies on farm inputs and outputs were introduced to supplement research and extension programs in stimulating agricultural production.

Agricultural credit expanded significantly over the plan period; in 1393-94 the Agricultural Bank granted 5,414 new loans amounting to SR 36.3 million.

Production of crude *petroleum* increased to an average level of 8.5 million barrels per day in 1394 and has since shown some decline, while posted prices of crude (Arabian Light—Ras Tanura) were raised from US$ 1.80 at the beginning of the plan to US$ 10.46 (set 1 November 1974). A vigorous program to expand output was implemented by increasing exploration and drilling activities, installing new pipelines, and adding new gas-oil separator capacity, water-injection facilities, natural gas liquid processing plants, and supporting facilities.

Four licenses for the exploration and development of *mineral* resources were issued to private mining companies. Present exploration of deposits is expected to lead to commercialization after some years. Minerals in these deposits include copper, lead, zinc, nickel, gold and silver. Other promising deposits of metallic minerals are being investigated.

An extensive program to inventory non-metallic mineral resources is in progress to locate additional material needed for construction programs.

Actions taken to improve the *electricity* system include establishment of the Electrical Services Department to plan and coordinate its development, and specification of standardized voltage (127/220v) and frequency (60 hz), though consumers will continue to be served with other voltages and frequencies where these are already in use. Total generating capacity is 1,256 megawatts and the system is serving an estimated 2.2 million people. Electricity tariffs were reduced by decree in 1394 to 7 and 5 halalahs per kilowatt-hour for residential and industrial consumers respectively.

Expansion of *manufacturing* not based on hydrocarbons exceeded the target set in the first development plan but petroleum refining and hydrocarbon-based industry fell short of their respective plan targets. A refinery was established in Riyadh, cement production more than doubled, and many new industries were established in accord with the objective of achieving a diversified manufacturing structure. A statement of Saudi Arabian Industrial Policy was issued and the Industrial Development Fund was established and began making loans to industrial enterprises.

Total *construction* activity more than doubled over the period of the plan as programs in all sectors were implemented.

All sectors within *commerce* grew rapidly in the first plan period — trade, transport and storage, finance, real estate, and business and personal services — reflecting the quickening tempo of development.

The main features of *manpower* development were a growth in the labor force of about 20 percent to a level of 1.6 million persons in 1395, and improvement in the educational levels of new entrants as a result of expansion of the educational system.

The *education* system has established a strong base from which to move toward further development. Almost 800,000 students are enrolled full-time in public schools and another 12,000 are attending colleges and universities. With night schools, part-time classes, and adult literacy programs having close to 90,000 enrollees, approximately one out of every seven persons in the Kingdom is participating in an organized educational program.

This achievement has required an unprecedented expansion of physical facilities — schools, class-rooms, special-purpose rooms—to avoid excessive congestion, multistreaming or double-sessions (phenomena usually associated with rapid growth of this order). While more and more Saudis are entering the teaching profession, substantial numbers of contract teachers have been engaged to meet the enrollment growth.

Most important is that expansion has occurred throughout the structure of the educational system. Each level has been developed to ensure opportunities for all students to continue their education to the extent their ability and interest allows.

Information services have developed rapidly in recent years. Two radio complexes equipped with studios and transmitters are located in Riyadh and Jiddah and broadcast Arabic

programs 20 hours daily. Half the population now receives the television signal, from seven television stations, about 50 percent of the programs transmitted being produced locally. A contract has recently been signed with the Government of France for the installation of a SECAM color television system throughout the Kingdom. A news-agency service was established in 1390 for collection and dissemination of news both domestically and externally.

Despite great difficulties in procuring the necessary qualified manpower, the *health* system has expanded steadily in quantitative terms in the past five years. Within the Ministry of Health, the number of hospitals has increased from 47 to 62, an addition of 569 beds; the numbers of doctors and nurses have expanded by 140 percent and 75 percent respectively.

In the later years of the first plan, a number of measures designed to ameliorate the quality of health services were undertaken and will provide an important impetus for implementation of the second Development Plan. These included establishment of a program for training in hospital management, specification of a series of standardized designs for hospital construction, and the establishment of a central group within the Ministry of Health for health service planning, coordination and program follow-up.

The Red Crescent Society has opened a number of new first-aid centers, established a First-Aid Training Institute, and continued to contribute to the provision of health services in the Hajj areas at the time of the Pilgrimage.

Delivery of social assistance through the *Social Security and Social Affairs* programs expanded significantly throughout the first development plan. Social Security benefits were increased substantially in 1394. The maximum benefit for a family of 7 persons is now SR 5,400 per year. In 1393-94 approximately 110,000 persons were receiving pension benefits and3,700 were receiving grants-in-aid.To ensure that as many as possible of those eligible for pensions received them, the number of branch offices was increased from 40 to 46.

The number of institutions run by the Social Welfare Department increased from 15 to 31 between 1390 and 1395. These offer institutional care to the aged, orphans, foundlings, problem or delinquent children, and others in need. The foster and alternate family care program has also increased significantly with the result that the number of children being cared for under this program has increased more than fourfold in five years.

A new range of activities was initiated in 1393-94 with the establishment of a rehabilitation department under Social Affairs. The department's first project was the establishment of a rehabilitation center in Riyadh which, six months later, was serving 42 persons.

Targets for expansion of the cooperative program in the first plan included expansion of their number from 39 to 76. By the end of the plan, this target had been exceeded and 83 registered cooperatives were in existence.

Expansion of Community Development Center activities included establishment of mother and child care centers, home economics classes, schemes for sanitary improvement,

and literacy classes. A research project to evaluate the effectiveness of community development is now nearing completion.

Enforcement of the *Social Insurance* Law began in 1393. It is being enforced in a number of stages beginning with the contributory annuities program covering disability, old age, and death benefits. By the end of the plan, annuities coverage had been extended to 199,400 persons who worked in 770 private and public organizations employing more than 20 persons. The General Organization for Social Insurance is currently preparing to bring in an occupational hazards scheme which, like the annuities program, will be introduced in stages.

To give stronger guidance and coordination to *youth welfare* programs, the General Presidency for Youth Welfare was founded in 1394 as the successor to the Youth Welfare Department of the Ministry of Labor and Social Affairs. In spite of slow progress with the construction of youth centers, youth activities have been expanded in many areas. Nine national societies for various sports were officially recognized and appropriate area and national championships were held. As well as participating in the Munich Olympic Games, the Kingdom participated in many international sports events. On the cultural side, numerous activities were held including acting, reading and painting exhibitions, lectures, and knowledge-exchange trips for the youth of different areas. Public service activities and voluntary labor camps have also become increasingly popular.

The major objective for the *transportation* sector in the first plan was to provide the basic transport network needed to support economic and social development. This objective has generally been achieved. All major commercial and administrative centers within the Kingdom are interconnected with roads and air routes.

There are now more than 11,000kms. of paved roads and a large construction program is under way. 42 teams are engaged in construction and maintenance of rural earth roads of which 8,000 kilometers have been constructed. There are more than 200,000 motor vehicles in the Kingdom and this number is expanding rapidly.

20 domestic airports are served on a scheduled basis by SAUDIA and foreign carriers. In 1393, 350,000 international and 800,600 domestic passenger departures were recorded. About 350,000 pilgrims arrived by air. SAUDIA also serves 28 foreign destinations in Europe, Asia, Africa, and the Middle East.

The major ports of Jiddah and Dammam have been expanded. Jiddah now has ten new and two old berths with seven more approved, and Dammam seven new, two old, and seven under construction.

Progress in developing a national *telecommunications* system has not kept pace with the growth in demand for services. At the end of 1394, there were 93,600 lines of automatic telephone exchange equipment in ten cities across the Kingdom; completion of 23 telephone office switch projects in the next three years will provide an additional 105,200 lines. In addition, two portable earth stations for satellite communication were installed, one at

Riyadh and the second at Jiddah. Implementation of the intra-Kingdom telecommunications network has fallen behind schedule.

The Postal Service has speeded up mail deliveries within the Kingdom, and is now approaching its goal of 24-hour service for inland mail. Although the morale of postal workers has improved with the implementation of performance reviews, the Service is still handicapped by shortages of trained manpower, a lack of modern mail-handling procedures and equipment, and inadequate facilities for the rapidly growing volumes of inland and international mail.

Substantial progress has been made in the development of *municipalities* during the first plan. The number of communities with municipality status grew from 54 to 85, thus bringing a wide range of amenities to a much broader section of the Kingdom's population. Achievement in the implementation of municipal projects was, in a number of cases, considerably in excess of plan targets, but implementation of street asphalting and drainage network construction projects has fallen short of plan expectations.

An important aspect of the Kingdom's urban development has been the preparation of town plans. Regional physical plans for all five of the physical planning regions were initiated; they include the preparation of master plans for the Kingdom's principal cities. Implementation of several of these master plans has already begun.

Housing construction has not kept pace with urban growth. Approximately 75,000 standard or better urban dwellings were constructed during the first plan period compared with an estimated need for new and replacement units of 154,000. Shortages or rising costs of labor, land, and materials have been largely responsible for the slow growth in housing supply, but lack of construction and mortgage financing has also been a major factor.

The General Housing Department was established in 1391 under the Ministry of Finance and National Economy. The Department is at present constructing 2,500 public housing units for low- and moderate-income families, developing 1,000 serviced plots for immigrant households and those displaced by urban renewal, and preparing to let contracts for the construction of 31,000 additional housing units.

The Real Estate Development Fund was established in 1394 for the purpose of making loans to individuals and companies for housing construction and residential and commercial development.

The number of pilgrims arriving for *the Hajj* increased by more than 40 percent over the period of the first plan. Close to 1.5 million persons now make the pilgrimage each year, more than 900,000 of these from foreign countries. The Hajj is undoubtedly the world's largest regular gathering of people. While much has been done to alleviate the enormous logistical, administrative and sanitary problems posed by such a large gathering, the urgent need for planned development of the physical infrastructure and services of the Hajj is fully recognized. Action to this end has already been initiated under the direction of a Royal Commission.

The *management and implementation* of the first plan has provided ministries and agencies and the Central Planning Organization with experience of both the value and the problems of effective planning. This experience, and the completion of five regional planning studies, has guided and informed the preparation of the second Development Plan.

III. THE ECONOMY AND SOCIETY OF TOMORROW

III. The Economy and Society of Tomorrow

The national goals to be pursued within the second Development Plan have already been outlined in the first chapter. Details of the sectoral plans for achieving these objectives, and of necessary management and implementation improvements needed, lie ahead in Chapters IV through VIII. The purpose of this chapter is to present the strategies to be adopted in attaining the plan objectives, to assess the manpower implications of the plan, to forecast the expected growth of the economy, and to set out the highlights of the sectoral plans.

A. DEVELOPMENT STRATEGY

The development strategy consists of three key elements:

1. Diversification of the economic base through emphasis on increasing agricultural and industrial production.
2. Rapid development of the Kingdom's manpower resources.
3. Development of the economic regions of the country by
   - ☆ wide distribution of productive investment based on the distinctive physical and human resources of each region, and
   - ☆ social programs applied in accordance with need,

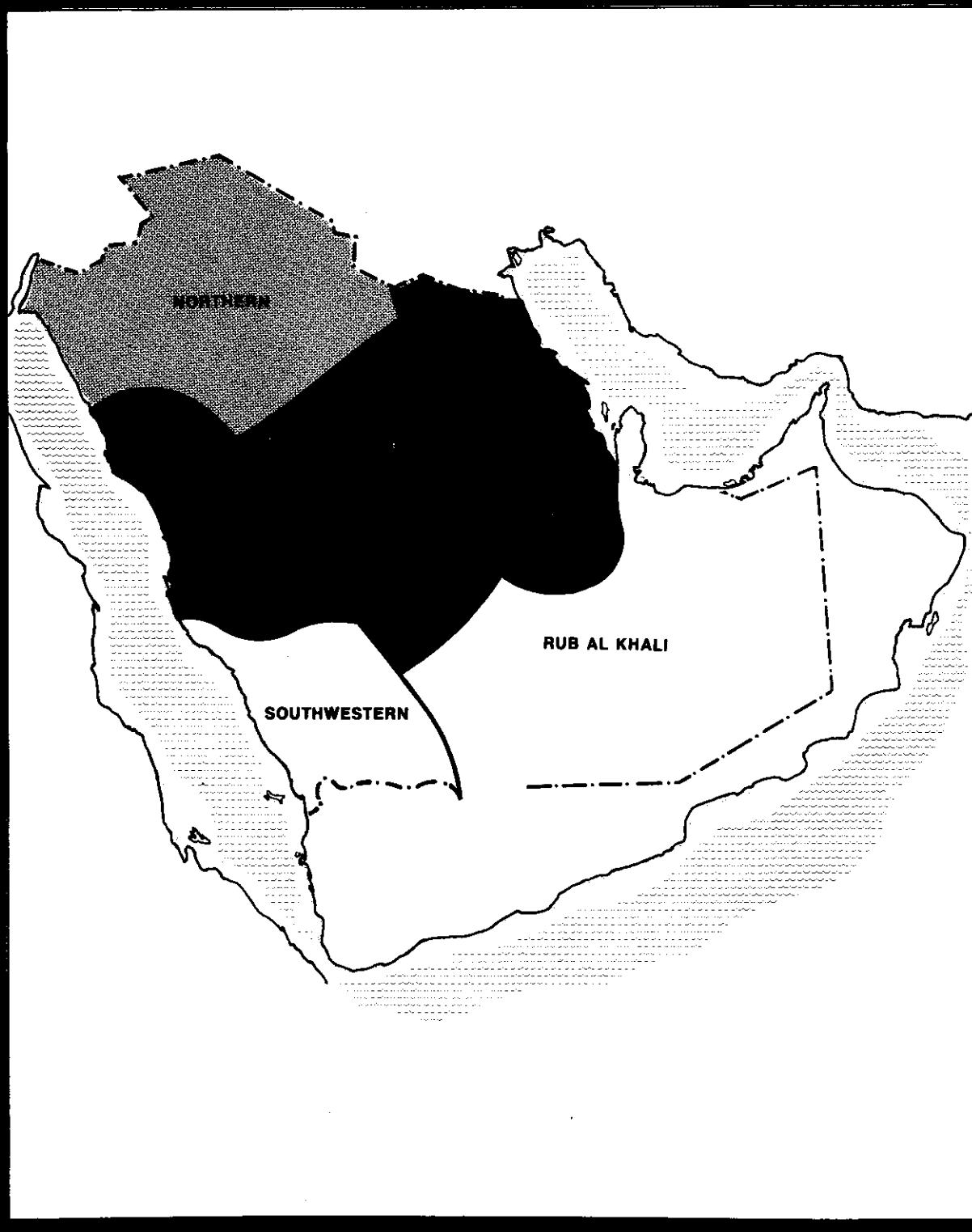
   thereby extending the benefits of national development to all sectors of the population without removing the incentives to individual effort and achievement.

The first strategy element will lay the foundations of economic self-sufficiency in the future as a precautionary measure against the gradual depletion of oil, when revenues and foreign exchange from oil may decline. Thus, large investments are to be made in industrial ventures based on natural gas and mineral resources; individual and joint investments in other industries will be encouraged with special incentives, credit, and the provision of infrastructure and support services; and agricultural production will be stimulated through government research extension activities, credit and input subsidies, and expansion of productive land.

Rapid development of manpower resources is essential for all aspects of the Kingdom's progress. Features of this development include increasing the number of both Saudis and non-Saudis in the labor force, raising the productivity of the labor force by education and training, and creating a productive work environment; and shifting manpower out of the agricultural sector into other sectors with expanding opportunities for employment at higher levels of productivity and income.

The development of regional economic resources and the provision of social services in accordance with need are intended to distribute the wealth, at present generated by the Kingdom's oil, to all sectors of the population. Regional strategy, based on socio-economic studies of the regions of the Kingdom (See Figure III-1), will include the following.

- ☆ Central Region: Continued development of Riyadh as the administrative capital of the Kingdom; the development of industry not requiring large quantities of water; and large-scale agricultural projects in rural areas.


NORTHERN
RUB AL KHALI
SOUTHWESTERN

- ☆ Eastern Region: Major development of hydrocarbon-based industry; and agricultural development in areas of high potential.
- ☆ Western Region: Pipeline transfer of hydrocarbons for the formation of a second industrial growth pole; continued development of the commercial, pilgrimage, and tourist activities of the main cities; and agricultural development in rural areas.
- ☆ Southwestern Region: Agricultural development; domestic tourism in the highlands; industry as feasible; and minerals development.
- ☆ Northern Region: Agricultural development; minerals development; and industry as feasible.

Real incomes of families will be increased throughout the country emphasizing:

- ☆ the expansion and upgrading of educational and health services,
- ☆ the widening and strengthening of social transfer programs including old age pensions and child allowances,
- ☆ implementation of a comprehensive housing program,
- ☆ expansion and improvement of the municipalities system.

The plans for productive-sector development and those for social development are mutually reinforcing; programs directly concerned with increasing real family incomes and social welfare will reinforce programs for improving industrial and agricultural productivity by expanding domestic markets and contributing to the development of a better-educated and more highly-skilled labor force. Similarly, programs for developing industry and agriculture will reinforce programs for increasing family incomes and social welfare by providing better paid employment opportunities for more people.

The above strategies will be reinforced by programs for development in other sectors. The Plan provides for nation-wide development of the telecommunications and transportation networks; extension of electrification within a national system; development of national water resources to meet urban, industrial, and agricultural demands; and continued development of the commercial infrastructure of the Kingdom to accommodate the growing volume of business activity that will be generated by the expanding economy.

The economic and social development of a nation require the strenuous efforts of both the government and the people. Despite the Kingdom's unusual financial situation, this is no less true in Saudi Arabia than in other countries. Saudi Arabia's development problems may be different from those of other countries; they will be no less easy to overcome. Accordingly, the following basic tenets underlie the successful outcome of the Kingdom's development strategy for the period 1395-1400 and beyond.

- ☆ Careful management of hydrocarbon resources in order to maximize the domestic, social, and economic benefits to the Kingdom over the long term, while at the same time meeting the Kingdom's need to finance industrial and social development.

- ☆ Acceptance of the addition to the foreign labor force in Saudi Arabia needed to assist in implementing the construction and other programs planned for the next five years.
- ☆ Continuing internal migration from rural areas to locations of urban and industrial employment.
- ☆ A major role in development for private enterprise, especially in the progress of the productive sectors. The Government will do its utmost to stimulate and assist private-sector activity.
- ☆ Elimination of constraints that may arise as a result of the unprecedented rate of planned expansion of economic activity, and rescheduling of programs and projects in accordance with national priorities where it is not possible to eliminate these constraints in the short run.
- ☆ Improvement in the speed and effectiveness of the Government's planning, decision-making, and implementation processes. Many existing procedures must be reformed, and public institutions created or the present ones modified in a number of areas.
- ☆ Prudent utilization of international cooperation programs, whereby the Kingdom can acquire access to technical know-how, skilled labor, and management expertise.
- ☆ Sound monetary and fiscal policies, whereby domestic inflation is minimized and the Kingdom's growing financial reserves are soundly managed in relation to future national development and with due concern for the stability of the international monetary system.

B. GROWTH OF THE LABOR FORCE

The projected increase of the Saudi labor force over the period 1395-1400 will be about 232,000, or an annual rate of 3.4 percent. The non-Saudi segment of the labor force must grow more rapidly than the Saudi portion to fulfill the manpower demands of the Development Plan. The number of foreign workers will reach 812,600 by 1400, a net increase of 498,600 over the plan period.

To meet plan requirements the labor force is therefore projected to grow over the 1395-1400 period, as follows:

	Number (thousands)		*Annual Growth Rate (percent)*
	1395	*1400*	*1395-1400*
Saudi men	1,259	1,470.0	3.1
Non-Saudi men	306	767.6	20.2
Subtotal	1,565	2,237.6	7.4
Saudi women	27	48.0	12.2
Non-Saudi women	8	45.0	41.2
Subtotal	35	93.0	21.6
Subtotal Saudi	1,286	1,518.0	3.4
Subtotal Non-Saudi	314	812.6	21.0
Total	1,600	2,330.6	7.8

Migration of the Saudi and non-Saudi worker is a phenomenon affecting the social framework of each region. During the past five years, the Western, Central, and Eastern regions have experienced net in-migration while the Southern and Northern regions had a net out-migration. This pattern is expected to continue into the second plan period, with slightly increased rates of out-migration from the Southern region.

Migration patterns show an acceleration of the drift toward the cities of both the rural and nomadic peoples. The urban growth poles of Jiddah and Dammam/al-Khobar, as well as Riyadh, will continue their high rates of growth. In the urban areas the labor force will increase at the bottom levels of the occupational skill pyramid. If widespread under-employment and unemployment are to be avoided, mechanisms for utilizing the new city dwellers must be developed.

Employment Structure by Economic Activity

The economic activity structure of the labor force and changes due to the development requirements are depicted in Figure III-2. Employment will have to grow from about 1.5 million to 2.3 million during the plan period. The construction and services sectors are growing the fastest, at 13.5 and 12.7 percent annually. The agricultural sector will decline at about 1.5 percent annually.

A comparison of employment increases and growth rates during the first Plan and those projected for the second Plan is shown in Table III-1. Employment increased by 418,300 during the period 1390-1395 and is projected to grow by 808,500 in the second plan period. This projection will result in an increase in the annual growth of employment from 6.6 percent to 8.9 percent during the second Plan.

Private-sector employment is estimated to increase by 624,600 at a rate of 7.9 percent annually, while public-sector employment must grow by 183,900 over the next five years in order to fulfill the Development Plan's manpower requirements. Public sector employment (excluding the military) will have to grow at a rate of 15.9 percent annually compared with 8.4 percent during the first Plan. Table III-2 compares the estimated present employment numbers and distribution by economic activity and the projections for 1400.

According to the planned programs described later, the manpower requirements of the Government (excluding Defense) in the second Development Plan are projected as follows:

	Planned Programs	*Other Programs*	*Total Non-Defense*
In 1394-95			
Budgeted	154,119	50,584	204,703
Less vacancies	22,267	13,636	35,903
Employment	131,852	36,948	168,800
In 1399-1400			
Budgeted (planned)	302,488	50,180	352,668
Net requirement	170,636	13,232	183,868

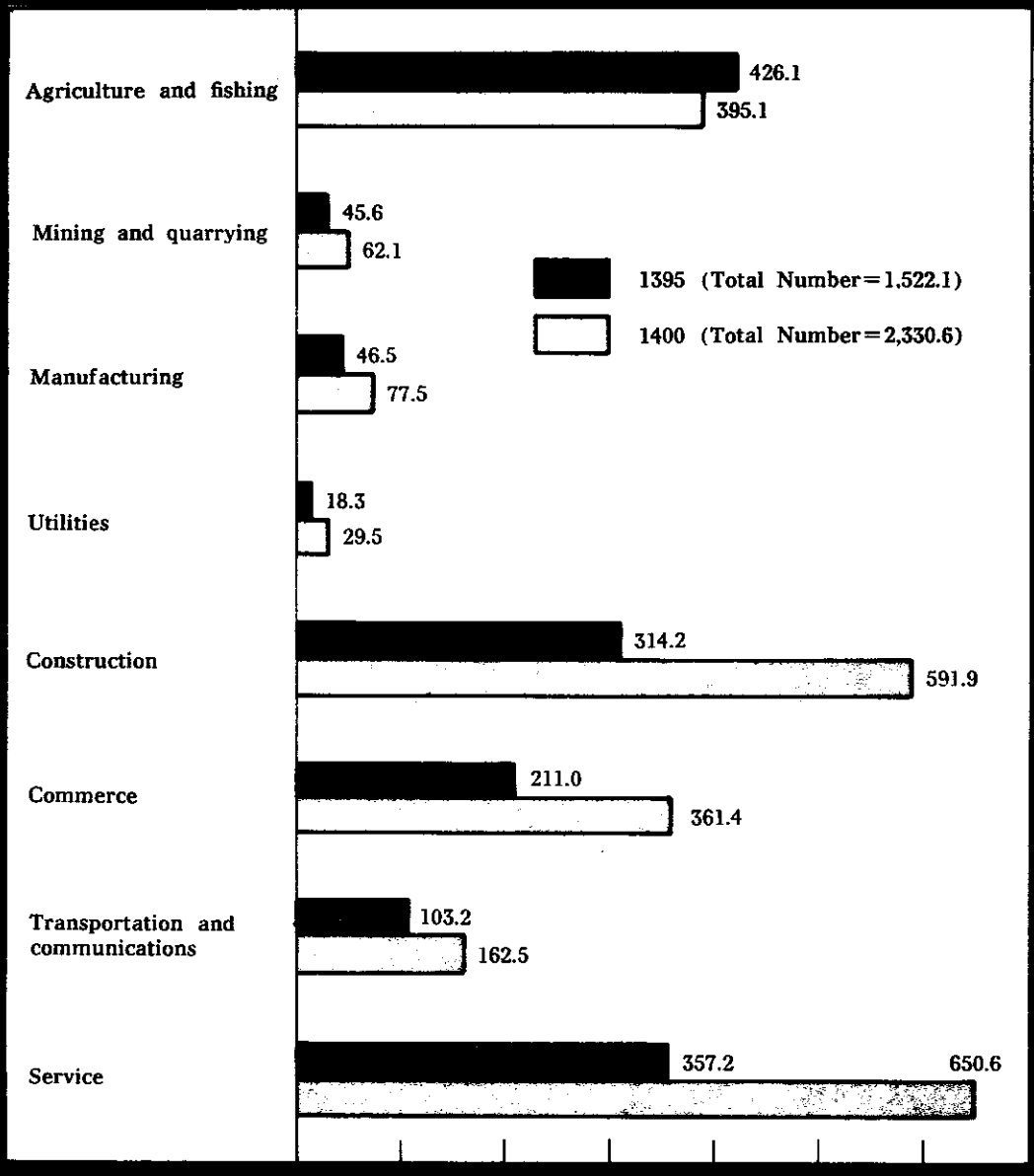

Agriculture and fishing
426.1
395.1
Mining and quarrying
45.6
62.1
1395 (Total Number=1,522.1)
1400 (Total Number=2,330.6)
Manufacturing
46.5
77.5
Utilities
18.3
29.5
Construction
314.2
591.9
Commerce
211.0
361.4
Transportation and communications
103.2
162.5
Service
357.2
650.6

Table III-1
AVERAGE ANNUAL GROWTH RATES AND EMPLOYMENT INCREASES
BY ECONOMIC ACTIVITY, 1390–95 AND 1395–1400

Activity	Growth Rate (percent)		Employment Increase (Thousands)	
	First Plan	Second Plan	First Plan	Second Plan
Agriculture, fishing				
Settled, fishing	(0.1)	(1.0)	(0.7)	(14.8)
Nomadic	(3.0)	(3.0)	(19.0)	(16.2)
	(3.0)	(1.5)	(19.7)	(31.0)
Mining and quarrying				
Crude petroleum, natural gas	9.9	3.1	7.2	3.2
Other	14.0	8.5	12.7	13.3
	12.1	6.4	19.9	16.5
Manufacturing				
Petroleum refining	8.5	1.8	0.7	0.2
Other	5.0	11.1	9.7	30.8
	5.2	10.7	10.4	31.0
Utilities	8.5	10.0	6.1	31.7
Construction	17.3	13.5	172.7	277.7
Commerce				
Trade, restaurants, hotels	10.9	11.7	77.4	141.3
Finance, insurance, real estate, business services	4.0	8.0	3.4	9.1
	10.1	11.4	80.8	150.4
Transportation, communications, storage	10.7	9.5	41.1	59.3
Community, social and personal services	6.5	9.6	50.9	109.5
Subtotal private sector	6.4	7.9	362.2	624.6
Public administration*	7.0	11.1	24.4	76.9
Education	10.2	14.1	24.0	79.7
Health	9.5	20.5	7.7	27.3
Subtotal public sector	8.4	15.9	56.1	183.9
Total	6.6	8.9	418.3	808.5

* Includes civilian Defense employees.

Table III-2
EMPLOYMENT IN 1395 AND LABOR DEMAND IN 1400
BY ECONOMIC ACTIVITY

Activity	Thousands: Employment 1395	Thousands: Labor Demand 1400	Percent Change 1395–1400	Percent Distribution: 1395	Percent Distribution: 1400
Agriculture, fishing					
Settled, fishing	311.2	296.4	(4.8)	20.5	12.7
Nomadic	114.9	98.7	(14.1)	7.5	4.2
	426.1	395.1	(7.3)	28.0	16.9
Mining and quarrying					
Crude petroleum, natural gas	19.2	22.4	16.7	1.3	1.0
Other	26.4	39.7	50.4	1.7	1.7
	45.6	62.1	36.2	3.0	2.7
Manufacturing					
Petroleum refining	2.1	2.3	9.5	0.1	0.1
Other	44.4	75.2	69.4	2.9	3.2
	46.5	77.5	66.7	3.0	3.3
Utilities	18.3	29.5	61.2	1.2	1.3
Construction	314.2	591.9	88.4	20.6	25.4
Commerce					
Trade, restaurants, hotels	191.7	333.0	73.7	12.6	14.3
Finance, insurance, real estate, business services	19.3	28.4	47.2	1.3	1.2
	211.0	361.4	71.3	13.9	15.5
Transportation, communications, storage	103.2	162.5	57.5	6.8	7.0
Community, social and personal services	188.4	297.9	58.1	12.4	12.8
Subtotal private sector	1,353.3	1,977.9	46.2	88.9	84.9
Public Administration*	85.2	162.1	90.3	5.6	7.0
Education	62.5	142.2	127.5	4.1	6.1
Health	21.1	48.4	129.4	1.4	2.1
Subtotal public sector	168.8	352.7	108.9	11.1	15.1
Total	1,522.1	2,330.6	53.1	100.0	100.0

* Includes civilian defense employees.

Employment Structure by Occupational Group

The occupational structure of the labor force in 1395 and the projected changes in 1400 are shown in Figure III-3. The number of professional and technical workers needed to meet the Plan's requirement must grow from about 79,100 to more than 191,100 by 1400. All occupational groups except farmers and fishermen will grow by more than 7 percent annually.

Employment increases in the two plan periods are compared in Table III-3. The largest increase is in the group of production workers, transport equipment operators and laborers — 392,400 in the second plan period compared with only 273,400 in the first plan. However, the highest growth rate (19.3 percent) is in the professional and technical workers, owing to the great build-up in developmental projects over the next five years.

Employment distribution by occupational group is estimated in Table III-4. Labor demand in 1400 is estimated to reach about 2.3 million with all occupational groups gaining a larger share of the total labor force except farmers and fishermen, who will drop from 27.2 percent to 16.3 percent during the second Plan.

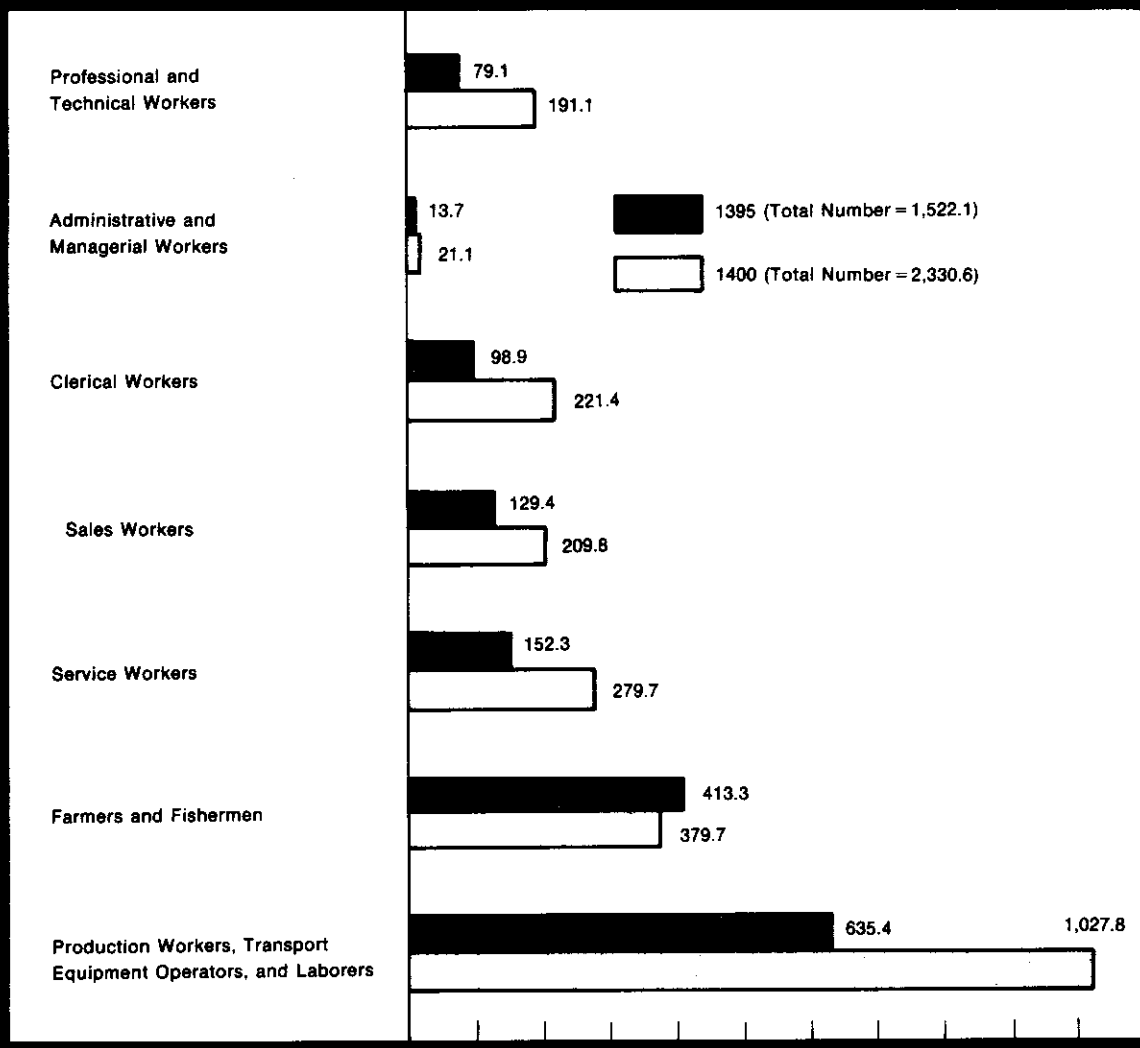

Professional and Technical Workers
79.1
191.1
Administrative and Managerial Workers
13.7
21.1
1395 (Total Number = 1,522.1)
1400 (Total Number = 2,330.6)
Clerical Workers
98.9
221.4
Sales Workers
129.4
209.8
Service Workers
152.3
279.7
Farmers and Fishermen
413.3
379.7
Production Workers, Transport Equipment Operators, and Laborers
635.4
1,027.8

Table III-3
EMPLOYMENT INCREASES AND AVERAGE ANNUAL GROWTH RATES
BY OCCUPATIONAL GROUP, 1390–95 AND 1395–1400

	First Plan		*Second Plan*	
Group	*Employment increase (thousands)*	*Growth rate (percent)*	*Employment increase (thousands)*	*Growth rate (percent)*
Professional and technical	29.3	9.7	112.0	19.3
Administrative and managerial	4.9	9.3	7.4	9.0
Clerical	38.2	10.2	122.5	7.5
Sales	41.1	7.9	80.4	10.1
Service	53.0	8.9	127.4	12.9
Farmers and fishermen	(21.6)	(1.0)	(33.6)	(1.7)
Production*	273.4	11.9	392.4	10.1
Total	418.3	6.6	808.5	8.9

* This category of workers includes transport equipment operators, and laborers.

Table III-4
EMPLOYMENT IN 1395 AND LABOR DEMAND IN 1400 BY OCCUPATIONAL GROUP

	1395		*1400*		*Percent Change 1395–1400*
Group	*Employment (thousands)*	*Percent Distribution*	*Labor Demand (thousands)*	*Percent Distribution*	
Professional and technical	79.1	5.2	191.1	8.2	141.6
Administrative and managerial	13.7	0.9	21.1	0.9	54.0
Clerical	98.9	6.5	221.4	9.5	123.9
Sales	129.4	8.5	209.8	9.0	62.1
Service	152.3	10.0	279.7	12.0	83.7
Farmers and fishermen	413.3	27.2	379.7	16.3	(8.1)
Production*	635.4	41.7	1,027.8	44.1	61.8
Total	1,522.1	100.0	2,330.6	100.0	53.1

* This category of workers includes transport equipment operators, and laborers.

C. GROWTH OF THE ECONOMY

The projected growth of the economy in real terms (value added in constant prices) over the period of the Plan is shown in Table III-5. The individual sectoral projections have been made in the light of an assessment of the highest overall rates of growth sustainable over the next five years, taking into account the absorptive capacity of the economy as a whole.

The average annual rates of growth for the different economic sectors for the first plan and the second plan are shown in Figure III-4. These growth rates are converted into increases in value added under the first plan and projected for the second plan in Table III-6. The latter provides a more useful comparison of the magnitude of the targets set for the second plan than the figure of comparative growth rates as it measures the real growth in product in absolute terms projected for each sector. Figure III-5 combines the sectoral information into the major source of origin–oil, private non-oil, and government.

As can be seen, the increase in output of the combined private non-oil sectors projected for the second Plan is almost twice as large as that estimated to have been achieved during the first plan -SR14,297 million versus SR 7,214 million. The increase projected for a number of the individual sectors is over twice as large– manufacturing (excluding refining), utilities, trade, transportation and communications, business services, and community services. The construction sector – the largest non-oil sector – more than doubled during the first plan; it is expected to more than double again, an increase of 370 percent in just 10 years.

In addition to projecting real growth in value added, inflation rates have been estimated for each of the sectors to show their magnitude in 1399-1400 in projected prices of that year. The margin for error in these projections is, of course, far larger than that already present in the constant price projections. However, the projections indicate the general magnitude and relationships of the numbers expected to appear in future national accounts. Table III-7 compares the sectoral valued-added projections for 1399-1400 (in 1399-1400 prices) with those estimated for 1394-95 (in 1394-95 prices).

Table III–5
GROSS DOMESTIC PRODUCT: 1394–95 AND 1399–1400 IN CONSTANT 1394–95 PRICES
(SR Millions)

	estimated 1394–95	*Average Annual Growth Rate*	*Projected 1399–1400*
Private			
Agriculture	1,409.0	4.0	1,714.3
Crude petroleum and natural gas	121,232.0	10.0*	195,199.5
Other mining and quarrying	175.3	15.0	352.6
Petroleum refining	7,494.7	5.0*	9,565.5
Other manufacturing	901.8	14.0	1,736.3
Electricity, gas, water, and sanitary services	333.3	15.0	670.4
Construction	4,362.0	15.0	8,773.7
Wholesale and retail trade, restaurants, and hotels	2,580.0	15.0	5,189.4
Transport, communications, and storage	3,637.8	15.0	7,317.1
Ownership of dwellings	1,636.7	6.0	2,190.2
Finance, insurance, real estate, and other business services	895.2	15.0	1,800.6
Community, social, and personal services	522.4	14.0	1,005.8
Less imputed bank service charge	(63.0)	–	(63.0)
Total private	145,117.2	10.2	235,452.4
Government			
Public Administration	1,291.4	10.0	2,079.8
Education	1,026.8	13.8	1,960.0
Health	256.5	15.0	515.9
Subtotal	2,574.7	12.1	4,555.7
Defense	1,025.4	15.0	2,062.5
Total government	3,600.1	12.9	6,618.2
GROSS DOMESTIC PRODUCT (excluding import duties)	148,717.3	10.2	242,070.6
Import duties	82.7	15.0	166.3
GDP (at market prices)	148,800.0	10.2	242,236.9
Summary			
Private sector			
Oil	128,726.7	9.7	204,765.0
Non-oil	16,390.5	13.4	30,687.4
Government sector	3,600.1	12.9	6,618.2
Total Non-oil	19,990.6	13.3	37,305.6

* These rates are notional only (to fill in the GDP picture), since oil production policies are not part of the Development Plan but are determined by the Supreme Advisory Council for Petroleum and Minerals.

Source: Central Planning Organization.

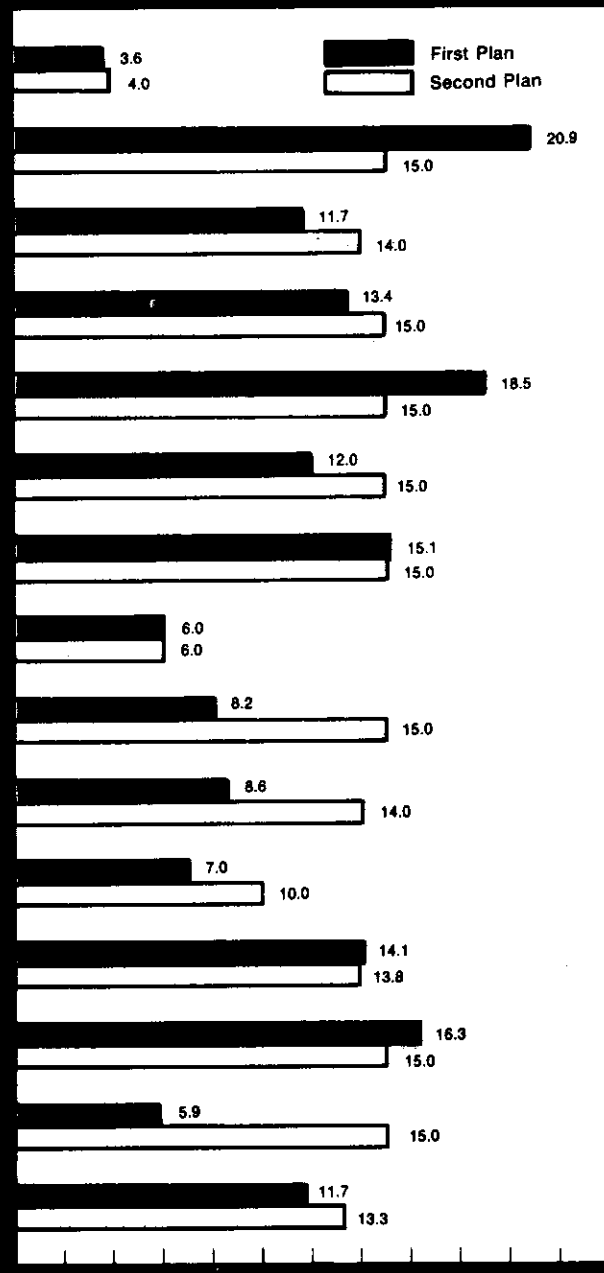

First Plan
Second Plan
3.6
4.0
20.9
15.0
11.7
14.0
13.4
15.0
18.5
15.0
12.0
15.0
15.1
15.0
6.0
6.0
8.2
15.0
8.6
14.0
7.0
10.0
14.1
13.8
16.3
15.0
5.9
15.0
11.7
13.3

Table III–6
INCREASE IN GROSS DOMESTIC PRODUCT FIRST PLAN VS. SECOND PLAN
(SR Millions in constant 1394–95 prices)

	1389 –90	*1394 –95*	*1399–1400*	*Increase during First Plan*	*Increase during Second Plan*
Private					
Agriculture	1,181.0	1,409.0	1,714.3	228.0	305.3
Crude petroleum and natural gas	52,197.7	121,232.0	195,199.5	69,034.3	73,967.5
Other mining and quarrying	67.7	175.3	352.6	107.6	177.3
Petroleum refining	6,118.8	7,494.7	9,565.5	1,375.9	2,070.8
Other manufacturing	517.5	901.8	1,736.3	384.3	834.5
Electricity, gas, water, and sanitary services	177.5	333.3	670.4	155.8	337.1
Construction	1,867.8	4,362.0	8,773.7	2,494.2	4,411.7
Wholesale and retail trade, restaurants, and hotels	1,460.8	2,580.0	5,189.4	1,119.2	2,609.4
Transport, communications, and storage	1,801.5	3,637.8	7,317.1	1,836.3	3,679.3
Ownership of dwellings	1,222.9	1,636.7	2,190.2	413.8	553.5
Finance, insurance, real estate, and other business services	603.0	895.2	1,800.6	292.2	905.4
Community, social, and personal services	345.5	522.4	1,005.8	176.9	483.4
Less imputed bank service charge	(69.0)	(63.0)	(63.0)	6.0	—
Total private	67,492.7	145,117.2	235,452.4	77,624.5	90,335.2
Government					
Public Administration	920.9	1,291.4	2,079.8	370.5	788.4
Education	529.7	1,026.8	1,960.0	497.1	933.2
Health	120.6	256.5	515.9	135.9	259.4
Subtotal	1,571.2	2,574.7	4,555.7	1,003.5	1,981.0
Defense	769.3	1,025.4	2,062.5	256.1	1,037.1
Total government	2,340.5	3,600.1	6,618.2	1,259.6	3,018.1
GROSS DOMESTIC PRODUCT (excluding import duties)	69,833.2	148,717.3	242,070.6	78,884.1	93,353.3
Summary					
Private sector					
Oil	58,316.5	128,726.7	204,765.0	70,410.2	76,038.3
Non-oil	9,176.2	16,390.5	30,687.4	7,214.3	14,296.9
Government sector	2,340.5	3,600.1	6,618.2	1,259.6	3,018.1
Total non-oil	11,516.7	19,990.6	37,305.6	8,473.9	17,315.0

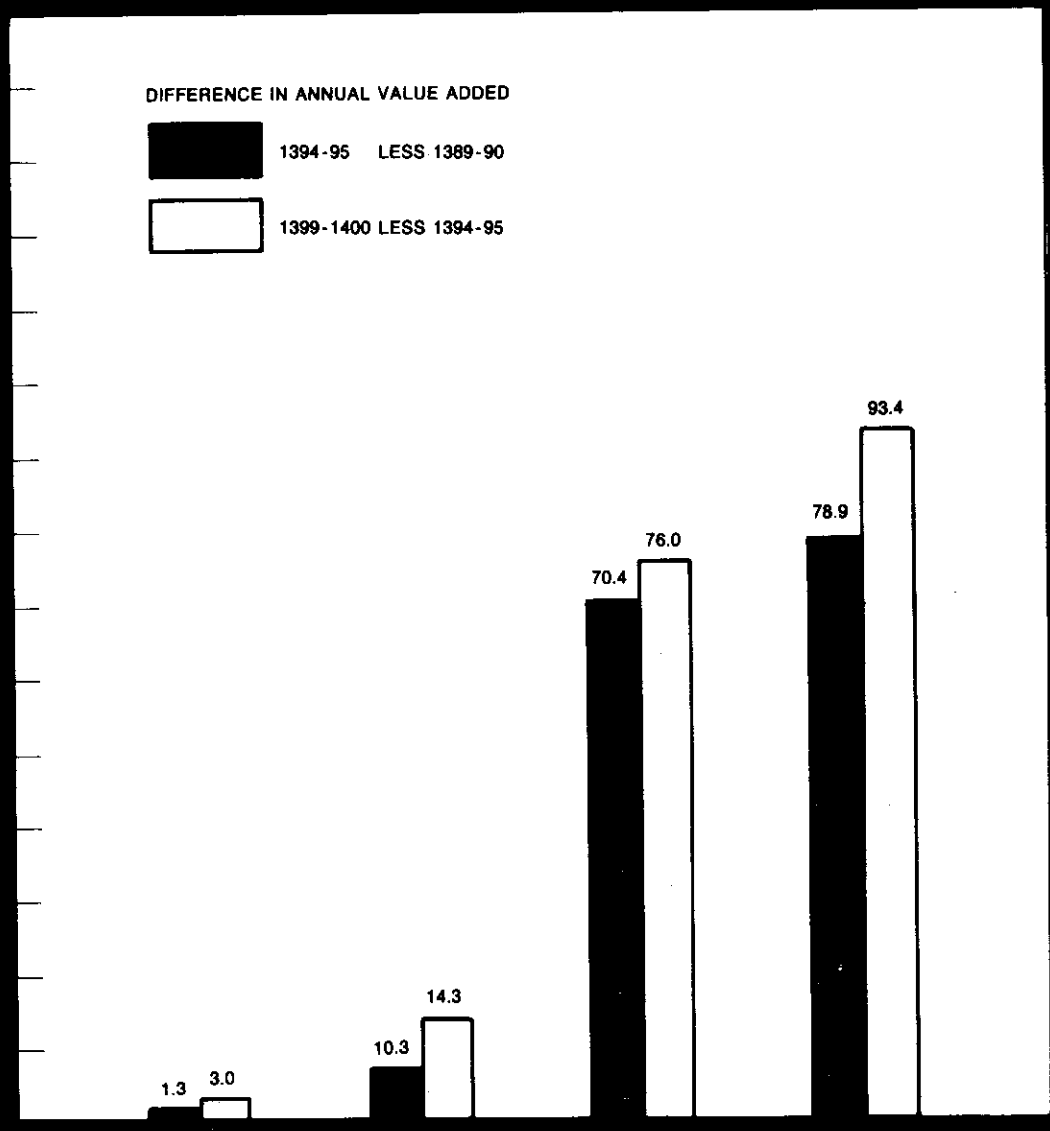

DIFFERENCE IN ANNUAL VALUE ADDED
1394-95 LESS 1389-90
1399-1400 LESS 1394-95
1.3
3.0
10.3
14.3
70.4
76.0
78.9
93.4

Table III–7
GROSS DOMESTIC PRODUCT IN CURRENT PRICES
1394–95 AND 1399–1400
(SR Millions)

	1394–95	*1399–1400*
Private		
Agriculture	1,409.0	2,188.0
Crude petroleum and natural gas	121,232.0	249,133.1
Other mining and quarrying	175.3	567.9
Petroleum refining	7,494.7	12,208.4
Other manufacturing	901.8	2,492.6
Electricity, gas, water, and sanitary services	333.3	670.4
Construction	4,362.0	15,810.2
Wholesale and retail trade, restaurants, and hotels	2,580.0	7,449.9
Transport, communications, and storage	3,637.8	10,504.4
Ownership of dwellings	1,636.7	3,527.3
Finance, insurance, real estate, and business services	895.2	2,899.9
Community, social, and personal services	522.4	1,443.9
Less imputed bank service charges	(63.0)	(101.5)
Total private	145,117.2	308,794.5
Government		
Public Administration	1,291.4	2,985.8
Education	1,026.8	2,813.8
Health	256.5	830.9
Subtotal	2,574.7	6,630.5
Defense	1,025.4	2,960.9
Total government	3,600.1	9,591.4
GROSS DOMESTIC PRODUCT (excluding import duties)	148,717.3	318,385.9
Import duties	82.7	238.7
GDP (at market prices)	148,800.0	318,624.6
Summary		
Private sector		
Oil	128,726.7	261,341.5
Non-oil	16,390.5	47,453.0
Government sector	3,600.1	9,591.4
Total Non-oil	19,990.6	57,044.4

As can be seen from all the immediately preceding tables, crude oil production and refining will continue to dominate the economy over the next five years. This dominance is, however, expected to show a relative decline during that period under the impact of more rapid growth throughout the balance of the economy. The table below compares the anticipated results of the second Plan with the situation estimated to obtain at the end of the first plan (current prices):

	GDP (SR millions)		*RelativeShares (percent)*	
	1394-95	1399-1400	1394-95	1399-1400
Oil	128,726.7	261,341.5	86.6	82.1
Private non-oil	16,390.5	47,453.0	11.0	14.9
Government	3,600.1	9,591.4	2.4	3.0
Total	148,717.3	318,385.9	100.0	100.0

In the previous chapter it was observed that neither constant prices nor current prices correctly measures changes in the real national income of Saudi Arabia because most of the domestic product — oil — is exported. The technique employed to provide a more valid measurement is to adjust constant price national income by a terms-of-trade effect. To do this for the future necessitates projecting the future value of exports including price changes in exports (primarily oil), price changes in imports, and growth in national income (GNP) in constant prices.

Historically, GDP has averaged about one-third larger than GNP, primarily because of the repatriation of oil company profits. Although Government ownership of 100 percent of the oil fields will eliminate this differential, development of new industries that are partly owned by foreigners would result again in repatriation of profits. Also, the number of foreign workers is expected to increase substantially and will lead to increases in factor income payments to abroad. On the other hand, Saudi earnings on foreign investments are increasing at a very rapid rate. Given all these considerations, in 1980 GNP could be larger than GDP by some SR 15,000 million.

As to the terms-of-trade effect, some relative deterioration with respect to the massive gains in 1393-94 and 1394-95 is to be expected. However, this is a matter of speculating how successful OPEC will be in raising prices to match any continued inflation in import prices, or in sustaining existing price levels.

GDP (in 1394-95 constant prices) has been projected at SR 242,070.6 million for 1399-1400. Real national income (GNP) could, therefore, be as large as SR 282,000 million in 1394-95 prices—GDP plus SR 15,000 million = GNP, plus terms-of-trade effect of SR 25,000 million

The Structure of the Economy

The above projections do not indicate any near-term change in the basic structure of the Kingdom's economy. The importance of oil is over-riding and will continue into the foreseeable future. Domestically-based, energy-intensive industries will further enhance oil's role in the economy.The long-term objective of diversification of the sources of national income and reduced dependence on oil is, therefore, somewhat paradoxical, because oil revenues are the means through which the Government finances the Kingdom's economic and social development programs—the principal means to diversification.

Thus, the speed with which diversification can be pursued is dependent on the extent and rapidity the Government achieves in exploiting its oil resources. The more successful the exploitation, the larger oil's share of GDP. The important criterion to use in assessing the economy's diversification efforts over the next several years is not oil's share of GDP, but whether or not consistent real growth is taking place in the other sectors.

As shown in the data presented earlier, the private sectors projected to achieve the highest growth rates are mining and quarrying, construction, utilities, transportation and communications, trade, and business services. The growth rates for manufacturing (excluding refining) and community services are almost as high. Because of their rapid growth, these sectors are, in general, also projected to experience relatively high rates of inflation.

The projections in Table III-8 suggest that the most significant changes resulting from the combination of these factors, as measured by sectoral contributions to GDP, are the increasing dominance of construction--one third of total value added in private non-oil activities — and the declining relative importance of agriculture.

Table III-8
RELATIVE SHARES OF SECTORS IN
PRIVATE, NON-OIL GROSS DOMESTIC PRODUCT
(Percentages Based on Current Prices)

Sectors	*1394–95*	*1399–1400*
Agriculture	8.6	4.6
Other mining and quarrying	1.1	1.2
Other manufacturing	5.5	5.3
Electricity, gas, water, and sanitary services	2.0	1.4
Construction	26.6	33.3
Wholesale and retail trade, restaurants, and hotels	15.7	15.7
Transport, communications, and storage	22.2	22.1
Ownership of dwellings	10.0	7.4
Finance, insurance, real estate, and other business services	5.5	6.1
Community, social, and personal services	3.2	3.1
Less imputed bank service charge	(0.4)	(0.2)
Total	100.0	100.0

In the realm of government, health and education will continue to grow at very high rates with the planned extension of these vital services throughout the Kingdom. Also, in keeping with the needs of stability in the Middle East, the Kingdom will rapidly expand its defense programs.

Foreign Trade and Balance of Payments

Oil will continue to provide export earnings more than ample to cover extremely rapid rates of increase in all the payments' categories. On the basis of the current posted price of US$ 10.46 per barrel, [a] an annual (solar year) export level of 3,000 million barrels (8.22 million barrels per day) would yield receipts of US $ 31,380 million or SR 108,889 million (SR 3.47 = US$ 1).

While comparatively minor at present, foreign exchange earnings from foreign investments should continue to increase at a very rapid rate. Given estimated reserves at the end of 1394-95 of SR 100,000 million and the fact that a large percent of these are held in a highly liquid form, any additional accumulations can be committed to less-liquid but higher-yielding forms of investment.

On the payments side, imports of goods and services will rise very rapidly. The major limiting factor on the rise in commodity imports over the next few years is the capacity of the Kingdom's ports and transportation systems. The Development Plan includes many programs for expanding both. If the implementation of these programs goes smoothly, an annual rate of increase in imports of goods and services of about 30 percent could possibly be sustained; however, this is an upper boundary and its probability of attainment is low. An average annual rate of increase of 30 percent would mean that imports of goods and services in 1399-1400 would reach SR 69,104 million compared with SR 18,612 estimated for 1394-95. [b] While this would mean almost doubling the value of imports every two years, payments for imports would still fall far short of export earnings during the plan period.

The largest payments item in 1973 was investment income payments — SR 12,350 million. Participation in Aramco oil production and reduction in oil companies' profits have greatly reduced the importance of this item in 1975. Though repatriation of profits is expected to grow throughout the second plan period from the very low level in 1975, it will not reach the 1973 level.

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a This assumes that the price actually realized is the same as the posted price.

b GNP estimates are in Hijra years whereas balance of payments estimates are in Gregorian years.

Repatriation of earnings of foreign workers in the Kingdom will continue to grow very rapidly, as will Government expenditures abroad and payments for travel and personal transportation. If these items all tripled during the second Plan and commodity imports reach SR 35,000 million in 1399-1400, total payments would still be below that projected for oil exports and other earnings of foreign exchange in that year.

Capital Formation

The requirements for fixed capital embodied in the Development Plan are formidable. For the planned major construction projects alone, investment requirements are estimated to exceed SR 258,000 million, in constant 1394-95 prices. If an additional 20 percent is added to cover the costs of miscellaneous projects, the total investment requirements for the plan period come to over SR 300,000 million in 1394-95 riyals.

As already noted in Chapter II, capital formation is estimated to total SR 12,773 million in the current year, 1394-95. Applying an average annual compound rate of growth of 15 percent to this base yields the following estimate of fixed capital formation (SR millions in constant 1394-95 prices):

1395-96	*1396-97*	*1397-98*	*1398-99*	*1399-1400*	*Period Total*
14,689	16,892	19,426	22,340	25,691	99,038

Even if an annual rate of growth of 25 percent could be sustained, the cumulative total would be only slightly above SR 130,000 million for the period 1395-1400.

It should not be inferred from these numbers that satisfying the capital investments requirements of the Plan is essentially a financial problem. It is not; the Kingdom's financial resources are more than ample to handle whatever programs are deemed feasible and economically rational. The problem is one of physically obtaining, moving and managing the utilization of the natural, manufactured, and human resources required to maximize their potential.

Therefore, a major part of the Kingdom's management effort will have to be devoted to securing the equipment, materiel, and people required to expand the basic transportation (e.g., ports) and support (e.g., housing) infrastructure so as to facilitate and improve the capacity for the movement of goods and people needed to complete the other aspects of the construction program—schools, hospitals, electricity systems, communications, desalination projects, industrial plants, etc.

Similarly, the requirements for capital investment will necessitate devoting more of the Kingdom's planning effort to establishing priorities for the utilization of equipment, goods, and people to ensure an orderly progression of activities. The Central Planning Organization will establish a program to monitor continuously all construction activities throughout the Kingdom so that project and program schedules can be quickly adjusted in the light of actual developments.

D. FISCAL AND MONETARY MANAGEMENT

Government revenues are estimated to total about SR 100,000 million in 1394-95, with oil accounting for about 96 percent of the total. Even if oil revenues stay at their present level during the second plan period, there will still be a significant increase in total revenues. This growth will come from increased earnings on foreign investments and from taxes on the many foreign firms and foreign personnel employed to assist in executing the Development Plan. Revenues from these sources are estimated to total roughly SR 40,000 million during the plan period.

The Kingdom's oil reserves — currently estimated at about 137,000 million barrels (including Saudi Arabia's share of the neutral zone) — are ample to sustain any foreseeable level of production required, either for revenues to finance the plan, or to meet the needs of the extensive hydrocarbon-based industrial complexes planned for the next decade. Nevertheless, economic planning for the optimum utilization of these depletable resources is essential to ensure that the long-run objective of economic diversification and reduced dependence on oil can be achieved.

To achieve this fundamental objective, fiscal management will concentrate on implementing the following policies:

- ☆ Make available the necessary finance for the Development Plan, both in sufficient amounts and at the right time.
- ☆ Maintain an open and stable economy, curb inflation as far as is feasible, and prevent the use of the riyal as a speculative currency in international markets.
- ☆ Spread economic prosperity as widely as possible among the Kingdom's citizens.
- ☆ Realize the highest possible returns for both productive capital and financial capital in the long run, to the benefit of both present and future generations.
- ☆ Through specialized agencies, support productive concerns in the private sector to help private enterprise use resources more efficiently and increase production.
- ☆ Develop the banking system to enable it to meet the expansion in demand for banking services.
- ☆ Fulfill the Kingdom's international obligations and promote international cooperation and monetary stability.

Total appropriations required for the Plan are estimated in 1394-95 prices as follows (SR millions):

Economic Resource Development	92,135.0
Human Resource Development	80,123.9
Social Development	33,212.8
Physical Infrastructure Development	112,944.6
Subtotal	318,416.3
Administration	38,179.2
Defense	78,156.5
External Assistance, Emergency Funds, Food Subsidies and General Reserve	63,478.2
Subtotal	179,813.9
Total	498,230.2

It is anticipated that actual expenditures, for a variety of reasons, will fall short of appropriations. The development plans of individual ministries and agencies are not beyond accomplishment but, in combination, they present a formidable task. Bottlenecks and other problems must be expected from time to time and the achievement of many targets may require extra time.

To maintain an open and stable economy, it is essential to keep the riyal strong and fully convertible. Over the plan period, the anticipated rapid expansion in private sector activity and accelerating growth of government expenditures will greatly increase the demand for foreign exchange. However, prudent management of the reserves currently on hand and of anticipated future surpluses will enable the Government to meet all foreseeable needs and to enjoy a reserve balance adequate enough to meet unexpected contingencies.

The Government is actutely aware of the potential inflation spiral that could be stimulated by the amount of spending required to implement its Development Plan. The measures discussed in Chapter II will be augmented to hold prices in line to the extent feasible and compatible with a free market economy and stability.

Subsidies of essential consumer goods will be continued and expanded as needed. The Government will also subsidize agricultural and industrial inputs, in kind or in cash, where warranted to hold costs in line.

The Government is also committed to distributing prosperity among all its citizens. A massive increase in transfer payments (for example, social security, child allowances, pensions) will ease the pressure of rising prices on lower-income families. In addition, opportunities for work will be created in depressed areas.

The highest possible returns will be realized:

- ☆ On productive capital by investing in industrial and agricultural production in accordance with the programs and projects set out in the Development Plan.
- ☆ On financial capital, by management of financial reserves in accordance with a

balanced assessment of the relative rates of return, security, and liquidity of different forms of investment.

In addition to its programs for direct encouragement of private-sector activities — that is, the development of the physical and commercial infrastructure, including the building of industrial estates — the Government plays an important role in channelling financial resources into private productive enterprises. This includes providing loans from special funds, providing equity capital and, when the enterprise proves successful, selling its shares to individuals, and encouraging the creation of investment consortia — joining banks, Saudi investors, and foreign capital.

The Government will ensure that the money supply continues to expand at a rate commensurate with the increase in general economic activity and that the banking system continues to develop. Banking services, including the speeding-up of clearing-house operations, will be expanded and improved. Branches will be opened in selected rural areas now lacking banking facilities. Increased Saudi participation in ownership and management of the Kingdom's banks will contribute to closer control of the Kingdom's financial resources, and training programs for all types of banking skills will be greatly expanded, including specialized training abroad.

The Government will continue to contribute to the development of other nations by participation in international lending institutions, grant and aid programs, and direct project investments. The Government will also continue its broad policies of international cooperation in economic and financial matters.

E. HIGHLIGHTS OF THE PLAN

The outstanding developments planned for the period 1395-1400 are summarized below in the order of the more detailed discussions in the subsequent chapters.

1. Economic Resource Development

Programs for development of *water* during the Plan provide for increasing water supplies to inland cities from underground sources, including major well drilling to supply Riyadh with an additional 120,000 cubic meters of water per day by 1398. Desalination will be the main source developed for the east and west coast urban centers and industrial complexes; here the projected increase in water production will amount to about 209,000 cubic meters per day on the Red Sea and 380,000 on the Arabian Gulf coast, although not all the planned capacity will be in production by 1400. All the larger desalination plants will be the dual-purpose type producing electricity as well as water.

For the longer term, an extensive program of studies is planned for the development and conservation of the Kingdom's water resources. These will provide the basis for formulating a National Water Plan and a National Water Code by the end of the third year of the Plan and National Water Standards by the end of the following year.

Agriculture is by far the largest user of water in Saudi Arabia. Because of the scarcity of this resource, major expansion of the area of land that can be brought under irrigation will depend largely on the outcome of planned studies relating to development of water resources and their availability for agricultural use. The target for expansion of irrigated farm land is 50,000 hectares, in addition to the present area of about 121,000 hectares.

Much of this new land will be in regional projects developed under field directorates of the Ministry of Agriculture and Water, but including special social and economic programs to improve the well-being of rural people and to modernize farming methods. The regional projects and existing agriculture and stock-raising will be supported by coordinated research programs and extension services designed to increase domestic production of priority cereals (wheat, barley, and sorghum), livestock, vegetables, and fruit.

Agricultural credit provided by the Saudi Arabian Agricultural Bank is to be greatly expanded over the plan period. The Bank will offer a total of SR 528 million in credit for agricultural production and a further SR 140 million for the marketing and processing of agricultural products. It will continue to act as the fiscal agent for subsidies on selected agricultural inputs.

In the management of *petroleum* resources, as with water and land, the Government's five-year plan should be considered as an early stage in very long-term development. Thus many of the programs planned by the Ministry of Petroleum and Mineral Resources for 1395–1400 are basic studies which will include techno-economic analyses of world trends in petroleum production and trade, the roles of petroleum as energy and as raw material, and international conservation of hydrocarbon resources. Other studies will increase knowledge of the Kingdom's own hydrocarbon resources: seismic exploration will be extended to all areas, including the Rub' al-Khali; field studies will be made of reserves, production potentials, and production improvements; and a special investigation of pipeline, treatment, and storage installations will precede improvement and expansion of these utilities. Sophisticated computer technology will be used in many of the studies.

The development of the *minerals* sector in the next five years is planned largely to increase the commercial potential of the Kingdom's metallic and non-metallic resources. In the continuing geological mapping program, maps will be compiled to assist comprehension of regional geology. While the emphasis will remain on the Precambrian Shield, mineral exploration will be extended to other areas and will gain increasing importance relative to basic geological studies. Two of the special studies planned relate to uranium prospects and to the availability of water for a minerals industry. The Mining Code and other regulations and incentives will be reviewed in the light of international practices to encourage private enterprise in exploration work.

The integrated *electricity* system that is planned will add 3,300 megawatts of generating capacity and 3,500 kilometers of transmission line to the present non-integrated system and will serve 1.6 million more people. Much of the new generating capacity will be in dual-purpose desalination plants. Implementation of an integrated system requires development of operating standards, interconnections that will reduce the present number of power stations, the orderly integration of demand centers, and a full-scale technical planning and program-management function. The latter will carry out many studies in preparation for the establishment of a national body to develop, regulate, and administer the integrated electricity system.

Manufacturing is a point of concentration of the Development Plan as a whole, for the Kingdom can reduce its dependence on sales of crude oil only by expanding and diversifying its manufacturing activities.

In the oil-producing Eastern Region, when feasibility studies are complete, major plants will be constructed for gas gathering and treatment, production of petrochemicals, refining of products for export, fertilizer production, and manufacture of steel and aluminum products. The total investment in these projects during the Plan is estimated at SR 39,840 million. In the Western Region, with crude oil and NGL piped from the east, an export refinery and a petrochemical complex will account for a further investment of SR 10,850 million.

Planned expansion of other manufacturing includes increasing cement production

capacity from 1.15 million tons annually to 10 million tons, construction of three large integrated grain-silos, flour milling, and feed-milling complexes, and a wide variety of other activities including food processing, construction materials and products, automobile assembly and parts production, and the manufacture of fabrics, carpets, and other consumer and health products.

Planning studies will be completed for a major industrial estate at Jubail to accommodate hydrocarbon-based industries and several estates elsewhere will be expanded or created for other industries.

To encourage full participation of the private sector in economic diversification, the Government is continuing to develop special incentives, investment funds, and other enhancements while rationalizing its regulatory systems.

The *construction* sector will be tested to the limit by demands from the many productive activities described above and the social plans summarized later. An array of programs has been planned to expand the domestic industry, increase the in-flow of construction manpower and materials, and coordinate demand for construction on the basis of national priorities. Immediate steps are being taken to simplify tendering, licensing, and other procedures while a comprehensive review of all relevant regulations is undertaken. Experience in other countries with new design approaches, use of manufactured components, and time- and labor-saving equipment and methods will be applied whenever appropriate.

The plan for *commerce* is designed to facilitate economic diversification and growth. Under way is a major reorganization of the Ministry of Commerce and Industry which will expedite the expansion of commerce through increased knowledge of its sub-sectors and development of infrastructure in its support. The importing, transportation, and storage of materials are also subject to review and improvement. The Saudi Arabian Monetary Agency, the Ministry of Finance, and representatives of private business will be concerned in several studies designed to ensure that all financial, insurance, and other commercial services will be adequate to meet the greatly increased demand for them in the plan period.

2. Human Resource Development

A potential major constraint to the country's development is the limit on its manpower in terms of both numbers and skills, in both the government and private sector. A special manpower training organization will be set up to assure efficient implementation of specific recruitment and training programs. Further, a manpower planning department within the Central Planning Organization will coordinate overall development and utilization of the Saudi and non-Saudi segments of the labor force.

The primary source of *training* for government administration, including industrial management and financing, is the Institute of Public Administration. Its programs will reach over 3,300 in-service trainees and 1,100 pre-service trainees in 1400, about double the present

annual number of participants. The Government's vocational training system will be expanded even more dramatically, with a target annual output at all levels of skill of about 27,000 in 1400 (including industrial induction and on-the-job training programs), compared with about 4,000 at the beginning of the Plan. A widening variety of specialized training will be provided within other government agencies.

The *labor affairs* program of the Ministry of Labor and Social Affairs — covering labor law, employment and other services, and information on job categories, wages, and benefits — will expand to 9 new branch offices in addition to its present 25. Procedures will be made more efficient, including the processing of foreign work permits.

The impressive development of *education* in the Kingdom during the first plan period can be measured mainly in quantitative terms as expansion of the school system reduced the backlog of demands for education. The stage is now set to achieve universal elementary education for boys and for as many girls as can be reached through the girls' school system. The enrollment of boys in general elementary schools is forecast at 677,500 in 1400 compared with 401,300 at the end of the first plan. The enrollment of girls will be 353,400 compared with 214,600.

A program of continued expansion at the post-elementary level will assure opportunities for all students to continue their education through the secondary level. Planned enrollments in general post-elementary education will increase from 99,300 at the end of the first plan to 179,200 in 1400 for boys and from 46,200 to 100,700 for girls. Planned developments for general higher education will cover all qualified secondary-school graduates. At this level, the number of students enrolled is forecast at 31,900 in 1400, compared with 11,900 at the beginning of the plan.

To meet the needs of adults for continuing education, evening classes will be expanded from an enrollment of 8,200 in 1395 to 19,300 in 1400. Enrollment in adult literacy classes will be increased from 55,500 to 126,100 for men and from 28,900 to 393,800 for women over the plan period.

Preparations are also under way for the modification of the structure of education so that it can effectively serve the future needs of the Kingdom. New curricula, additional subjects and courses, new programs, and modern evaluation systems are all incorporated in the plans of the education agencies.

In furtherance of scholarship and intellectual enrichment, the Government's support of *cultural affairs* will include expansion of the national public libraries, establishment of a national museum system, increases in archeological activities, and development of the King Abdul Aziz Research and Cultural Institute.

Public *information services* will disseminate entertainment, education, and news to all parts of the Kingdom via high quality medium-wave radio transmissions. Television coverage will be extended to 90 percent of the population, and a second channel as well as color TV will be introduced.

3. Social Development

While emphasizing individual responsibility for the well-being of the family and society generally, the Government plans major extensions of its many health services, social systems of transfer payments and insurance, special services for youth and for Bedouin nomads, and strengthening its judicial system.

The Government aims to provide comprehensive preventive and curative *health services* in all regions of the Kingdom. During the Plan the Ministry of Health will add 11,500 beds in established or new hospitals, the number of dispensaries will be nearly doubled from the present 215, and many other types of facilities will be established or expanded. About 5,300 technical assistants will be graduated during the Plan and the number of health institutes and nursing schools will be doubled. Emergency health services are offered by the Saudi Red Crescent Society which aims to double the numbers of its ambulances and first-aid centers. Special emphasis will be laid on the Hajj areas; new clinics will be opened there and a mobile hospital will be procured primarily for the pilgrims' use.

A new program of social security benefits is being introduced, including old-age pensions and death, housing, and child allowances.

Social Affairs programs include social welfare, rehabilitation, cooperatives, and community development. 24 additional welfare institutions are planned, among them a home for handicapped children and 5 new probation homes. The number of rehabilitation centers will grow from one in Riyadh to sixteen located across the country. Generous subsidies will encourage cooperative developments; 90 new cooperatives are planned. The present number of community development centers will be doubled and the number and scope of their projects expanded considerably. A major program of social research will be undertaken through the ad-Dir'iyah center and its community development center training programs will be expanded.

The General Organization for *Social Insurance* will play an important role in providing insurance coverage of the increasing numbers in the work force. During the second plan period, the Annuities and Occupational Hazards programs of the Social Insurance law will be extended to cover at least 250,000 employees.

The greatly expanded *youth welfare* programs planned for the forthcoming five-year period reflect the Government's belief in the importance of developing tomorrow's citizens and leaders. The primary objective is to contribute to the raising of youth in a manner that balances the moral, mental, physical, psychological and social aspects of their lives and, at the same time, organize the energies and creative capabilities of youth so that they will contribute positively to the Kingdom's socio-economic development.

Youth programs are planned for cultural, athletic, and social activities. In addition a number of public service and work camp projects will be held. Major emphasis will be put on the development of youth leaders and the provision of equipment and facilities.

The development and well-being of the *nomadic Bedouin* will receive major attention during the second Development Plan. Programs will be developed on an economic, rather

than a welfare basis; and will be adapted to the special needs and situation of the Bedouin. They will cover agriculture, health, education, and social affairs.

In order to guide and coordinate the work of agencies directly responsible for implementing Bedouin programs, the Government will establish a special unit in the Ministry of Interior exclusively concerned with all aspects of Bedouin development policy and programs.

The *judicial system* will be strengthened to enable it to process promptly in accord with the Sharia the growing number of disputes associated with increasing prosperity and economic activity.

4. Physical Infrastructure Development

The physical infrastructure must be developed if the economic and social objectives of the Plan are to be attained. While the major task during the first development plan was to provide the basic physical means, much more emphasis will now be laid on improving efficiency and quality of service.

The targets for the *roads* sector are to link all major population concentrations and to provide alternatives for the most-travelled routes. More than 13,000 kilometers of paved roads and 10,000 kilometers of rural roads will be constructed and the maintenance program will be expanded.

The Kingdom's *ports* handled almost 3 million tons of general cargo in 1392-93. By 1400, over 13 million tons are expected to be imported annually. To cope with this vast increase, 20 new berths will be constructed at Jiddah, and 16 at Dammam. The introduction of further mechanization will increase the handling capacity of existing berths.

The improvement program of the Kingdom's *airports* will continue and the whole airways system will be provided with the highest quality navigation and control equipment to ensure safe aviation.

SAUDIA's image as a major international airline will be further increased by the introduction of the wide-bodied L-1011 jets in 1395. The route network may be enlarged to include North America, the Far East, and more destinations in Europe and Africa.

The long-term function of the railroad in the transport system is under study and major decisions will be made when its role has been defined. Certainly, operations will be improved and, where feasible, rail and road transport will be integrated.

The targets established for *telecommunications* are high, but must be met if the telecommunications industry is to meet the demands for service that are implied by the overall social and economic goals of the Plan, and establish a basis for meeting a projected continuing growth in demand over the longer term.

Achievement of these goals requires: an upgrading of the local telephone network to provide at least 20 telephones per 100 residents in the larger cities and approximately 5 telephones per 100 in the smaller communities, requiring installation of 670,000 telephone

lines of which 490,000 lines will be in service; completion of the intra-Kingdom and international telecommunications network; expansion and improvement of record traffic and special services; development of an organization that will provide an efficient operational frame-work for the Kingdom's telecommunication industry; and a new approach to training, including promotion of Saudi management control and development of Saudi nationals in appropriate working capacities.

The *Postal Service* plans to provide all parts of the Kingdom with prompt service of unquestionable reliability. This will be accomplished by expanding the network of postal service centers, buildings and exchange offices, and streamlining organization and administration.

Major programs include expansion of mail distribution to houses and commercial establishments, purchase of 38 mobile post offices, introduction of an express mail system, and construction of new facilities to include three major postal centers, 20 main exchange offices, and a number of branch, and smaller exchanges.

The major objectives for *municipal development* are to make cities, towns and villages healthier, more comfortable, more enjoyable and less costly places in which to live, work and travel and, at the same time, to improve their efficiency as locations for trade, industry and services.

In pursuit of these objectives, the Government is nearly doubling the number of communities with municipality status, and upgrading the level and range of municipal services and facilities throughout the Kingdom. New programs include the provision, in selected communities, of public transportation services, cultural centers, guest houses, and refrigeration plants. All major towns will have master plans by 1398.

The planned municipal expenditure requires major changes in the administration and organization of the Department of Municipal Affairs. Among the major changes will be a new four-category classification of municipalities — with each category having clearly-defined organizational and administrative functions — and an increased degree of autonomy for the individual municipalities.

The Government's primary aim for *housing* is to ensure that every houshold in the Kingdom has a decent, safe and sanitary dwelling. Because of technical constraints, it will be some years after 1400 before this goal is achieved. Nevertheless, targets set for housing construction during the second Plan will go a long way to improving the housing situation. The Plan calls for the private sector to construct, with the assistance of the Real Estate Development Fund, 122,100 units and for the public sector to construct 52,500 units for low-income families and to develop 44,300 fully serviced building lots to be allocated to low-income households for the orderly self-help construction of housing. A further 51,000 temporary housing units will be constructed for the labor required to implement major development projects.

A new Housing Organization, incorporating the present General Housing Department and linked to the Real Estate Development Fund, will be created to implement the housing program.

To enhance the devotional nature of *the Hajj* and to improve safety, a series of major measures will be undertaken in the Hajj areas. These will include an improved transportation system; programs to improve the quantity and quality of pilgrims' accommodation, especially in Mina; continued improvement of health services; and the conservation and development of the Holy Cities as communities.

5. Plan Management and Implementation

The total cost of the Plan is SR 498,000 million in 1394-95 prices, or about nine times the size of the first development plan. Its implementation will require a large increase in foreign workers (about 500,000) and a rapid expansion of construction capacity. Various measures are proposed to improve the capacity of the public and private sectors to implement the programs and projects in their respective areas of activity.

IV. ECONOMIC RESOURCE DEVELOPMENT

IV. Economic Resource Development

One of the primary objectives of the Plan is to reduce the Kingdom's overwhelming dependence on export of crude oil by developing a diversified industrial economy producing an increasing range and quantity of foodstuffs, minerals, and manufactured products. This chapter sets out the plans for continuing the diversification already started under the first development plan.

The chapter deals first with water. The development and management of water resources are prerequisites not only for diversifying the economy but also for meeting the need for more and better water in both urban and rural communities.

Plans for the primary production sectors— agriculture, petroleum, and minerals—are then presented. These are followed by the plan for expanding electricity production to meet the demands of industrial, urban, and rural development. Petroleum refining, hydrocarbon-based industry, and other manufacturing are then discussed in the section on manufacturing.

The two concluding sections set out the plan for the construction industry which should enable it to meet the greatly expanded demand expected from all other sectors, and the plan for improving the efficiency of commerce and related services to enable them to accommodate the growth in demand for these services (i.e. commerce and related services) that will accompany implementation of the Plan.

A. WATER

1. Present Conditions

1.1 Ground water meets the major portion of the Kingdom's combined agricultural, industrial, and urban demand, while surface water satisfies a smaller share, and limited amounts of water have been supplied by desalination. Hydrological studies have established the existence of further usable quantities of ground water, but more information is required before rates of usage can be defined; surface water is intermittent and primarily available in the southwestern highlands and coastal areas; brackish water is abundant in several areas of the country; and sea water is available for desalination in unlimited quantities.

1.2 Demand for water has been estimated for 1394-95 as follows (million of cubic meters per year):

☆ Irrigation agriculture	1,900
☆ Oil-well injection	390
☆ Urban (towns of over 5,000 residents)	170

1.3 Irrigation agriculture has been, and will continue to be, by far the largest user of water. It is discussed in the next main section of this document.

1.4 Water supply for urban and industrial uses is at present the concern of three government agencies — the Ministry of Agriculture and Water, the Municipalities Department (Ministry of Interior), and the Water Desalination Organization. In addition to overall responsibility for water resource development and national water policy, the Ministry of Agriculture and Water has been concerned with urban and industrial water supply in all but five of the Kingdom's municipalities. The Ministry of Interior is responsible for supply in these five municipalities and shares this function with the Ministry of Agriculture and Water in another six municipalities. The Water Desalination Organization produces water in coastal plants for urban and industrial uses where ground and surface water are unable to provide an adequate and safe supply. The progress of these authorities in water development programs during the period 1390-95 is summarized below.

1.5 Ministry Of Agriculture And Water

1.5.1 Numerous ground water investigations were undertaken, including initiation of a study of the direct and indirect effects of water transfer from the Wasia aquifer for oil-well injection. In addition, an extensive program of hydrological data collection and analysis was continued. The current network of hydrological instrumentation consists of 385 rainfall stations, 53 runoff stations, 48 climatological stations, 37 well recorders, 24 instrument rooms, and 12 cableways. Further study and data gathering are necessary to refine and extend the present data base. Research is also necessary into the use of brackish water, water from irrigation drainage, and urban effluent.

1.5.2 Water supply projects for the following towns were undertaken:

- ☆ Tabuk: Begun during 1394.
- ☆ Jiddah: First and second stages of the distribution network completed and third stage initiated.
- ☆ Tayif: Tendering in preparation.
- ☆ Abha: Dam completed in 1394.
- ☆ Qunfudhah: Study being made.
- ☆ Riyadh: Development of the Salboukh well field and construction of transmission, treatment, and distribution facilities continued.

1.5.3 Over 740 wells were drilled, dug, or repaired over the first four years of the plan — most for domestic purposes and with distribution systems of varying extent — and a further 285 were scheduled for 1394-95. The original target for the first plan was 550 wells.

1.5.4 Over 20 small dams have been constructed or approved for construction. Additional small dams are required throughout the Kingdom for flood protection, aquifer recharge, and storage of surface runoff.

1.6 Municipalities Department (Ministry Of Interior)

Water supply networks have been completed in a number of towns in which the water department is operated wholly or partially by the municipalities department. Completed networks include those in Mecca, Hofuf, and al-Khobar. Both in these and other towns, however, the provision of adequate amounts of water presents a major problem; studies for means of increasing water supplies are being undertaken in Tayif, Mecca, and Dammam. A water mixing plant has been completed in al-Khobar and its connection to the desalination plant permits an increase in water supplies to the communities of Dammam and al-Khobar.

1.7 Water Desalination Organization

Desalination plants that are operating in the Kingdom or soon will be are listed below.

Plants in Operation or Under Construction	*Year of Operation*	*Production Capacity* Water (cu.m/day)	Electricity (MW)
Jiddah, Phase I	1390	19,000	50
Phase II	1397	38,000	80
al-Wajh, Phase I	1390	228	–
Duba, Phase I	1390	228	–
Amlaj, Phase I	1395	455	–
al-Khobar, Phase I	1394	28,500	10
Khafji, Phase I	1394	455	–
Plants under Design, Tender, or Study			
Jiddah, Phase III*	1400	76,000	200
Yanbu', Phase I*	1399	19,000	50
al-Wajh, Phase II	1396	455	–
Duba, Phase II	1396	455	–
Haql, Phase II	1399	455	–
Khafji, Phase II*	1399	19,000	50
al-Khobar, Phase II*	1400	190,000	500
Jubail, Phase I	1397	9,500	25

* Projects included in the second Development Plan.

1.8 It is apparent from the above summaries of water development programs that significant progress has been made in meeting immediate needs for improved water supplies. These needs will expand rapidly with rising population, increased urbanization and industrialization, and growth of irrigation agriculture. Uncertainty about the availability of ground water and how rapidly it can be used, concern about falling water tables in some locations, forecasts of rates of growth in urban water consumption of over 10 percent annually, awareness of waste and misuse of water resources, and knowledge that development of industry, mining, and agriculture are dependent on large and assured supplies of water have convinced the agencies concerned of the need for coordinated water planning that will allocate water for priority uses within the framework of a national policy for conservation and management.

2. Objectives and Policies

2.1 The primary objective for water development is to meet the Kingdom's social and economic demands for an adequate and safe supply of water — from source to ultimate user — over the long term. Table IV-1 shows the supply of water for major uses in 1394 and provisional forecasts of production requirements for major uses in 1400. The forecast of urban demand assumes that per capita rates of water consumption will increase towards international levels; the estimated demand from heavy industry is derived from regional and other studies but has yet to be confirmed by detailed investigations.

Table IV-1
SUPPLY OF WATER FOR MAJOR USES 1394, AND
FORECAST OF PRODUCTION REQUIREMENT 1400
(Thousand cubic meters per day)

	Supply	*Production Requirement*
Main Cities	*1394*	*1400*[a]
Riyadh	57.5	163
Jiddah	57	142
Mecca	18.5	74
Tayif	6	41
Medina	22	35
Dammam and others[b]	50	90
Subtotal	211	545
Industrial Complexes		
Jubail	-	76[a]
Yanbu'	-	19[a]
Subtotal	-	95
Oil-well Injection	1,100	2,400
Irrigation Agriculture	5,370	7,060
Total	6,681	10,100

a Subject to rescheduling of implementation of industrial projects.
b Dhahran, al-Khobar, Safwa, and Qatif.

2.2 The policies that will be followed in the period 1395-1400 to achieve the Kingdom's long-term objective for water development are as follows.

2.2.1 Pending more complete analysis of the total water resource potential of the country:

- ☆ Continue to develop ground water to meet immediate urban, industrial, and agricultural demands in locations distant from the sea coast.
- ☆ Accelerate development of the supply of desalinated sea water to meet urban and industrial demand in locations on or near the sea coasts and plan to use desalinated water to meet demands in selected locations away from the coasts.

2.2.2 Improve water quality and distribution by constructing treatment plants and extending and improving distribution networks in urban areas.

2.2.3 Provide water to new industries that are large users of water only in locations near the sea coasts, unless it can be shown that establishment of such industries in other locations is economically and socially feasible.

2.2.4 Permit increased use of water for agricultural purposes only after it has been established that such increased use is in the public interest over the long term.
2.2.5 Provide water for mining operations from the most economically advantageous source after taking into account urban, industrial, and agricultural needs.
2.2.6 Plan the development of the desalination system in accordance with the following criteria:

- ☆ Use of dual-purpose (electric power/desalination) plants to reduce the cost of production of both electricity and water, where studies show the need for power as well as water.
- ☆ Use of the least-cost fuel.
- ☆ Use of networks to interconnect desalination plants for both domestic and industrial needs within the Eastern and the Western regions so as to achieve maximum flexibility in meeting emergencies and efficiency in undertaking periodic maintenance.

2.2.7 Establish and maintain a comprehensive information system relating to the development of the Kingdom's water supply systems.
2.2.8 Conduct special studies concerning:

- ☆ Development of underground and surface water resources.
- ☆ Desalination technology and materials.

2.2.9 Improve the conservation and management of water resources.

- ☆ Develop and seek approval of a formal statement of National Water Policy, together with a National Water Code and National Water Standards.
- ☆ Develop and seek approval of a comprehensive National Water Plan within the guidelines of the National Policy, with provisions for the enforcement of the Code and Standards.
- ☆ Improve national awareness of the critical importance of water as a resource, and thereby foster sound water management and conservation practices throughout the Kingdom's population.

2.2.10 Increase the capabilities of the agencies concerned with water resource development and supply.

3. Programs and Projects

3.1 Urban Water Projects: Ministry of Agriculture and Water

3.1.1 Riyadh:

- ☆ Complete drilling of 11 wells in locations near Riyadh to provide an additional 65,000 cubic meters per day (1396).
- ☆ Complete development of wells and construction of facilities for exploitation of

the Salboukh well field with an expected production capacity of 55,000 cubic meters per day (1398).

- ☆ Continue construction of transmission systems, treatment facilities, and distribution networks (1395-1400).

3.1.2 al-Kharj:

- ☆ Design and construct a supply system and distribution network to bring water from wells to consumers in the city (1395-1400).

3.1.3 Jiddah:

- ☆ Undertake the third stage of construction of the Jiddah water distribution network (1395-1400).

3.1.4 Tayif, Hada, and Vicinity:

- ☆ Develop Wadi Turabah and the transmission system linking it to these towns and villages in two stages, to be completed in 1397 and 1401 respectively, each with a capacity of 17,280 cubic meters per day.

3.1.5 Medina, Badr, al-Musayjid, and Khaybar:

- ☆ Continue design and construction of a system to supply up to 100,000 cubic meters per day to Medina and 10,000 each to Badr and Musayjid in accordance with conclusions reached in the investigations noted below (1395-1400).
- ☆ Contract for work to drain the marshes at Khaybar and use the water and reclaimed land in accordance with conclusions reached in these investigations.

3.1.6 al-Qunfudhah:

- ☆ Design and construct water supply systems for the various villages in Qunfudhah area in accordance with conclusions reached in the investigations noted below (1395-1400).

3.1.7 Other Large Towns:

Design and construct networks or additions to networks in the following towns (1395 1400).

- ☆ Central Region — Dirʾiyah, Afif, Bukayriyah, al-Ghat, Sudayr, Hillah, Khamasin, Majʾmaʾah, Quwayiah, ar-Rass, Asyah, Zilfi, Badaya, Buraydah, Darma, Huraymila, Jalajil, Layla, Shaqra, and Unayzah.
- ☆ Western Region — al-Lith, Hunayn, Khurma, Rabegh, and Yanbuʾ.
- ☆ Eastern Region — Jubail, Qatif, Mayriyah, Hafar, Rahimah, Khafji, Safwa, and Saihat.

- ☆ Northern Region — al-Ula, al-Wajh, ʾArʾar, Duba, Hayil, Haql, Qurayyat, Sakaka, Tabuk, Tayma, and Amlaj.
- ☆ Southern Region — Abha, Abu Arish, Jaizan, Khamis Mushayt, Najran, Rafidah, Ranyah, Sabya, and Samitah.

3.1.8 Smaller Communities:

- ☆ Undertake about 3,000 projects including drilling, repair, and replacement of wells, and construction of distribution systems, to improve the quality and accessibility of the supply of water for drinking, domestic use, and the watering of animals on the range and in small villages (1395-1400).

3.1.9 Small Dams

- ☆ Construct about ten small dams each year for recharge of shallow aquifers, irrigation, and flood control (1395-1400).

3.2 Urban Water Projects: Municipalities Department

3.2.1 Expand or construct water supply systems in the following municipalities in coordination with the Ministry of Agriculture and Water.

☆ Mecca	☆ Medina
☆ Tayif	☆ Dammam
☆ Hofuf	☆ Jubail
☆ al-Khobar	☆ ʾArʾar
☆ Rahimah	

3.2.2 Coordinate with the Ministry of Agriculture and Water in implementing water supply systems for Riyadh and Jiddah.

3.2.3 In consultation with the Ministry of Agriculture and Water, formulate a program for gradually transferring the management of municipality water systems to the Municipalities Department.

3.3 Desalination Program: Water Desalination Organization

3.3.1 Construct desalination plants in accordance with the schedule shown in Table IV-2, following definitive investigations of water demand.

3.3.2 Construct all the plants indicated as dual-purpose plants producing both electricity and water following detailed planning for the joint development of the systems to supply water and electric power.

3.3.3 Subject to feasibility study, interconnect the desalination plants within the Eastern and the Western regions.

Table IV–2
PLANNED STUDY, DESIGN, AND CONSTRUCTION OF DESALINATION PLANTS, 1395–1400

		Production Capacity							
		Water (cu.m/day)	Electricity (MW)	1395 –96	1396 –97	1397 –98	1398 –99	1399–1400	Third Plan
West Coast									
Jiddah,	Phase III	76,000	200	———	———	———	———	———	
	Phase IV	190,000	500				———	———	----
Medina,	Phase I	76,000	200	———	———	———	———	———	
	Phase II	152,000	400					———	----
Yanbu',	Phase I	19,000	50	———	———	———	———		
Rabigh,	Phase I	910	–	———	———				
Duba,	Phase III	19,000	50	———	———	———	———		
Haql,	Phase II	5,700	15		———	———	———		
al-Wajh,	Phase III	57,000	150			———	———	———	----
al-Lith,	Phase I	460	–			———	———		
Qunfudhah,	Phase I	3,800	10			———	———		
Farasan,	Phase I	455	–	———	———				
East Coast									
al-Khobar,	Phase II	190,000	500	———	———	———	———	———	
	Phase III	152,000	400					———	----
Jubail,	Phase II	76,000	200	———	———	———	———		
	Phase III	114,000	300		———	———	———	———	----
Khafji,	Phase II	19,000	50	———	———	———	———		
	Phase III	95,000	250				———	———	----
al-Ogayr,	Phase I	95,000	250				———	———	----
Inland (brackish water)									
al-Kharj,	Phase I	570	–				———	———	----

3.4 Coordination: Central Planning Organization

In 1395, complete analyses of requirements for effective coordination of planning and implementation of dual-purpose water desalination projects with electric power generation and transmission programs, and establish coordination procedures accordingly.

3.5 Information and Investigations: Ministry of Agriculture and Water

3.5.1 Continue to acquire, analyze, and store hydrologic and geological data, other technical data, and demographic and economic data relating to water resource development and use.

3.5.2 Establish a national data base, including current and projected demands for water by location and purpose.

3.5.3 Undertake special investigations to increase the efficient utilization of basic data by making basin observations and studies in the following eight representative areas (1395-97):

Wadi or Basin	*Representative of*
Abha	'Asir
Jaizan	Tihamah
Khulais	West coast
al-'Aqiq	Medina area
Kushriah	Arabian Shield
Namar	Eastern and central limestone terraces
Bishah	Wadis eastward of the western escarpment
Khurais area	Sand dunes.

3.5.4 Undertake research programs on the following:

- ☆ Recharge of wells (1399-1400)
- ☆ Use of remote sensing (1395-1400)
- ☆ Reclamation of brackish water (1395-98)
- ☆ Water harvesting (1396-1400)
- ☆ Reduction of water losses and re-use of water (1397-1400)
- ☆ Use of returning oil tankers to carry water to the Eastern Region.

3.5.5 Continue investigations in the Central Region to determine:

- ☆ Potential of Minjur and Wasia aquifers as sources of supply for Riyadh (1395-1400).
- ☆ Salinity of water in Wadis Risha and Rima (1397-1400).
- ☆ Availability of good water from the Tabuk and Saq aquifers in the vicinity of Qiba (1397-98).
- ☆ Survey of 300,000 square kilometers of land (Survey Area VIII) in the west central area of the Kingdom not previously surveyed (1395-97).

3.5.6 Continue investigations in the Western Region to determine the water development potentials of:

- ☆ Jiddah area: Wadis Abyadh, Hakkak, and Khulais (1395-1400).
- ☆ Yanbu': Wadi Yanbu' an-Nakhl (1395-1400).
- ☆ Medina: Harrat-Khaybar and Harrat-Rahat areas of the sub-basaltic aquifer (1395-1400).
- ☆ Khaybar: extensive swamps (1395-1400).

3.5.7 Continue investigations in the Eastern Region as follows:

- ☆ On-going study of effects of use of brackish water from Wasia aquifer for oil well injection (1395-96).

- ☆ Expansion of irrigated areas near Qatif, Syhat, and Tarut (1395-98).
- ☆ Utilization of water from shoreline springs (1395-1400).

3.5.8 Undertake investigations in the Northern Region to determine the water development potentials of:

- ☆ Tabuk area (1397-99).
- ☆ Wadi as-Sirhan area (1397-99).
- ☆ Sakaka, al-Jawf, and Turaif areas (1397-99).
- ☆ Wadi 'Ar'ar (1397-99).
- ☆ Baq'a (1397-99).

3.5.9 Undertake investigations in the Southwest Region for combined water and agricultural development in accordance with the plan for Agriculture.

3.5.10 Undertake a survey and establish and update an inventory covering the supply of domestic water to smaller towns and communities throughout the Kingdom.

3.6 Information and Investigations: Water Desalination Organization

3.6.1 Undertake research programs in desalination technology, economics, and material supplies for desalination plants.

3.6.2 Participate in a joint study (or studies) to determine future quantities and locations of water and electric power demand, and the optimum means for meeting these demands (1395-96).

3.7 Water Resource Management: Ministry of Agriculture and Water

3.7.1 Develop a National Water Policy setting out national goals for the management of the country's water resources (1395-97).

3.7.2 Formulate a National Water Plan to serve as the framework for all future water resources development (1395-98).

3.7.3 Prepare a National Water Code to provide a legal basis within the framework of the Sharia, for regulating water use and enforcing the provisions of the National Water Plan (1395-98).

3.7.4 Prepare a set of National Water Standards setting forth minimum requirements for the quality of water produced for various uses, and for disposal of waste waters (1395-99).

3.7.5 Develop effective administration, surveillance, and enforcement of the provisions of the above documents.

3.7.6 Undertake a public information program to increase community awareness in matters relating to water resource management and conservation.

4. Finance

Forecasts of the financial requirements of the three main government organizations concerned in the development and control of the Kingdom's water resources are given separately below (SR millions).

4.1 Ministry of Agriculture and Water (Water Plan)

	Budgeted 1394-95	*1395 -96*	*1396 -97*	*1397 -98*	*1398 -99*	*1399- 1400*	*Plan Total*
Recurrent*	–	11.6	14.9	18.0	21.3	36.0	101.8
Project	519.5	930.3	1,271.2	1,377.3	1,512.5	1,679.9	6,771.2
Subtotal	519.5	941.9	1,286.1	1,395.3	1,533.8	1,715.9	6,873.0

* Recurrent costs for *existing* Ministry of Agriculture and Water (MAW) water programs are included in the discussion on Agriculture.

4.2 Municipalities Department

	Budgeted 1394-95	*1395 -96*	*1396 -97*	*1397 98*	*1398 -99*	*1399- 1400*	*Plan Total*
Recurrent*	–	–	–	–	–	–	–
Project	55.4	466.2	316.2	330.2	345.1	360.1	1,817.8
Subtotal	55.4	466.2	316.2	330.2	345.1	360.1	1,817.8

* Recurrent costs for existing Municipalities Department water programs are included in the discussion on Municipalities finance.

4.3 Water Desalination Organization

The Water Desalination Organization, formerly part of the Ministry of Agriculture and Water, is now a public corporation. Thus the estimated financial requirements for the second Plan consist of (1) funds for completion of the existing program as allocated in the 1394-95 budget and (2) estimates of future transfer funds to public corporations (normally carried in Chapter III of the budget as recurrent costs). A summary of these two items follows (SR millions).

	Budgeted 1394-95	*1395 -96*	*1396 -97*	*1397 -98*	*1398 -99*	*1399- 1400*	*Plan Total*
Existing projects	285.6	292	225	–	–	–	517
New Projects*	–	9,092	2,264	1,359	6,204	5,938	24,857
Subtotal	285.6	9,384	2,489	1,359	6,204	5,938	25,374

* Includes provision for electric power generation in dual-purpose plants.

4.4 Total Water Resources Programs

	Budgeted 1394-95	*1395 -96*	*1396 -97*	*1397 -98*	*1398 -99*	*1399-1400*	*Plan Total*
Recurrent	–	11.6	14.9	18.0	21.3	36.0	101.8
Project	860.5	10,780.5	4,076.4	3,066.5	8,061.6	7,978.0	33,963.0
Total	860.5	10,792.1	4,091.3	3,084.5	8,082.9	8,014.0	34,064.8

B. AGRICULTURE

IV.B.1. AGRICULTURAL PRODUCTION

"Agricultural production" as used here includes nomadic and settled agriculture along with fishery, forestry, and range resources. The Ministry of Agriculture and Water (MAW) is the agency primarily responsible for the development of agriculture. Important financial services for the sector are rendered by other agencies such as the Agricultural Bank — discussed in the next section — which operates under the Ministry of Finance. Other services for agriculture are described in other chapters: these include the rural cooperatives, which are supervised by the Ministry of Labor and Social Affairs; the Grain Silos and Flour Mills Organization, which oversees the supply of major agricultural products for domestic consumption, under the Ministry of Commerce and Industry; and the training in agricultural skills provided by the Ministry of Education and certain universities.

1. Present Conditions

In describing the present conditions of the agricultural sector, the tenuous nature and inadequacy of data pose a great many limitations. Thus the estimates given below of agricultural output and consumption, labor force, and other inputs are approximations.

1.1 The average annual rate of growth in value added in the sector from 1382-83 to 1391-92 was an estimated 1.6 percent (in constant prices). For the five years of the first development plan, this rate is estimated at 3.6 percent compared with a plan target of 4.6 percent. The rate of 3.6 percent is based on national accounts data, which may overstate the actual rate of growth. Total value added in the sector for 1394-95 is estimated at SR 1,409 millions (current prices) or 8.6 percent of the private non-oil gross domestic product.

1.2 Owing to increasing national income and population, the growth rate in food consumption is rather high; an estimated 5.2 percent per annum between 1391 and 1400 for a selected number of agricultural commodities. About 55 percent by value of total food consumed was domestically produced in 1391. The remaining 45 percent was made up of net imports. Production and consumption of selected agricultural products are shown in Table IV-3 and illustrated in Figure IV-1. Imports have grown much more rapidly than domestic production — at about 13 percent over the 1382-91 decade — and

are assumed to have grown at the same rate during the first plan period. Consequently the Kingdom's self-sufficiency in food production has fallen significantly for most commodities. An exception may be marine food, for which a growing demand offers the Kingdom a unique opportunity to increase food production with a minimum input of labor.

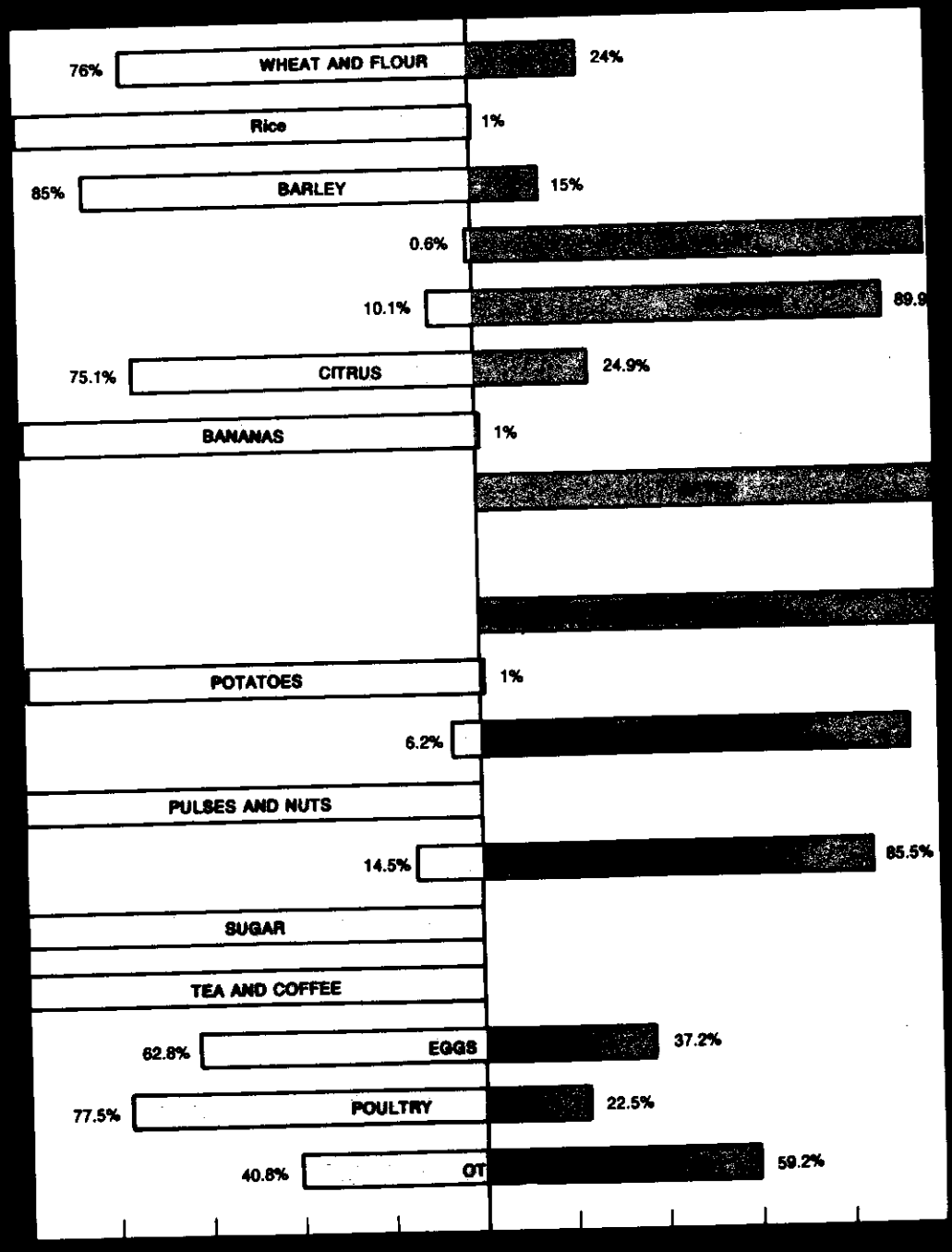
Table IV–3
PRODUCTION AND CONSUMPTION OF SELECTED AGRICULTURE PRODUCTS, 1390–91
(Thousand of Metric Tons)

Commodity	*Production*	*Imports*	*Exports*	*Consumption*
Cereals				
Wheat, wheat flour[a]	74.2	237.2	–	311.4
Rice	–	202.0	–	202.0
Barley	6.7	37.0	–	43.7
Millet	162.5	1.0	–	163.5
Sorghum, maize	147.4	18.0	–	165.4
Fruits				
Citrus	13.1	39.6	0.2	52.5
Bananas	–	22.4	–	22.4
Dates	224.3	–	6.6	217.7
Other fruits	–	17.8	–	n.a
Vegetables				
Melons	470.0	–	19.2	450.8
Potatoes	–	13.2	–	13.2
Other vegetables	176.4	17.5	5.9	188.0
Pulses, nuts	–	11.0	–	11.0
Sesame	16.0	2.7	–	18.7
Sugar	–	69.1	–	69.1
Tea, coffee	–	11.4	–	11.4
Eggs	49.5[b]	83.6[b]	–	133.1[b]
Poultry	2.5	8.6	–	11.1
Other meat	29.0	20.0	–	49.0

n.a. = not available.
a 1391-93 average.
b Millions of eggs.

1.3 The labor force in agriculture is assumed to have declined by about 0.9 percent annually, from 445,800 or 40.4 percent of the national labor force in 1390 to 426,100 or 28.0 percent of the labor force in 1395. This decline is already reflected in abandoned farmland and partly depopulated villages, particularly in the Southwestern Region. Its main causes are low real incomes in agriculture and increasing opportunities for well-paid employment in other sectors.

Rapid increase in productivity in the agricultural sector will release part of the large agricultural labor force and thereby alleviate manpower shortages in other sectors. Some of the current constraints on increasing productivity — in terms of the ownership and condition of land and water problems — are described below.


76%
WHEAT AND FLOUR
24%
Rice
1%
85%
BARLEY
15%
0.6%
10.1%
89.9
75.1%
CITRUS
24.9%
BANANAS
1%
POTATOES
1%
6.2%
PULSES AND NUTS
14.5%
85.5%
SUGAR
TEA AND COFFEE
62.8%
EGGS
37.2%
77.5%
POULTRY
22.5%
40.8%
OT
59.2%

1.4 Land

1.4.1 As shown in Table IV-4, the area of cropped land in the Kingdom (as of 1390-91) was about 525,000 hectares — about 0.2 to 0.3 percent of the total land area — of which about 121,000 hectares are irrigated and the rest are rainfed. Soil and water resource surveys have shown that, subject to availability of water, the total area of cropped land could be more than doubled. Development of new land must await soil and hydrologic surveys of the areas with potential.

1.4.2 Table IV-4 also shows that the total of about 525,000 hectares of cultivated land is shared among 181,000 holdings, the average size of which is under 8 hectares. The average area of irrigated land per holding is less than one hectare.

1.4.3 Most land in Saudi Arabia is arid or semi-arid, suitable only for periodic grazing. Although these vast range lands have been badly overgrazed, they remain important in that they support about three-fourths of the country's livestock population — about 8.5 million in sheep-equivalents. Owing to the declining productivity of the range lands, the Bedouin have experienced a deterioration in their income from livestock.

1.4.4 About 42,500 hectares of virgin land have been distributed to farmers. However, only a small portion has thus far been developed and utilized, owing to shortages in credit and in well-drilling, and the uneconomically small size of the allotments.

Table IV - 4
ESTIMATED NUMBER OF LAND HOLDINGS AND CULTIVATED AREA BY PRINCIPAL EMIRATE, 1390-91
(Area in Hectares)

				Cultivated Area			
				Temporary Crops			
Emirate	*Number of Villages*	*Number of Holdings*	*Total Area of Holdings*	*Irrigated*	*Not Irrigated*	*Permanent Crops*	*Total*
Eastern	111	11,372	6,961	1,070	59	5,818	6,947
Riyadh, Afif, and al-Khasira	374	9,668	268,722	19,696	164	15,204	35,064
Qasim	284	6,695	223,086	17,282	19	3,745	21,046
Hayil	241	6,645	66,623	2,418	-	3,251	5,669
Jawf, Qurayyat, and N. District	95	2,655	1,806	79	-	519	597
Medina	264	7,815	13,066	1,483	11	1,338	2,832
Mecca	2,423	37,000	230,973	15,637	12,926	4,245	32,808
'Asir	1,317	31,302	67,449	8,496	3,199	209	11,905
al-Bahah	961	19,534	15,128	2,228	1,456	304	3,988
Jaizan	1,406	34,802	476,107	1,664	385,366	36	387,066
Najran	71	2,389	5,003	2,393	-	673	3,067
Bishah and Ranyah	258	10,912	16,351	5,915	454	7,368	13,737
Total Kingdom	7,805	180,789	1,391,274	78,362	403,654	42,709	524,726

1.5 Water

1.5.1 The most binding constraint on Saudi agriculture is imposed by water. More than 75 percent of the Kingdom's arable land is rainfed, but nowhere does the rainfall exceed 400 to 500 mm which may occur over short periods of time. Flood damage and loss of rain water in runoff are serious problems which the Government has begun to solve. Fifteen dams constructed during the past few years give relief from flooding in some areas and provide a source of water for domestic and agriculture purposes. The largest of the dams are in Jaizan, which provides irrigation water for 7,000 hectares, and in Abha, which provides the city's water supply. There is urgent need in rainfed areas for additional water harvest and diversion systems to prevent loss from floods and to salvage water for useful purposes.

1.5.2 Irrigated farming also has water problems. Water in some areas has high salt content, which rapidly creates salinity when drainage and leaching are inadequate. Irrigation systems are generally inefficient, causing wastage of water. Periodic droughts cause shallow wells to dry up, temporarily eliminating a source of irrigation water. The fossil-water aquifers, which underlie about two-thirds of the Kingdom, are vital for long term survival. They already serve agricultural, industrial and domestic purposes.

1.5.3 The extent to which agricultural production can be increased in the long-run will be determined by the success achieved in increasing efficiency in the use of water drawn from underground sources, improvement in water resource management and conservation, and, most important, the limit which must be placed on total annual abstraction or depletion having regard to the amount of water available and to the social, economic, and technical factors relating to its use. These matters have been discussed more fully earlier in this chapter.

1.6 Technology in Agriculture

1.6.1 Research

There are 15 research stations and demonstration farms in the country. In addition several contracts with foreign universities support agricultural research in Saudi Arabia. MAW is strengthening its research program in a number of ways including exploring the possibilities of additional assistance from abroad. There is a need for closer coordination among research stations and especially between research and extension.

1.6.2 Extension

There are 62 extension units throughout the country. Given the scattered nature of agriculture around 8,000 villages, extension service has not been within the reach of many farmers in the Kingdom. Furthermore, the body of knowledge in a form suitable for the extension service to transfer to the farmers is limited. The need to improve extension by increasing the number of agents, training, and raising the quality of the service is fully recognized.

1.6.3 Fertilizers

Although rising steadily over the past years, the use of fertilizer in the Kingdom did not exceed 11,000 tons of available nutrients as of 1394, whereas the actual requirements for modern farming of the irrigated land (about 121,000 hectares in 1390-91, much of which is often cropped twice) are as high as 25,000 or 30,000 tons of nitrogen and the same amount of phosphates. The subsidy on fertilizer (see below) has encouraged the use of fertilizers, but the channels of imports and distribution have not responded well to the needs, and shortages of fertilizers are reported in many parts of the Kingdom.

1.6.4 Pesticides and Insecticides

The nation is using approximately 2,000 tons of insecticides and pesticides per annum, an amount expected to increase in the future.

1.6.5 Agricultural Machinery

Agricultural machinery has not found wide use in the Kingdom, mainly because the small size of farms does not call for the utilization of machinery.

1.7 Agricultural Credit

Although the Saudi Arabian Agricultural Bank, described later in this chapter, has continuously expanded interest-free credit available to the farmers, it has not completely displaced merchants and brokers who lend money at very high rates. At present only 5 percent of farmers in the Kingdom have received credit through the Bank.

1.8 Agricultural Subsidies

1.8.1 To encourage the adoption of modern technology and increase output and farm income, the Government pays subsidies on selected inputs and products. In addition, supplemental feed is provided for drought relief at a nominal cost. The present subsidies and their rates are presented in Table IV-5. Subsidies on marketing facilities, fruit and vegetable processing, and data production are under study.

1.8.2 To encourage increased productivity through greater use of modern inputs, a part of their price is paid by the Government. This helps increase output through increased productivity, and increase net farm income by lowering costs. Input subsidies are paid on farm machinery and equipment including irrigation pumps and engines, and certain poultry and dairy equipment. To encourage establishment of dairy operations, the transportation costs of dairy cows shipped to Saudi Arabia are paid.

1.8.3 Output subsidies are in fact subsidies on land and labor inputs, and thereby attract more resources into production of subsidized products. Output subsidies are paid on wheat, sorghum, rice, camels, and sheep. Combined with the subsidies on inputs these subsidies are expected to substantially expand production of the commodities.

Table IV–5
CURRENT AGRICULTURAL SUBSIDIES

	Year Introduced	*Amount*
Inputs		
Farm machinery	1393	45% of price
Fertilizers	1393	50% of price
Animal feed concentrates (36% protein)	1393	50% of price
Poultry farms	1394	30% of price[a]
Dairy farms	1394	30% of price[a]
Transportation of 200 or more dairy cattle	1395	Total cost of transportation
Feed for drought relief		At nominal prices
Outputs		
Wheat	1393	SR 0.25/kg
Sorghum	1393	SR 0.25/kg
Rice	1393	SR 0.30/kg
Sheep	1394	SR 10.00/head
Camels	1394	SR 50.00/head

a 20% if financed by Agricultural Bank.

1.9 Training

1.9.1 The training of skilled personnel in agriculture has not been carried out on a significant scale mainly because incentives for following agricultural careers are not commensurate with the hardships; commercial agriculture does not yet offer many opportunities for skilled agriculturalists, and training institutions have not yet been established in rural areas.

1.9.2 The Ministry of Agriculture operates a training center in Riyadh for its employees which, together with other institutions, provided training for 487 persons in 1393-94. It has also sent 40 members of its staff for higher education and training outside the Kingdom. In addition, the Ministry of Education has prepared a program for the establishment of five vocational agricultural schools, one to open in Buraydah in 1396-97 and the others to open in 1398-99.

1.10 Problems Facing Development

1.10.1 Rapid development of agriculture in the Kingdom is greatly impeded by physical and climatic adversities — in particular by small, inefficient farms dispersed over a large land area and subject to wide fluctuations in rainfall, limited supplies of low-quality irrigation water, a harsh summer climate and drying winds, and encroachment by sand dunes.

1.10.2 Some existing institutions, such as land tenure arrangements and customary water rights, are hindering the adoption of modern technology. On the other hand,

termination of traditional communal rights (the Hema system) to use of the range without introduction of an alternative system of management has contributed to serious over-grazing.

1.10.3 The general prosperity of the Kingdom is having both positive and negative impacts on development. Positive impacts include expanding markets, improved transportation at lower cost, greater availability of modern inputs such as water pumps, farm machinery, fertilizers and improved seeds, and increased access to credit. Negative impacts, some of which may cause permanent damage to the resource structure, include:

- ☆ Over-exploitation of the range caused by increasing use of motor vehicles.
- ☆ High rates of water extraction by pumping, resulting in falling water tables and increasing salinity, and the abandonment and relocation of farms.
- ☆ Mining of non-recharging aquifers to meet the demands created by urbanization and industrial and agricultural expansion, before the structure and capacity of these aquifers have been adequately defined and a long-range National Water Plan has been developed.
- ☆ Reduced consumption of some traditional crops — dates in particular, but also sorghum and millet — as prosperity leads to changes in consumer diets.
- ☆ Slow emergence of commercial agriculture because of the relative attractiveness of other sectors for entrepreneurial talent.

2. Objectives and Policies

2.1 The three main objectives for agricultural development are to raise the per capita income and improve the welfare of rural people, minimize the Kingdom's dependence on imported food, and release surplus labor for employment in other sectors.

2.2 These objectives will be achieved by raising the level of productivity in agriculture and bringing more land into production where water resources permit, in accordance with a balanced program of regional development.

2.3 Assessment of land and water resources will continue, and the level of hydrologic, biologic, and economic research will be enhanced in support of better utilization of these resources; and the results of this research will be extended to farmers.

2.4 Effective measures for the utilization, conservation, and management of the water, soil, range, forest, and wildlife resources of the Kingdom will be formulated and introduced.

2.5 A statement of national policy for agricultural development has been prepared by the Ministry of Agriculture and Water, and is summarized in Figure IV-2. Other major policy statements, to be issued early in the plan period, will include:

- ☆ A comprehensive statement with respect to land use and development for crop production, grazing, and other purposes.

- ☆ A water code based on hydrologic surveys and existing laws relating to water rights.
- ☆ A range management code.
- ☆ A statement with respect to the distribution of virgin land and its more effective development and use.
- ☆ A set of rules to protect wildlife and forests in the Kingdom.

Figure IV-2
SUMMARY OF SAUDI ARABIA'S AGRICULTURAL POLICY (1394)

In order to reduce the Kingdom's dependence on food imports and to help develop its rural areas, the Government will:

- ☆ Encourage private enterprise in food production, processing, and marketing while confining its own activities to those into which private entrepreneurs are unable or unwilling to enter.
- ☆ Aim at a reasonable balance between the economic and social rewards available from agricultural activities in the rural areas and the rewards available from other economic endeavors in the urban areas.
- ☆ Recognize future as well as present needs and consumer as well as producer needs in implementing agricultural programs.

The Government's strategy for effecting this national policy is based on the following eight principles:

- ☆ The best use of water resources, especially depletable resources.
- ☆ Maximum feasible self-sufficiency in the production of farm machinery, seed, fertilizer, and other inputs.
- ☆ Development by the private sector, including cooperatives, of the facilities and services required for food processing and distribution.
- ☆ The same guarantees for foreign investors in agriculture as for foreign investors in industry.
- ☆ Provision by the public sector of the physical infrastructure and the safety and animal health services required by the private sector in agriculture.
- ☆ Expansion of the credit available from both government and private sources for the development of agriculture, including fisheries.
- ☆ The provision, when studies show they are needed and feasible, of special economic incentives and programs to stabilize prices or support farm incomes.
- ☆ Protection of the environment from pollution associated with agricultural activities.

Other policies to be followed by MAW toward the stated objectives for agricultural development are summarized below.

2.5.1 Recognizing the importance of the Kingdom's ground water resources as a contingency against possible drought and vital for national survival, it is a policy of MAW that no major ground water developments will be initiated until the structure, capacity, and interdependence of aquifers has been determined and the long-term social consequences of their exploitation have been assessed.

2.5.2 In the short run, until research produces results and better delineates the situation in agriculture, MAW will continue the present subsidy programs to encourage use of modern inputs and increase agriculture production. However, the various impacts of these programs will be carefully analyzed.

2.5.3 Knowing that entrepreneurial talent is in short supply in the sector, MAW will actively encourage private investment in the development of commercial agriculture.
2.6 Within the long-term requirements implicit in the above objectives and policies,the agricultural sector is to be expanded and integrated both vertically and horizontally. Vertical expansion hinges mostly on research to discover the proportions needed to maximize yield. The limit for horizontal expansion is set by the aggregates of water and soil. Achievement of higher yields thus depends largely on painstaking research, extension, and training within agriculture. With special emphasis on exploratory studies, the programs and projects planned for the coming five years and described below are designed to integrate the development of research, extension, and training activities so as to facilitate the vertical and horizontal expansion of the agricultural sector as a whole.

3. Programs and Projects

3.1 Regional Development

3.1.1 Formulate detailed regional development programs for agriculture, water, conservation, and recreation, drawing upon the regional socio-economic development plans prepared by the Central Planning Organization and other studies, and including the selected programs shown in Table IV-6.
3.1.2 Decentralize the detailed planning and implementation of these programs by means of strengthened and more effective MAW field directorates organized in accordance with the model established at Abha for the Asir Province.
3.1.3 Organize other field directorates in accordance with the following schedule:

☆ Qasim	1394-96
☆ Eastern Region	1396-98
☆ Northern Region	1397-99
☆ Jaizan	1397-99
☆ Najran	1397-99

3.2 Production Programs

3.2.1 Emphasize production in the following subsectors.which have been ranked after considering the strategic importance of crops and livestock production, the need for water conservation, the relative value of crops in total agricultural production, and potentials for rapid increase in yield:

☆ Cereals
- Wheat
- Barley
- Sorghum

Table IV-6
SELECTED AGRICULTURAL DEVELOPMENT PROGRAMS BY REGION

Region and Location	*Progress, Purposes, and Plans*
Southwestern	
ʾAsir	Detailed development plan to be drafted in 1395. Asir field directorate, already established, will strengthen extension services, improve utilization of water, and inventory resources for this area. Bee-keeping program to be initiated in 15,000 hectares of fruit land, and rehabilitation of 180,000 hectares of range land to receive increasing attention.
Wadi Bishah	Pre-design study to be conducted in 1395–97 on a water storage and distribution network for irrigating 600 ha. of arable land.
Wadi Jaizan	Study of water development for the 7,000 ha. to be irrigated from Wadi Jaizan dam to be completed in 1396–97, and land utilization and farming methods improved throughout plan.
Wadi Najran	Detailed plan to be drafted. Studies to be made of flood control (by dam if necessary) and potential supplies of irrigation and domestic water.
Wadi Baysh and South Tihamah	Pre-design study to be completed in 1397. Study will include runoff, rainfall, hydrology, and hydrogeology data; soil classification; sites for flood retention; assessment of supplies of irrigation and domestic water.
Western	
Wadi Haly	Pre-design study to be conducted in 1395–96 on rainfall storage and flood retention to increase arable land.
Central	
Wadi ad-Dawasir	Pre-design study (1395–97) on reclamation of up to 8,000 ha., development of infrastructure, and optimum land utilization.
al-Aflaj plain	Feasibility study (1395–96) on the area between al-Kharj and Wadi ad-Dawasir, to identify potential resources and specify their utilization.
Eastern	
al-Hasa	Study of water resources (1395–97) and land preparation (1396–98) prior to constructing an irrigation and drainage system to increase the area under cultivation by 6,000 ha. as a result of more efficient water use and increased water supplies (including re-use of drainage water). A pilot extension program to be launched will focus on improved irrigation and agronomic practices, and on living conditions in the area.
Faisal Settlement	Project to be further evaluated in 1395 with a view to increasing its social benefits and improving water use.
Wadi al-Miyah	A pre-design study in 1395–98 will identify scattered parcels of land of 50 to 60 ha. The study will focus on infrastructure development for 600 ha. and supplies of ground water.
Yabrin oasis	A six-month reconnaissance survey will analyze soil and water, as part of a feasibility study to be conducted in 1397–99 to determine potential for the development of 13,000 ha.
Northern	
Wadi as-Sirhan, Sakaka, al-Jawf, Turaif, and Wadi Arʿar	Exploratory studies to be conducted in these five areas, focusing on availability of water for agricultural development, will be the basis for a detailed development plan.

- ☆ Livestock
  - Sheep
  - Poultry
  - Dairy
  - Beef
- ☆ Horticulture
  - Vegetables
  - Fruits.

The production or procurement of forage will have the same priority as the livestock for which it is required.

3.2.2 Crop Production

3.2.2.1 Undertake intensive studies of about 14 crops, including varietal selection and adaptive research programs (1395-1400). Table IV-7 shows the estimated production in the base year and in 1400 for 10 of these crops; 4 other crops (potatoes, sugar beets, rice, and oil seeds) will be studied but their production is not likely to be significant until after the end of the plan period.

3.2.2.2 Produce and distribute breeder and certified wheat seeds to about 3,800 farmers, and provide extension services necessary for their rapid adoption. Broaden the certified seed program to include other cereal crops, as shown in Table IV-8.

3.2.2.3 Concentrate research at the Hakmah station (Jaizan) on increasing the yield of sorghum and millet.

3.2.2.4 Strengthen extension programs to help realize higher yields in citrus in existing areas and in the 1,000 hectares of new land that will be brought under citrus production. Similarly, concentrate research and extension on means of increasing the yield of deciduous fruits. Table IV-9 shows plan targets for citrus improvement.

3.2.2.5 Develop a production program for bee care, honey production, and fruit tree pollination (1395-97).

3.2.2.6 Develop a detailed plan for the improvement of production and marketing of dates which, despite their importance in total agricultural production in the Kingdom, have recently experienced a decline in yield.

3.2.2.7 Develop research and extension programs to improve both the quality and quantity of vegetable production, by introducing improved varieties, pure seed, and improving production, management, and marketing procedures.

3.2.2.8 Continue research on rice production at Hofuf and, if successful, initiate feasibility studies for commercial production.

Table IV-7
CURRENT AND PLANNED PRODUCTION OF IMPORTANT CROPS

Crop	Estimated Production (thousands of metric tons) Current[a]	Target (1400)
Wheat	74.2[b]	250.0
Sorghum	147.4[c]	225.0
Millet	162.5	200.0
Barley	6.7	10.0
Vegetables other than potatoes	176.4	300.0
Melons	470.0	730.0
Dates	224.3	300.0
Citrus	13.1	20.0
Alfalfa	180.0	250.0
Cotton	–	7.0

a As of 1390–91, the last year for which published data are available.
b 1391-93 average.
c Includes maize.

Table IV – 8
TARGETS FOR CERTIFIED MULTIPLICATION SEED PROGRAM

	Annual Target (tons) 1395 –96	1396 –97	1397 –98	1398 –99	1399–1400	Plan Total
Wheat						
Super x variety	1,000	1,600	1,600	1,200	1,400	6,800
Durum variety	200	1,000	1,000	1,200	1,200	4,600
Breed wheat to replace super x	–	–	20	400	1,200	1,620
Barley	–	–	–	10	100	110
Grain sorghum	–	–	1	10	100	111

Table IV – 9
TARGETS FOR CITRUS IMPROVEMENT PROGRAM

	Annual Target (number) 1395 –96	1396 –97	1397 –98	1398 –99	1399–1400	Plan Total
Rootstock seedlings	30,000	10,000	10,000	10,000	10,000	70,000
Budded seedlings	1,000	5,000	2,000	2,000	2,000	12,000
Transplants	–	300	300	400	–	1,000
Nursery trees	–	300	300	400	–	1,000
For distribution	700	1,700	4,000	2,500	3,000	11,900

3.2.2.9 To realize the production targets set for crops, plan the increases in irrigated land, water for irrigation, and fertilizers shown below.

	1390-91	*Target 1400*
Crop land (ha.)		
Irrigated	121,000	171,000
Rainfed	404,000	404,000
	525,000	575,000
Irrigation water (million cubic meters per year)	1,850	2,500
Fertilizer (tons of available nutrients)	10,800[a]	80,000

a 1394 data.

3.2.3 Livestock Production

3.2.3.1 To aid in meeting the production targets for livestock and derived products shown in Table IV-10, initiate a program at the Hofuf station to train extension staff in forage production. Develop various areas in the Kingdom, especially in the north, for forage production (1395-1400).

Table IV–10
CURRENT AND PLANNED PRODUCTION OF LIVESTOCK

	Estimated Production (thousands of metric tons)	
	Current (1394–95)	*Target (1400)*
Sheep and Goats		
Milk	60.0	110.0
Meat	18.0	26.0
Camels		
Milk	40.0	50.0
Meat	6.0	10.0
Beef	5.0	11.0
Broilers	7.0	20.0
Eggs	90.0[a]	140.0[a]
Dairy		
Milk	85.0	120.0
Meat	3.0	8.0

a Millions of eggs.

3.2.3.2 In further support of domesticated animal production, carry out the following studies (1395-1400).

- ☆ Expand ongoing studies of poultry breeds, nutrition, management and sanitation at the Qatif station and the Central Research Laboratory.
- ☆ Initiate, at Dirab, a study to improve sheep and goat production, including breed

evaluation, management practices, and nutrition.

- ☆ Continue studies at the Dirab and Hofuf stations to improve methods for managing commercial dairy operations, and expand activities to other stations.
- ☆ Expand the research at Dirab, Hofuf, and Medina to include studies to test and select local and cross-bred strains of dairy and beef cattle, and to analyze the nutrition, management, and marketing aspects of these livestock.
- ☆ Undertake studies at Wadi ad-Dawasir in 1396-97 to improve camel production, breeding, management, and marketing.

3.2.3.3 Implement a program for breeding an improved strain of the Arabian horse, and establish and maintain a register of breeding stock in support of this program (1395-1400).

3.2.3.4 In addition to ongoing animal treatment programs, develop an extension veterinary program for disease and animal pest prevention, concentrating on dipping of sheep and inoculation and vaccination of livestock against communicable diseases (1395-97).

3.2.3.5 Improve the existing quarantine stations in Jiddah, Halat Ammar, and Dammam, and establish new stations in Jaizan, Najran, and Yanbu'.

3.2.4 Marine Food Production

3.2.4.1 Expand at Jiddah studies to increase the production of marine food:

- ☆ Feasibility of fish culture and farming (1395-97).
- ☆ Feasibility of prawn culture and its production under controlled conditions (1398-99).
- ☆ Potentials of fish and fish by-products for livestock feed and in industrial uses (1395-96).
- ☆ Industrial utilization of coral reef products.

3.2.4.2 Continuously monitor and evaluate the dynamics of fish population to develop a plan for maximum long-term yield of marine resources (1395-1400).

3.3 Land Development and Conservation

3.3.1 Develop and issue early in 1397-98 a comprehensive statement of policy with respect to land use and development for crop production, grazing, and other purposes.

3.3.2 Re-evaluate the virgin land distribution program to provide a basis for possible policy changes in the light of distribution of virgin land (1395-96). Only a small portion of the land distributed has been developed, and further distribution of virgin land will be kept to a minimum until the study provides:

- ☆ Criteria for determining eligibility for grants.
- ☆ Specification of areas for distribution to individual farmers and for large-scale farming.
- ☆ A set of rules for optimum patterns of well locations.

- ☆ A specification of the relation between the size of wells and the area to be irrigated, to minimize the cost of well construction and optimize the use of water.

3.3.3 Launch a comprehensive soil survey and classification program focusing during the plan period on priority areas for land development within the one million hectares found from earlier land and water surveys to have potential for irrigation agriculture.

3.3.4 During the first year of the Plan, further evaluate the Haradh project with a view to increasing social benefits and improving water use.

3.3.5 During the early years of the Plan, evaluate progress in land development in the al-Hasa, Haradh, and Wadi Jaizan projects, focusing on their effectiveness in increasing productivity and potential for successful application of the experience gained to future land development projects.

3.3.6 To reduce the pressure on the ranges, develop and enforce a national range management code which recognizes the traditional Hema system and incorporating the following specific actions:

- ☆ Encourage the integration of range production of livestock with irrigated agriculture by establishing commercial feedlots on irrigated land.
- ☆ Develop more water sources so as to expand the grazing areas and rebalance their utilization.
- ☆ Conduct research to determine the carrying capacity of range sites, and to identify plant species suited to range conditions.
- ☆ Determine the feasibility of re-seeding and fertilizing selected areas of range land.
- ☆ Develop and implement a program for the production and storage of supplemental forage for reducing pressure on ranges and ensuring against shortages during drought periods.
- ☆ Coordinate the relevant research at the Tayif station with the Ar'ar range improvement work to test and demonstrate range improvement practices in selected areas of the Kingdom (1395-97).

3.4 Forestry and Conservation

3.4.1 Draft a set of regulations for the protection of forestry, conservation of wildlife, and establishment of national parks.

3.4.2 Develop an afforestation program to increase timber production and facilitate soil and wildlife conservation. Implement this program as a pilot project in Asir and extend it according to the experience gained there.

3.4.3 Enforce effective measures — such as construction of firebreaks and windbreaks, pruning and thinning, and control of commercial wood harvesting — to safeguard forests in the Southwest.

3.4.4 Establish six new national parks and improve the conditions in the three existing parks to help meet the recreational needs of the population.

3.4.5 Undertake the following measures to preserve wildlife:

- ☆ Establish breeding centers and wildlife refuges for endangered species.
- ☆ Develop public education activities aimed at increasing appreciation for wildlife.
- ☆ Develop and enforce strictly appropriate laws on hunting.

3.4.6 Continue sand stabilization in al-Hasa establishing a new defense line (1395-1400).

3.4.7 Based on the experience gained in al-Hasa, develop a plan for sand stabilization in other areas threatened by sand encroachment (1396-97).

3.5 Supporting Programs

Supporting programs described below and planned to continue throughout the 1395-1400 period include all the research, training, and data collection and analysis programs that have a direct or indirect bearing on either the implementation or performance of the food production and land development programs.

3.5.1 Water-Use Efficiency

3.5.1.1 Continue to investigate consumptive use of irrigated crops at Hofuf and publish the results. Initiate similar investigations in the following three new stations that will be established in the first year of the Plan: Qasim, Baljarshi, and one in the north.

3.5.1.2 Investigate optimum irrigation practices and alternative irrigation systems for major crops in each agro-climatic zone.

3.5.2 Plant and Animal Protection

3.5.2.1 Analyze plant and animal pests, diseases, and parasites to develop methods for their control.

3.5.2.2 Study the efficiency of present agricultural quarantine measures.

3.5.2.3 Increase the capability for desert locust control.

3.5.2.4 Establish close coordination with the Saudi Arabian Standards Organization for setting and implementing health and safety standards for agricultural commodities.

3.5.3 Research Stations and Subjects.

3.5.3.1 Complete the establishment and bring into operation all the research stations listed in Table IV-11.

3.5.3.2 Establish a prototype unit for experiments in hydroponics.

3.5.3.3 At Hofuf, re-orient selected research activities toward problem-solving and practical research, increasing accordingly the coordination between established research and extension programs there.

3.5.3.4 Make the Central Research Laboratory in Riyadh operational in the first year of the Plan and develop a research plan.

3.5.3.5 Give priority to broadening research activities at Dirab and Ar'ar, and to initiating research at Qasim, Baljarshi, and the station to be established in the north. Make the rest of the research stations fully operational in the second year of the Plan.

Table IV-11
AGRICULTURAL RESEARCH CENTERS AND SUBJECTS

Center	*Subjects*
Research Stations	
Hofuf	Dairy, cattle, sheep; irrigation, re-use of drainage water; forage, rice; agro-climatology.
Qatif	Poultry, grapes, dates, melons, vegetables.
Unayzah	Citrus, vegetables, cereals, dates, grapes, olives.
Jaizan (Hakmah)	Cereals, vegetables, cotton papaya; irrigation
Dirab	Cereals; dairy, horse breeding, goats.
al-Kharj	Cereals, vegetables, grapes, melons, citrus; irrigation.
Jiddah	Locust and insect control.
Haddah Asham[a]	Tropical and citrus fruit, vegetables.
Baljarshi[a]	Deciduous fruit; irrigation.
Bishah[a]	Citrus, dates, grapes, cereals.
Medina	Poultry, dairy, cattle.
Marine development (Jiddah)	Fish movement, and classification; fishing; training.
Range development ('Ar'ar)	Water spreading; extension, training; fodder storing.
Central Research Laboratory (Riyadh)	Soil and water analysis; plant protection; animal disease
Range and Forest station (Tayif)	Water spreading; extension, training; fodder storing.

a Functioning as nurseries and demonstration farms but no organized research as of 1394-95.

3.5.4 Cooperatives

Undertake a periodic review of the programs for development of agricultural and marketing cooperatives in conjunction with the Ministry of Labor and Social Affairs.

3.5.5 Financial Incentives

3.5.5.1 Continue to give subsidies to encourage the adoption of modern technology and to realize higher levels of production (and also to increase the levels of income in agriculture).

3.5.5.2 Continue the study of subsidies on dates, marketing facilities, and fruit and vegetable processing.

3.5.5.3 Because subsidies can in the long run often have serious undesirable consequences, initiate early in the plan period an economic research study to assess the short- and long-run impacts of the present subsidies.

3.6 Training

3.6.1 Undertake training programs to alleviate shortages in special categories of skills, with the following target numbers of students:

	1395 -96	*1396 -97*	*1397 -98*	*1398 -99*	*1399-1400*	*Plan Total*
Two-year technical training	55	65	80	90	95	385
Summer training for university students	200	250	300	350	400	1,500
Short courses in special skills	337	412	477	537	597	2,360
Other training	91	117	159	195	240	802
Scholarship program						
BS	52	52	53	53	54	264
MS	10	12	14	16	18	70
Ph.D	3	4	5	6	7	25

3.6.2 Undertake in the first year of the plan a review of the vocational agricultural training program, in conjunction with the Ministry of Education.

3.7 Data Development and Publication

3.7.1 Before the end of 1395, publish the results of the census of agriculture already taken.

3.7.2 Take a census of the Bedouin (1396-97).

3.7.3 To provide data for the third development plan, take a complete census of agriculture in 1397-98 as described in Chapter VIII, Statistics.

3.7.4 Establish systems for collection of agricultural commodity prices, operate a market news service, and survey and publish annual crop and livestock production.

3.7.5 Develop MAW's capability in automated data processing and storage.

3.8 Economic Analyses

Undertake a range of economic studies with direct relevance to agricultural development, including the following.

3.8.1 Develop a quantitative model of the sector.

3.8.2 Estimate farm production costs and returns to assist in developing production functions for crops and enterprises in the different regions.

3.8.3 Analyze the extent of differential between the levels of income in agriculture (both settled and nomadic) and in the industrial and tertiary sectors, and explore ways of raising agricultural incomes.

3.8.4 Study the extent of surplus labor in agriculture and the possibilities for its speedy release and utilization in other sectors.

3.8.5 Conduct an economic analysis of marketing channels, their structure and performance, and the feasibility of introducing grades and standards.

3.9 Facilities Improvement

3.9.1 Build headquarters for MAW field staff in Qatif, Hayil, Amlaj, ar-Rass, Tayif, al-Ula, ad-Dawadimi, Quyya, Shaqra, Buraydah, and Unayzah.

3.9.2 Expand MAW's existing library.

3.10 Ministry Organization

3.10.1 In addition to decentralizing MAW developmental activities through the field directorates, instigate administrative reforms in the following:

- ☆ Recruitment and promotion procedures.
- ☆ Financial management and control procedures.
- ☆ Preparation of the budget and accounting procedures.
- ☆ Procedures for the evaluation of performance.

3.10.2 Study the establishment of a Food and Agriculture Corporation as part of MAW's organizational reform.

4. Finance

The financial requirements for agricultural development — excluding regional agricultural development, the cost of which has not yet been determined — under the Ministry of Agriculture and Water are estimated as follows (SR millions):

	Budgeted 1394-95	*1395-96*	*1396-97*	*1397-98*	*1398-99*	*1399-1400*	*Plan Total*
Recurrent	249.7	241.0	300.1	369.1	444.5	512.5	1,867.2
Project	248.4	432.8	427.9	437.3	370.3	323.2	1,991.5
Total	498.1	673.8	728.0	806.4	814.8	835.7	3,858.7

MAW's water projects have been included in the financial estimates for Water, the first section of this chapter. Financial requirements for agricultural credit are shown in the next section.

IV.B.2. AGRICULTURAL CREDIT

1. Present Conditions

1.1 The Saudi Arabian Agricultural Bank (SAAB), is the principal institution providing credit for the agricultural sector of the Kingdom.

1.2 Starting from a modest base, the Bank has grown rapidly during the first development plan period. In 1394-95, it operated branches in each of ten cities supervising a total of 43 local offices.

1.3 The capital endowment of the Bank has also increased, from SR 10 million in 1384-85, the start of operation, to SR 103 million in 1394-95 (excluding the SR 48.5 million allocated for payments of agricultural subsidies).

The endowment of SR 103 million is enough to satisfy, at most, the credit needs of about 6 percent of farmers, leaving a large number subject to excessive charges by merchants and money lenders.

1.4 Three types of loans are made by the Bank: short-term seasonal loans for production inputs, medium-term loans for farm machinery and similar assets, and long-term loans for land purchase and development. In 1393-94 the Bank granted 5,414 new loans amounting to SR 36.3 million.

Objectives and Policies

2.1 The primary objectives of the Bank are to expand the number of agricultural loans so as to reach over 15 percent of farmers in the next five years, and to expand credit in support of agricultural development. To achieve these objectives, SAAB will make available loans for:

- ☆ Seed, fertilizer, labor, and other production inputs.
- ☆ Transporting, marketing, and processing of agricultural products.
- ☆ Agricultural machinery and irrigation equipment.
- ☆ Purchasing and developing of agricultural land.

2.2 In order to assist farmers and processors in financial management and planning, training courses for bank employees will be established to develop and enhance their skills in financial management.

2.3 In order to increase the accessibility of the Bank's services to the agricultural sector, measures will be taken to decrease the time and effort borrowers need to obtain loans, especially in emergency situations.

3. Programs and Projects

3.1 Credit Expansion

Expand credit in support of agricultural production, processing, and marketing development in accordance with the requirements shown in Table IV-12.

Table IV - 12
PLANNED LOAN FINANCE OF THE AGRICULTURAL BANK
(SR Millions)

	1395 -96	*1396 -97*	*1397 -98*	*1398 -99*	*1399 -1400*	*Plan Total*
Agricultural Production						
Agricultural production requirements	64.4	74.1	84.2	96.4	108.3	427.4
Development of virgin land	14.4	14.4	14.4	14.4	14.4	72.0
Development of apiary industry	0.3	0.3	0.3	0.3	0.3	1.3
Nomadic herdsmen	2.5	3.0	3.5	4.0	4.5	17.5
Development of fisheries	2.0	2.0	2.0	2.0	2.0	10.0
Subtotal	83.6	93.8	104.4	117.1	129.4	528.2
Marketing and Processing						
Cold storage plants	5.0	5.0	5.0	5.0	5.0	25.0
Processing plants	5.0	5.0	5.0	5.0	5.0	25.0
Poultry and animal feed plants	3.0	3.0	3.0	3.0	3.0	15.0
Dairy farms, milk processing and collection centers	15.0	15.0	15.0	15.0	15.0	75.0
Subtotal	28.0	28.0	28.0	28.0	28.0	140.0
Total	111.6	121.8	132.4	145.1	157.4	668.2
Less estimated loan repayments	25.0	31.4	49.4	68.2	66.6	240.6
Net loan finance required	86.6	90.4	83.0	76.9	90.8	427.6

3.2 Production Credit

3.2.1 Estimate credit requirements, develop repayment plans, and make loans readily available for:

- ☆ Farmers and agricultural cooperatives.
- ☆ The beneficiaries of the virgin land distribution program.
- ☆ Establishment of an apiary industry.
- ☆ Nomadic herdsmen.
- ☆ Modernization and expansion of fisheries in the Gulf and the Red Sea.

3.3 Processing and Marketing Credit

Estimate credit requirements, develop repayment plans, and make loans readily available for:

- ☆ Cold storage plants.
- ☆ Construction and operation of processing plants for tomato juice and paste production, date packing, oil-seed extraction, and other products.
- ☆ Establishment of milk collection centers, and modernization of dairy production and processing units.
- ☆ Construction and operation of poultry feedmixing plants.
- ☆ Construction and operation of top-leather tanning plants and light-leather preserving plants.

3.4 Agricultural Input Subsidies

Continue to act as the fiscal agent for the Government under the agricultural input subsidies program.

3.5 Management

3.5.1 Initiate a program of facilitating and simplifying Bank lending processes and procedures for recipients of loans.

3.5.2 Establish additional regional bank centers, branches, and offices, as necessary.

3.5.3 Provide regular banking services to distant areas and villages by acquiring and using vans for a mobile banking program.

3.5.4 Study the potential for strengthening existing and newly-created branches and offices through delegating additional lending authority.

3.5.5 Study alternative methods of decentralizing the Bank's operations.

3.5.6 Expand the use of automatic calculating and posting machines throughout all sections of the Bank.

3.5.7 Apply modern book-keeping and accounting techniques so as to reduce the number of forms and documents for processing and collection of loans.

3.6 Information and Research

3.6.1 Make more and more farmers aware of the services available from the Bank through audio-visual aids, radio and TV announcements, and other means of publicity.

3.6.2 To help facilitate credit transfer and to evaluate the performance of the Bank, undertake the following studies:

- ☆ Credit requirements of various sizes of farms.
- ☆ Impact of input subsidies on agricultural credit.
- ☆ The possibility of integration of agricultural credit transfer with extension service.
- ☆ The possibility of transfer of credit through cooperatives.
- ☆ The effectiveness of mobile units in transferring credit to remote areas.

3.7 Training

3.7.1 Prepare an orientation program for new employees.

3.7.2 Establish and maintain a job training program within the Bank.

3.7.3 Provide technical training in agricultural production and financial management for Bank employees and accountants, and initiate a long-term program of study abroad for qualified employees so as to improve the capacity of the Bank's management and technical services.

3.8 Buildings

3.8.1 Design and supervise construction of a new headquarters building in Riyadh.

3.8.2 Acquire necessary property and facilities for new regional, branch, and local offices.

4. Finance

The annual requirements for financing of the Agricultural Bank, excluding provision in the Plan years for subsidies already included in finance for agricultural production, are estimated below (SR millions):

	Budgeted 1394-95	*1395 -96*	*1396 -97*	*1397 -98*	*1398 -99*	*1399-1400*	*Plan Total*
Recurrent	54.8	55.0	63.5	68.0	73.5	78.5	338.5
Loan finance[a]	41.0	86.6	90.4	83.0	76.9	90.8	427.7
Project	–	13.0	15.0	12.0	10.0	10.0	60.0
Total	95.8	154.6	168.9	163.0	160.4	179.3	826.2

a Planned loan finance less forecast loan repayments.

C. PETROLEUM

1. Present Conditions

1.1 Oil production has increased at a rate far exceeding targets set forth in the first development plan. Output rose rapidly from an average of 3.2 million barrels per day in 1969 to nearly 8.5 million barrels per day in 1974, as shown in the following tabulation.

Year	*Aramco*	*Getty*	*Arabian Oil*	*Total*
1969	2,992	62	161	3,215
1970	3,548	79	172	3,799
1971	4,497	92	179	4,768
1972	5,749	78	206	6,033
1973	7,334	65	197	7,596
1974	8,210	82	188	8,480

1.2 In 1974, Saudi Arabian crude oil production represented 15.3 percent of world output, 27.8 percent of OPEC-member production, and 46.4 percent of Arab-nation output. Proven oil reserves are estimated at 137,000 million barrels, which represent 20 percent of world reserves. Gas output at Aramco (almost all of which is associated with oil production) amounted to 4,422 million cubic feet per day in 1974 of which 17.8 percent was for gas injection, power generation, and industrial uses. Several major projects are now being planned for utilizing this resource in new manufacturing activities such as petrochemicals and steelmaking.

1.3 A vigorous program to expand oil output was carried out during the first development plan period. New wells drilled of all types increased from about 50 annually in 1389-90 to more than 300. New pipeline installations grew from 225 kilometers annually in the base year to more than 550. In addition, major expansions were accomplished in gas-oil separator capacity, water-injection facilities, natural gas liquid processing, stabilizers, storage facilities, and power-generating capacity.

1.4 Several major new fields were discovered: the Mahara field offshore between the Zuluf and Marjan fields in the northeast region; and the Abu Jifan, Qirdi, Mazalij, and Harmaliyah fields in the southern part of the concession area. The Zuluf and Harmaliyah fields were in production in 1393. Concessionaires continued exploration at a high level of activity. Aramco maintained five seismic working parties in its area. In addition, the Ministry of Petroleum and Mineral Resources continued its aggressive program to explore non-conceded areas throughout the Kingdom. Aramco's estimate of proved reserves of liquid hydrocarbons increased by 6,558 million barrels in 1974.

1.5 In Dhul Qi'dah 1392, the Supreme Advisory Council for Petroleum and Minerals was formed. Membership of the council is drawn from the Ministries of Petroleum, Finance, and Foreign Affairs, the Central Planning Organization, and the Saudi Arabian Monetary Agency. The main functions of the Council are coordination and formulation of policies relating to oil production and prices, concessions, participation in and ownership of production companies, sales to foreign governments, gas utilization, and the creation of institutions to implement these policies.

1.6 By the General Agreement of 20 December 1972, effective 1 January 1973, the Government acquired a 25 percent interest in Aramco's crude oil concession rights, in crude oil produced, and in production facilities. On 5 June 1974, the Government's interest was increased to 60 percent, effective 1 January 1975. Discussions are now in progress regarding a further increase in the 60 percent interest. Government ownership of Aramco operations is a major step toward establishing a Saudi-owned integrated production-marketing operation to control the exploitation of the Kingdom's hydrocarbon resources.

1.7 During the first plan the Ministry of Petroleum and Mineral Resources increased its research capabilities for studies of the economic and technical aspects of the international oil situation and outlook, and of policies and practices relevant to petroleum-resource utilization. The Technical Affairs Department was expanded to oversee field production and participate more actively in international forums on petroleum technology. Assumption of increased ownership in Aramco facilities required a major increase in staff to accommodate these new responsibilities.

1.8 Substantial progress was made in training Saudi geologists, engineers, and technicians in exploration and other activities of the Ministry to the point that they now manage most of the field work and processing of field data. Contract companies continue to be utilized for drilling and other specialized operations, and to assist in the training of Saudi staff. Such policies will continue because the staffing required still exceeds the qualified persons available within the Kingdom.

1.9 During the 1970s, Saudi Arabia played an increasingly important role in the Organization of Petroleum Exporting Countries. OPEC demonstrated its growing strength by achieving a major correction in posted prices in February 1971 — the Tehran Agreement. The complete record of price corrections, as shown below in terms of posted prices of Arabian Light (Ras Tanura), is ample testimony to OPEC's increasing effectiveness:

Date	US $	
pre 15 February 1971	1.800	Pre-Tehran
15. 2.71	2.180	Tehran Agreement
1. 6.71	2.285[a]	
20. 1.72	2.479	Geneva Agreement
1. 1.73	2.591[a]	
1. 4.73	2.742[a]	
1. 6.73	2.898	Revised Geneva Agreement
1. 7.73	2.955[a]	
1. 8.73	3.066[a]	
1.10.73	3.011[a]	
16.10.73	5.119	
1.11.73	5.176[a]	
1.12.73	5.036[a]	
1. 1.74	11.651	
1.11.74	10.460	

a Automatic adjustments in accord with agreements in effect.

1.9.1 In addition to the increases in posted prices, royalties per barrel increased from 12.5 percent of the posted price to 20.0 percent, and income taxes on profits from 50 percent to 85 percent during the plan period.

1.9.2 Monetary fluctuations, of the US dollar in particular, and continuing rises in import prices are matters of major concern to OPEC and will play a key part in future negotiations with consumer countries.

1.10 The Organization of Arab Petroleum Exporting Countries (OAPEC) was formed in January 1968, with Saudi Arabia, Kuwait, and Libya as founding members. Membership has since increased to ten. The primary objective of OAPEC is to ensure close coordination among member countries and promote projects that would enhance the oil industry in the region.

1.10.1 In May 1972 OAPEC formed a maritime company for petroleum transport with a paid-up capital of US $100 million divided equally among member countries. The objective of the company is to acquire a capability in the transport of all types of hydrocarbons.

1.10.2 In December 1973, Saudi Arabia, Bahrain, Abu Dhabi, Iraq, Qatar, Kuwait, Libya, and Egypt signed in Kuwait the articles of association for establishing shipbuilding and drydock facilities in Bahrain. The paid-up capital of the project is US $30 million. This project and the maritime company are major steps toward the general goal of producers' control over down-stream activities related to the oil industry.

1.10.3 In September 1974, OAPEC formed the Arab Petroleum Investment Company, to be located in Dammam, with a paid-up capital of SR 1,200 million. Saudi Arabia subscribed to 17 percent of the shares of the Company. The purpose of the Company is to finance petroleum projects with particular emphasis on projects to be established in the Arab countries.

1.10.4 In January 1974, an Arab Fund to provide soft loans to African countries to assist them in financing oil purchases was established with a capital of US $200 million. Saudi Arabia has paid its contribution of US $40 million to the Fund.

2. Objectives and Policies

The major petroleum-resource management objectives of the Ministry of Petroleum

and Mineral Resources in the 1395-1400 period, and their related policies, are summarized below.

2.1 Manage petroleum and gas production in response to domestic and international demand and to production reserve policies judged to bring maximum long-range benefits to the Kingdom's society and economy.

2.1.1 Consider probable long-term shifts in world energy types and sources in developing assessments of future demand for Saudi Arabian oil.

2.1.2 Ensure that international trade relationships and marketing policies of the Kingdom support a viable long-term market for its petroleum.

2.1.3 Recognize that oil resources are expendable in time, and continue to strengthen decision-analysis approaches for formulating production-reserve policies.

2.2 Accelerate exploration activities throughout the Kingdom to identify new fields and thus improve resource utilization potentials to meet both world energy needs and domestic hydrocarbon industry development.

2.2.1 Continually reassess reserve positions of existing fields based on new seismic and drilling investigations.

2.2.2 As past concessions have occupied only a small portion of the oil-prone sedimentary surface area of Saudi Arabia, accelerate seismic and drilling investigations of the entire area to identify new reserves.

2.3 Expand the Ministry program for providing general guidance to the Kingdom about the international energy outlook and policy matters concerning Saudi Arabia's posture.

2.3.1 Strengthen the study programs for analyses of economic, political, technological, and social forces influencing international demand and prices for Saudi Arabian petroleum and gas.

2.3.2 Coordinate such programs with the short- and long-term strategies of the Kingdom whereby oil resources will be used to advance the overall social and economic welfare of the Kingdom.

2.3.3 Encourage world conservation of petroleum resources.

2.4 Assume the major new responsibilities arising from acquiring control of the concession rights of Aramco and its extensive range of exploration, production, and refining organizations and facilities.

2.5 Accelerate Ministry programs to recruit and develop administrative, professional, and technical manpower to meet the increasing demands of its other programs.

3. Programs and Projects

3.1 Economic and Technical Studies

3.1.1 Accelerate the studies and their staffing which afford the Kingdom an excellent understanding of international forces and considerations bearing on its petroleum

resource utilization and trade policies. Optimize these study programs by 1397.
3.1.2 Strengthen the technical study programs throughout the plan period which provide understanding of advanced developments in world-energy technologies, including major new forms of energy in the long-range outlook and the future role of petroleum as energy and raw material.
3.1.3 Promote world conservation of hydrocarbon resources in light of the results of the above studies.

3.2 Seismic Exploration
3.2.1 Extend seismic investigations to cover all areas of the Kingdom — including the Rub' al-Khali — by the end of the plan period.
3.2.2 Introduce by 1397 the advanced techniques in data processing and interpretation recently developed for seismic work.

3.3 Field Study
3.3.1 Continue the established program of contracted investigations of existing oil fields relating to reserves, production potentials, and opportunities to improve field productivity.
3.3.2 Complete the Berry field investigation, and undertake study of an additional major field.

3.4 Utilities Study
3.4.1 Complete a new investigation by 1397 of the existing pipelines, treatment, and storage installations to inventory these facilities, their adequacy, efficiencies, and maintenance, and the replacement requirements.
3.4.2 On the basis of the findings, implement a series of projects in the latter years of the Plan for additional studies and actions to maintain or improve the overall operating condition of the utilities.

3.5 Exploratory Drilling
3.5.1 Continue the established program of exploratory well-drilling to investigate non-conceded areas of the Kingdom, with particular emphasis upon the following:

- ☆ The western area of the Abu Jifan field.
- ☆ The Shatfa area.
- ☆ The Faris, Beir Hadi, and Dokma areas in the Rub' al-Khali.

3.5.2 Continue the exploration data-analysis program to build understanding of phenomena related to Saudi Arabian oil origin and movement in underground flows to deposit basins.

3.6 Resources Study

Launch a major project in 1396 for a basic evaluation of all information bearing upon the oil resources of the Kingdom, and the private and public organizations involved in their commercialization.

3.7 Technical and Administrative Support

3.7.1 Complete and staff by 1400 the chemical laboratory facility in Dhahran.

3.7.2 Execute the computer-utilization project that is to be initiated in 1395, and extend it throughout the plan period to cover both technical assistance and staff training.

3.7.3 Continue the contract for computer utilization in reservoir-simulation analysis.

3.8 Training

3.8.1 Execute the plan to train abroad more than 200 administrative and professional personnel by 1400.

3.8.2 Continue to expand internal seminar and other education programs for upgrading present staff.

3.8.3 Develop a scholarship program for supporting selected staff in relevant post-graduate education.

4. Finance

The annual financial requirements of the Ministry of Petroleum are estimated as follows (SR millions)[a]:

	Budgeted 1394-95	*1395 -96*	*1396 -97*	*1397 -98*	*1398 -99*	*1399- 1400*	*Plan Total*
Recurrent	20.8	34.2	46.2	62.4	84.2	113.6	340.6
Project	47.8	59.0	100.1	149.3	155.5	196.4	660.3
Total	68.6	93.2	146.3	211.7	239.7	310.0	1,000.9

a Excluding project costs of the Aerial Survey and Mapping Department, which are shown later (Chapter VIII).

D. MINERALS

1. Present Conditions

1.1 Geologic reconnaissance mapping of well over one-half of the Precambrian Arabian Shield has now been completed (145 quadrangles of the planned total of 223). Practically all of this work was accomplished in the first development plan period.

1.2 Nine known mineral belts as well as basic and ultra-basic rock masses have been well-defined within the Shield. Figure IV-3 shows the locations of known mineral occurrences within the Shield.

1.3 Four exploration licenses have been issued:

- ☆ To Societe d'Etudes, Recherches et d'Exploitations Minieres (SEREM) and the United States Steel Corporation: Jabal Sayid (copper, gold, and zinc). Petromin has the option of 50 percent participation in a company to be formed if the deposit proves commercially viable. A smelter will be installed if found feasible.
- ☆ The Nippon Mining Company Ltd. and Mitsui and Company Ltd.: Nugrah (lead, zinc, silver, and copper). Petromin has the option of 50 percent participation in any company to be formed.
- ☆ Arabian Shield Development Company and National Mining Company: Wadi Qatan (nickel), Massene (copper and zinc). Petromin has options under both licenses of 25 percent participation in any company to be formed.

1.4 The main provisions of the Mining Code, which was amended to encourage exploration by foreign mining companies, are summarized in Figure IV-4.

1.5 Pending transfer to private enterprise, the following promising deposits are being investigated by the Directorate General of Mineral Resources (DGMR):

- ☆ al-Amar: copper, zinc, and gold.
- ☆ Muhd adh-Dhahab: gold and silver.
- ☆ Wadi Sawawin: iron.
- ☆ Wadi Fatimah: iron.
- ☆ Thaniyat-Turaif: phosphates.

1.6 Many other investigations were initiated, continued, or completed in the overall effort to understand the basic geology of the Kingdom and identify mineral resources in economic concentrations.

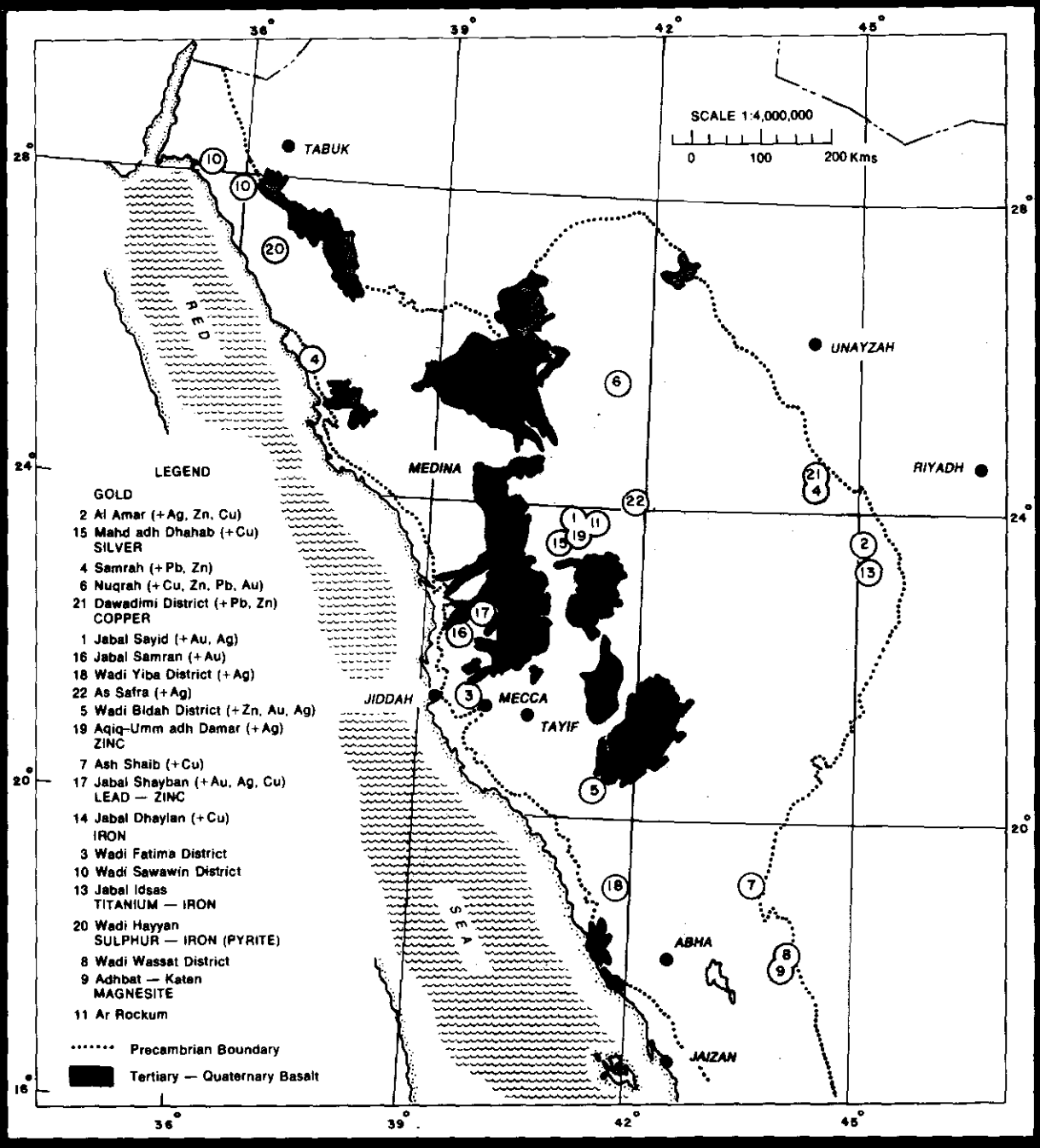

SCALE 1:4,000,000
0 100 200 Kms
TABUK
UNAYZAH
RIYADH
MEDINA
JIDDAH
MECCA
TAYIF
ABHA
JAIZAN
RED SEA
LEGEND
GOLD
2 Al Amar (+Ag, Zn, Cu)
15 Mahd adh Dhahab (+Cu)
SILVER
4 Samrah (+Pb, Zn)
6 Nuqrah (+Cu, Zn, Pb, Au)
21 Dawadimi District (+Pb, Zn)
COPPER
1 Jabal Sayid (+Au, Ag)
16 Jabal Samran (+Au)
18 Wadi Yiba District (+Ag)
22 As Safra (+Ag)
5 Wadi Bidah District (+Zn, Au, Ag)
19 Aqiq–Umm adh Damar (+Ag)
ZINC
7 Ash Shaib (+Cu)
17 Jabal Shayban (+Au, Ag, Cu)
LEAD — ZINC
14 Jabal Dhaylan (+Cu)
IRON
3 Wadi Fatima District
10 Wadi Sawawin District
13 Jabal Idsas
TITANIUM — IRON
20 Wadi Hayyan
SULPHUR — IRON (PYRITE)
8 Wadi Wassat District
9 Adhbat — Katan
MAGNESITE
11 Ar Rockum
Precambrian Boundary
Tertiary — Quaternary Basalt

Figure IV – 4
SUMMARY OF SAUDI ARABIA'S MINING POLICY (1394)

Mineral exploration and development in the Kingdom is controlled by the Mining Code, which is modern in concept and authorizes the issue of the following documents:

Reconnaissance Permit: gives the holder the right to carry out mineral reconnaissance over a specified area, which is not limited in maximum size but which excludes any areas under exploration license or mining leaseThe principal advantages are that the permit is a basis for work permits for foreign staff, and entitles the holder to import exploration equipment duty-free.

Exploration License: conveys the exclusive right, initially for up to five years, to explore for specified minerals over an area not exceeding 10,000 square kilometers, and in recognition of this exclusive right, the licensee undertakes a phased exploration program and guarantees a minimum expenditure. The principal terms of any subsequent mining lease are defined in the exploration documents and Mining Code. No rent is charged.

Mining lease: authorizes the holder to mine. No royalty is charged, and taxation is either by way of income tax or by a previously agreed profit-sharing arrangement. In the case of income tax, a tax holiday of five years is granted, starting from the date of first production or from the beginning of the fourth year after the signing of the lease, whichever is the sooner.

Exploration Licenses will normally be granted to a foreign mining company only after the company has concluded a partnership agreement with the state organization Petromin, providing for joint investment in mining if the company exploration proves successful; the degree of participation is not defined, but existing agreements are mainly on a 50 percent basis. Exploration costs are capitalized; exploration expenses on the area by the Government prior to the granting of the exploration license are credited to Petromin, and subsequent expenditure by the mining company is credited to the company.

1.7 A start has been made in exploration work beyond the Precambrian Shield as similar rocks elsewhere contain economic deposits of lead, zinc, copper, uranium, phosphate, potash, and other minerals.

1.8 Further progress was made in strengthening the technical, data processing, and support capabilities of DGMR with assistance from the U.S. Geological Survey and the French Bureau de Recherches Geologiques et Minieres.

1.9 A start has been made on an extensive program to inventory the non-metallic mineral resources of the regions. These resources are having an immediate impact on the economic development program of the Kingdom as valuable construction materials.

1.10 Most of the metallic mineral development, now transferred to private mining companies, will require upwards of ten years to reach operational stages — assuming the deposits prove to warrant commercialization. At present, mineral commercialization is confined to the non-metallics: cement, gypsum, marble, lime, and salt production.

2. Objectives and Policies

In the 1395-1400 period, management and development of the Kingdom's mineral resources will be guided by two basic objectives: (a) to increase the potential for commercial exploitation of the Kingdom's metallic and non-metallic resources and (b) to increase the capabilities of DGMR, particularly in managerial and technical functions, in

support of orderly exploitation of these resources. These objectives are stated more specifically below.

2.1 Continue and expand the mineral resource management programs of the Kingdom to:

☆ Survey and record the geology of the Kingdom as a basis for mineral exploration.

☆ Investigate the mineral resources and build an inventory of mineral potential

☆ Stimulate the development of a sound mineral industry, with particular reference to the rational policy of industrialization.

☆ Build an organization to take full responsibility for the technical work of the mineral resources sector.

2.1.1 Continue technical arrangements with the U.S. Geological Survey and the French Bureau de Recherches Geologiques et Minieres for services related to implementation of the overall program of DGMR.

2.1.2 Continue and expand the Group Contract, through which experienced foreign staff are supplied to the DGMR on a full-time basis or on short-term consultancies, in order to increase DGMR output and provide the professional experience to aid the development of Saudi technical capability.

2.1.3 Examine in 1395-96 new means of expanding geological and mineral exploration, including the engagement of a third mission.

2.2 Increase the proportion of mineral exploration activities compared with basic geological studies within the overall DGMR effort.

2.2.1 Accelerate exploration of areas outside the Precambrian Shield (although the Shield area will remain the major focus).

2.2.2 Intensify investigation of the non-metallic mineral resources of the Kingdom since such minerals are important materials for the massive construction programs under way.

2.3 Reassess by 1397 the existing Mining Code, other regulations governing mining operations, and the range of incentives now extended to private firms for developing known deposits, and recommend whatever modifications are needed to ensure conformance to international standards and to permit the timely transfer of DGMR exploration work to private initiatives.

2.4 Continue throughout the plan period to improve the managerial, technical, data processing, and general mission-support activities of DGMR.

2.5 Continue to develop Saudi staff capabilities to meet the administrative and professional requirements of the DGMR programs.

3. Programs and Projects

3.1 Basic Geology

3.1.1 Carry out the geologic mapping of the Precambrian Shield (continuing).

3.1.2 Compile geologic maps of scales smaller than 1:100,000 to assist comprehension of regional geology (continuing).

3.1.3 Maintain studies of Precambrian formations to identify mineral deposits (continuing).

3.1.4 Undertake special studies of the Precambrian Shield to develop analytical models of its make-up (continuing).

3.1.5 Determine the characteristics of acid plutonic rock formations, and investigate in detail selected bodies of basic plutonic rocks (continuing).

3.1.6 Initiate a study of the stratigraphy and structure of the Red Sea coastal sediments (1395-97 for basic data).

3.1.7 Expand knowledge of the geomorphic development of western Saudi Arabia and its economic potentials (1397-1400).

3.1.8 Arrange to obtain geologic data from civil engineering excavations being made in the Kingdom (continuing.).

3.2 Mineral Exploration

3.2.1 Conduct detailed investigations and evaluations of mineral prospects of the principal mineral belts of the Precambrian Shield (continuing).

3.2.2. Conduct detailed investigations and evaluations of mineral prospects of the acid plutonic rocks of the Precambrian Shield (continuing).

3.2.3 Conduct detailed investigations and evaluations of mineral prospects of basic and ultra-basic bodies in the Precambrian Shield (continuing).

3.2.4 Initiate a special project to explore uranium prospects (1395-97 for basic data).

3.2.5 Carry out investigations of known iron ore deposits to further assess their commercial potential (continuing).

3.2.6 Undertake investigation of mineral characteristics of cover rocks in the Eastern Region (continuing).

3.2.7 Undertake detailed examination of mineral prospects in Red Sea coast sediments (continuing).

3.2.8 Place special emphasis on producing inventories of non-metallic minerals of the Kingdom (continuing).

3.2.9 Study the economic potentials of evaporite deposits (continuing).

3.2.10 Assess the economic potentials of phosphorite resources (continuing).

3.2.11 Undertake further studies to develop the economic potentials of marble and other ornamental stone (continuing).

3.2.12 In conjunction with the Ministry of Agriculture and Water, establish a new program for identification of water resources for the mineral industry (1395-96 and continue).
3.2.13 Initiate detailed procedures for continuous review of economic potentials of the Kingdom's mineral resources as new findings are developed (continuing).
3.2.14 Carry out a range of special mineral and commodities studies (1395-1400).

3.3 Geophysics
3.3.1 Initiate a five-year project to compile and interpret a comprehensive gravity anomaly map of the Kingdom (1395-98 for basic data).
3.3.2 Develop and interpret aeromagnetic data for planning of geology and mineral exploration, and support the geologic quadrangle mapping program (continuing).
3.3.3 Establish an international Standard Seismic Station to monitor local and regional seismic disturbances (complete in 1398).
3.3.4 Survey selected areas for radioactive anomalies as part of the uranium exploration program and as an indirect tool for other exploration (continuing).
3.3.5 Conduct and interpret airborne electromagnetic surveys of sulfide-bearing zones (continuing).
3.3.6 Continue local geophysical studies to aid investigation of mineral prospects (continuing).
3.3.7 Establish a laboratory and associated field equipment for rock analysis (complete by 1398).
3.3.8 Conduct special surveys to yield new insights into delineation of surface structures and mineral environments (continuing).

3.4 Support Services
3.4.1 Expand, improve, or institute technical support programs as follows:

- ☆ Chemical analysis section (continuing).
- ☆ Topographic services, new section (complete establishment by 1398).
- ☆ EROS Study Center, new program (complete feasibility work by 1397).
- ☆ Photo laboratory (continuing).
- ☆ Petrological section (implement in 1396).
- ☆ Computer services (continuing).
- ☆ Electronics engineering, new section (implement by 1397).
- ☆ Drilling services (continuing).
- ☆ Geochronology analysis services (continuing).
- ☆ Underground exploration (continuing).
- ☆ Geochemical prospecting (continuing).

3.4.2 Expand and improve data service in the following:

- ☆ Data storage (continuing).
- ☆ Publications (continuing).
- ☆ Translation services (implement by 1396).

3.4.3 Improve transport and building capabilities in the following:

- ☆ Land transport (continuing).
- ☆ Air transport (continuing).
- ☆ Building maintenance (continuing).
- ☆ Temporary accommodations and new technical and administrative building.

3.5 Administration

3.5.1 Carry out reorganization of DGMR to improve the effectiveness of its operations.

3.5.2 Review mining legislation and recommend revisions of the Mining Code (1395-97).

3.5.3 Draft and promulgate new regulations to conduct mining operations in accordance with Article 4 of the Code (1395-97).

3.5.4 Establish a Mine Inspectorate to administer documents and procedures of the Mining Code (1395-96).

3.5.5 Create a facility where mining company representatives may obtain background information quickly and in concise form (1395-97).

3.5.6 Make a comprehensive review of DGMR's technical performance during the first plan period and improve administration accordingly (1394-96).

3.5.7 Establish a cost-accounting facility within DGMR (1395-97).

3.6 Training

3.6.1 Expand training programs for non-technical staff.

3.6.2 Continue internal training programs for development of Saudi professional and administrative personnel.

4. Finance

The estimated financial requirements of DGMR are as follows (SR millions):

	Budgeted 1394-95	*1395 -96*	*1396 -97*	*1397 -98*	*1398 -99*	*1399- 1400*	*Plan Total*
Recurrent	26.5	23.3	24.4	26.2	27.4	27.9	129.2
Project	81.2	128.0	131.5	134.1	130.6	124.0	648.2
Total	107.7	151.3	155.9	160.3	158.0	151.9	777.4

E. ELECTRICITY

1. Present Conditions

1.1 The economic growth of the Kingdom requires careful planning of the electricity system in order that the quantity and kind of services be appropriate to the Kingdom's needs and preferences. Recognition of these needs in the development plan for 1390-95 brought about the formation of the Electric Services Department. The projects completed or being conducted by the Department have improved the Kingdom's electricity service to the level indicated in Table IV-13. However, a higher level of capability and sophistication will be needed in the period ahead.

1.2 The present electrical system is heterogeneous; it serves residential and commercial consumers with various voltages and with both 50 and 60 Hz frequencies. Gradual standardization on 60 Hz has been decreed (Council of Ministers Resolution No. 425 dated 1/9/92) along with establishment of 127/220 volts as the standard distribution voltages. Consumers have had serious problems with the distribution of electricity; solutions for these problems lie in modifying the distribution systems and upgrading them to appropriate standards. Directives now specify that these changes will be made

1.3 By Council of Ministers Resolution No. 1020 dated 19-20/7/1394, consumer and industrial tariff rates of 7 and 5 halalahs respectively per kilowatt-hour (kWh) are to be the basis for operation; return on investment is stipulated at 7 to 10 percent.

1.4 It is clear that the electricity systems of the Kingdom must rapidly increase their installed capacity to meet the forecast demands of industrial and general economic expansion. Further, many ministries and agencies of the Kingdom have an interest or an active part in generation and consumption of electricity. The coordination required to cope with their diverse and changing intersts has to be built into the planning and management of the developing electricity systems.

1.5 Resources to develop electricity systems — particularly skilled and professional manpower — are in short supply in most parts of the world. The high demand for such men results in a high price for recruiting them. There is already a nucleus of operating and management capability in the electricity system operations of Jiddah, Riyadh, Dhahran, Aramco operations, and the Water Desalination Organization. The personnel and experience of these organizations must be drawn on heavily in executing the second national Development Plan.

Table IV-13
SUMMARY OF PRESENT ELECTRICITY SYSTEM
(Estimates as of Dhul-Qi'dah 1394)

	Region					
	East	*Central*	*West*	*Southwest*	*North*	*Total*
Transmission	----------		Limited interconnection		----------	
Number of power stations	48	58	84	43	28	261
50-60 Hz	----------		Gradual change		----------	
Consumer service	------	Varied levels of service dependent on local conditions. Standards for electricity company franchises and safety of electrical service prepared[a]; distribution standards not implemented			------	
System Integration	-----	Hospitals, industry, public facilities generate power separately; no interconnection.			-----	
Number of people served (millions)	0.7	0.6	0.7	0.1	0.1	2.2
Number of electricity system employees	1,260	770	1,050	370	370	3,820
Generating capacity (MW)	702	205	308	20	21	1,256
Demand (MW)	460	116	229	11	12	828

a Includes wiring standards, contractor competence, inspection services, and consumer relations and administration.

1.6 H.M. King Faisal issued an order that emphasized the importance of "distributing electricity throughout all villages and cities." To cope with this order and the growing demands of industry, a rapid increase in delivery of electricity to all populated areas of the Kingdom must be accomplished.

1.7 The results of a pre-feasibility analysis of the complementing capability of an integrated electricity system are summarized in Table IV-14, by region. Tables IV-15 and IV-16 show the advantages of proceeding on a plan for an integrated electricity system in attaining this capability; in addition to the evident economic and manpower advantages, and the greater number of people served by distribution from the extended transmission system, the integrated system will provide higher levels of system performance and reliability. Furthermore, flexibility in meeting industrial and domestic electricity loads is attained by standardizing and interconnecting the electricity systems (see Table IV-17). The Council of Ministers has initiated this integration by Resolution No. 168 dated 19.2.1395, providing for the establishment of a consolidated electric power company for the Eastern Region.

Table IV-14
ANALYSIS OF INTEGRATED SYSTEM IN 1400

Region	*Additional Capacity (MW)*	*Additional Transmission Line (km)*	*Additional Number of People Connected (millions)*
East	2,437	455	0.14
Central	165	935	0.30
West	562	450	0.07
Southwest	70	1,400	1.0
North	48	300	0.1
Total	3,282	3,540	1.61

Source: Central Planning Organization

Table IV-15
SELECTED COMPARISONS OF ELECTRICITY SYSTEMS, 1394 AND 1400

		1400	
	1394	*Integrated System*	*Non-integrated System*[a]
Technical			
Number of people served (millions)	2.2	3.8	2.7
Number of power stations	261	204	560
Generation capacity (MW)	1,256	4,538	5,335
Length of transmission line (km)	1,300	4,840	2,400
Manpower			
Employees operating power stations/networks	3,820	5,800	9,200
Employees constructing power stations/networks (annually)	1,000	3,400	4,100
Total number employed	4,820	9,200	13,300
Investment in entire system (SR millions)			
Generation	700	5,728	6,728
Transmission	600	1,000	700
Distribution	200	1,200	500
Total investment	1,500	7,928	7,928
Investment per person served (SR)	680	2,040	2,930

a An electricity system developed with no interconnection, but assuming the same demands, excluding those of the extra population served, as for the integrated system.

Table IV – 16
REVENUE AND COSTS OF INTEGRATED AND NON-INTEGRATED ELECTRICITY SYSTEMS, 1400

	Integrated System		*Non-integrated System*[a]	
	SR *millions*	Halalahs *per kWh*	SR *millions*	Halalahs *per kWh*
Revenue[b]	1,000	5.4	1,000	5.4
Costs				
Investments[c]				
Plant	745		875	
Transmission	130		90	
Distribution	156		65	
Subtotal	1,031	5.6	1,030	5.6
Maintenance	121		142	
Administration	114		81	
Manpower	101		161	
Subtotal	336	1.8	384	2.0
Fuel[b]	110	0.6	240	1.3
Total cost	1,477	8.0	1,654	9.0
Subsidy required	477	2.6	654	3.6

a An electricity system developed with no interconnection but assuming the same demands, load factors, kilowatt-hours, and revenues as for the integrated system. The additional revenue from the extra 1.1 million population served by the integrated system is assumed to be insignificant by 1400.

b Assuming prices at present policy levels.

c Assuming a 13% capital charge rate on the total investment (10% return on investment with 30-year lifetime).

Table IV-17
SUMMARY OF INTEGRATED ELECTRICITY SYSTEM
(Estimates for End of 1400)

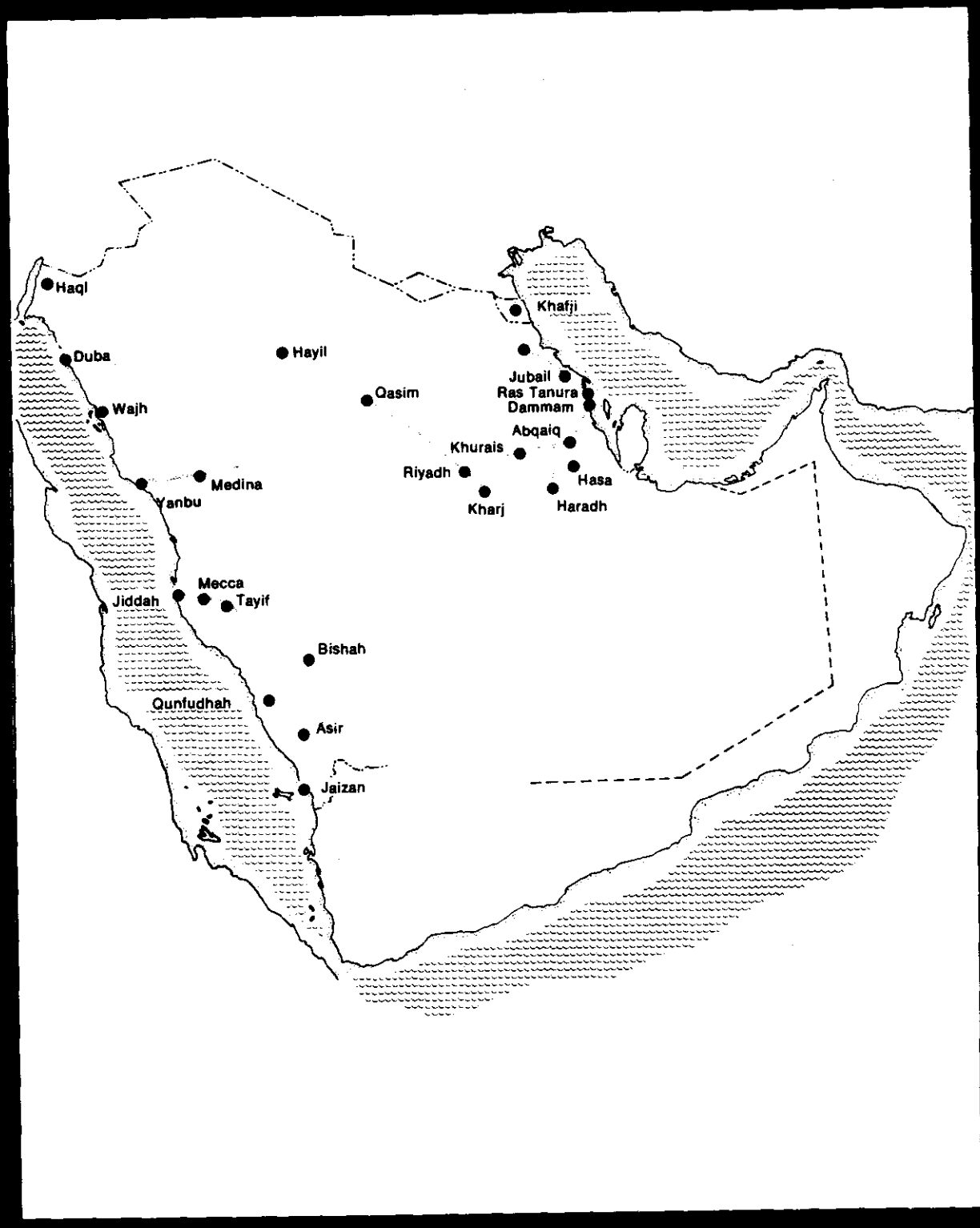
	Region					
	East	*Central*	*West*	*Southwest*	*North*	*Total*
Transmission	East and Central interconnected; Qasim-Riyadh interconnected.		Jiddah, Mecca, and Tayif interconnected; Medina and Yanbu' intergrated	Principal cities interconnected; interconnection with Tayif in West.	Local areas interconnected.	
Number of power stations	34	33	60	36	41	204
60 Hz	---	General, except in isolated areas ---				
Consumer service	---	Service levels brought to established national standards. ---				
	Qualified inspectors and administration developed. Distribution standards implemented both in equipment, and rural and urban planning.					
System integration	---	Hospitals, industry, public facilities generate only emergency power (with exception of isolated facilities). ---				
	Interconnected as noted above.					
Number of people served (millions)	0.9	0.9	0.8	1.0	0.2	3.8
Number of electricity system employees[a]	2,750	660	1,540	320	530	5,800
Generating capacity (MW)	3,139	370	870	90	69	4,538
Demand (MW)	2,100	362	781	76	45	3,364

2. Objectives And Policies

2.1 The basic objective for electricity development is to meet the electric power demands of communities, households, industry, and agriculture by means of an efficient and reliable system of power generation, transmission, and distribution. The following policies will be followed in achieving this objective.

2.2 Generating capacity will be installed to meet the above demands, and this capacity will be interconnected where feasible to achieve economy in operation and manpower, and to provide service to isolated communities. The location and possible interconnection of the main centers of generating capacity are illustrated in Figure IV-5.

a Power generation and transmission.


Haql
Duba
Wajh
Hayil
Qasim
Khafji
Jubail
Ras Tanura
Dammam
Abqaiq
Khurais
Riyadh
Hasa
Kharj
Haradh
Medina
Yanbu
Mecca
Jiddah
Tayif
Bishah
Qunfudhah
Asir
Jaizan

2.3 A high level of reliability will be developed in all new installations so that consumers — industrial, residential, and agricultural — may expect and receive high levels of service.

2.4 A high level of proficiency in electricity systems operation will be achieved, such that:

- ☆ The system generates its own standards and regulates its own performance.
- ☆ Consumer needs and preferences are fully understood and applied to system decisions.
- ☆ Review and improvement procedures create a high level of satisfaction with the system environmentally, economically, and operationally.
- ☆ Managerial, administrative, and skilled manpower are available in the levels and quantities needed.

2.5 The electricity systems will be developed and operated within the stipulations relating to tariff rates and returns on investment.

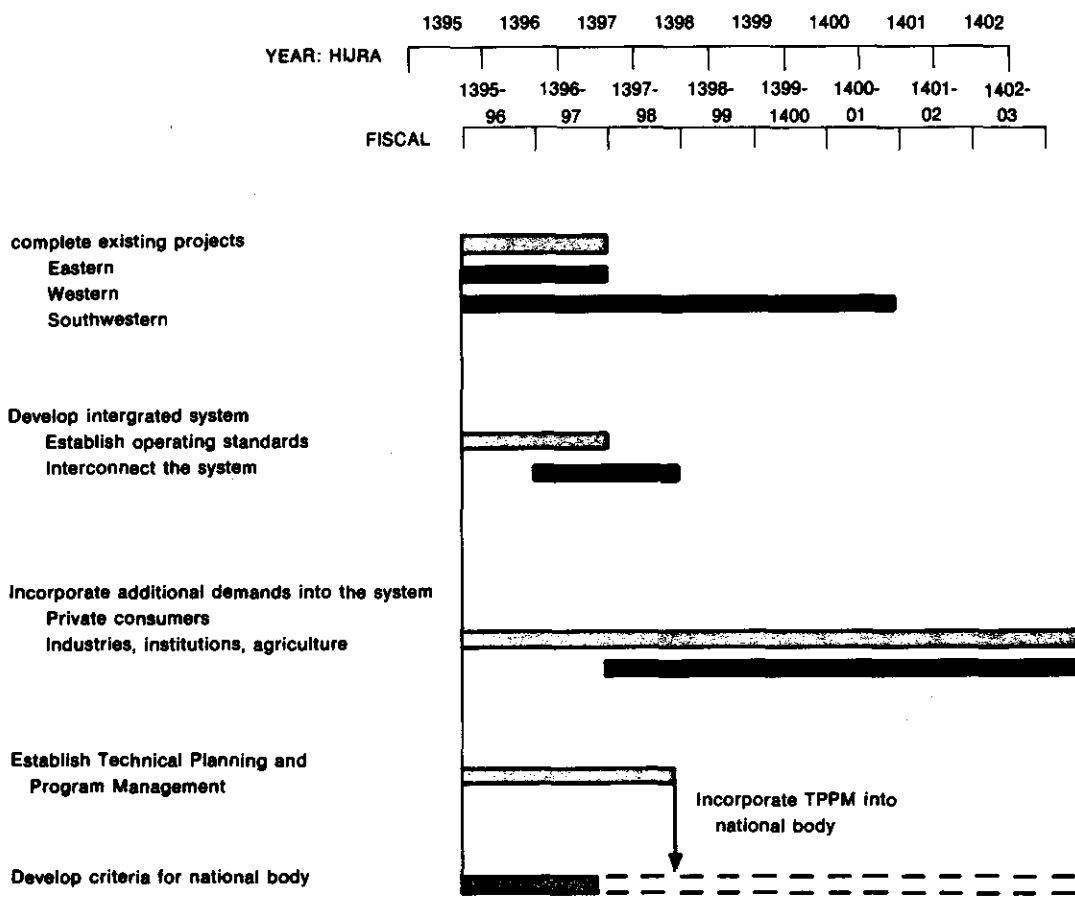
3. Programs and Projects

The programs and projects scheduled in Figure IV-6 and described below are directed toward flexible development of the most appropriate elements of the overall electricity system during the period 1395-1400. The programs include many elements of an integrated electricity system that have been introduced by the Electric Services Department. These are complemented by projects in interconnection and central generation. A technical planning and program management project is established to provide flexible adaptation of the system to consumer needs (industrial, residential, and rural) and to ensure progress in a balanced and timely fashion. Lastly, a program is established that will provide the Kingdom with a national body to assure stable, long-term regulation of electricity generation, transmission and distribution on one hand, and development and administration of the electricity system on the other hand

3.1 Existing Projects

Implement the following planned projects of the Electric Services Department and of the Water Desalination Organization:

- ☆ Jaizan area
- ☆ ʾAsir area
- ☆ al-Bahah area
- ☆ al-Kharj region
- ☆ Qasim area
- ☆ al-Hasa, 33 villages


1395
1396
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YEAR: HIJRA
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1396-97
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1398-99
1399-1400
1400-01
1401-02
1402-03
FISCAL
complete existing projects
Eastern
Western
Southwestern
Develop intergrated system
Establish operating standards
Interconnect the system
Incorporate additional demands into the system
Private consumers
Industries, institutions, agriculture
Establish Technical Planning and Program Management
Incorporate TPPM into national body
Develop criteria for national body

- ☆ Additional water/electricity station at Jiddah of 250 MW capacity
- ☆ 24 towns in the first and second stages of the rural electrification program
- ☆ 40 villages along the pilgrims' routes under the Quick program
- ☆ Connection of villages to nearby existing utilities

3.2 Integration of the System

3.2.1 Operating Standards

3.2.1.1 Initate within the first six months of the plan period mechanisms to obtain approval for standards to be prepared, and establish an organization and funding to implement these standards.

3.2.1.2 In coordination with government agencies and municipalities, conduct studies leading to establishment of standards for design, land use, and access for distribution equipment of the electricity systems. These standards, when developed and approved, should be adopted for municipal planning of electricity systems.

3.2.1.3 Conduct studies leading to establishment of equipment and appliance standards.

3.2.2 Interconnection

Study how to implement an interconnected and integrated generation and transmission system to provide assured supply for the capital city and other main centers, reliability and flexibility for industrial development, and electricity service for the largest number of cities and villages.

3.2.3 Implementation

Subject to the results of the above study, provide the following interconnection links:

	Kilometers
☆ Jubail – Abqaiq	170
☆ ᵓUthmaniyah – Khurais	170
☆ Khurais – Riyadh	170
☆ Riyadh – Qasim	400
☆ Riyadh – al-Kharj	100
☆ Jiddah – Mecca – Tayif	150
☆ Tayif – Baljarshi – Abha – Jaizan	700
☆ Yanbu – Medina – al-Hanakiyah	300

3.2.4 Number of Power Stations

As a result of the above interconnections, reduce the number of power stations from the present 261 to 204, employing a mix of large-size control generating plants.

3.3 Additional Demands

3.3.1 Integrate the following new industrial, institutional, and agricultural demands into the system:

- ☆ Petromin industrial development at Jubail
- ☆ Other new industrial facilities
- ☆ Hospitals
- ☆ Public facilities
- ☆ Agricultural and water projects.

3.3.2 Make electricity available for an additional 1.6 million people by extending or modifying present Electric Services Department plans as follows:

- ☆ Franchise new electricity distribution companies in newly developing areas.
- ☆ Adjust the franchises of existing companies for interconnection with the integrated system.
- ☆ Provide information and development plans for the formation of distributing companies by groups, towns, cities.
- ☆ Provide plans for financial aid to new and enlarged distributing companies.

3.4 Technical Planning and Program Management

3.4.1 Expand the capability of the Electric Services Department by establishing a technical planning and program management group. This group will require staff with the experience and proven competence to conduct the overall development of the integrated electrical power system. It will be initially staffed largely by non-Saudi contract personnel and will be under the control of the Ministry of Commerce and Industry but with strong liaison with the CPO, to assure coordination with all the concerned agencies. The planning and management staff will study, plan, monitor, and control relevant projects and make recommendations that will ensure that the elements of the integrated electricity system plan are developed in an appropriate and timely manner. The staff must be capable of recommending system changes to meet changes from the forecast rates of progress, changes in emphasis, and unforeseen opportunities or adverse events. Such circumstances may arise in industrial projects, water desalination projects, or oil production projects. The staff developed in the course of the tasks identified below could become an element of the national body (described later) established to regulate, develop, and administer the overall electricity system of the Kingdom.

3.4.2 The program management staff will carry out the following tasks.

3.4.2.1 Develop a program document for the entire electricity system integration plan covering:

- ☆ Consumer electricity demand

- ☆ Industrial and mining demand
- ☆ Power generation by the Water Desalination Organization
- ☆ Aramco and other oil demand
- ☆ Hospitals and other public facilities
- ☆ Rural electrification.

Generation, transmission, and distribution aspects should be included in this document.
3.4.2.2 Make periodic reassessment of the priorities of programs within the integrated electricity system program. Time schedules, probability of successful completion, and value contribution of each project will be taken into account in project evaluation.
3.4.2.3 Assess periodically the availability of special skills and the manpower training needs. Develop alternative sources of manpower and take the administrative steps needed to assure satisfactory results from individual projects. Manpower skills and availability are judged to be of sufficient importance to the integrated electricity system plan that the program management staff should analyze in detail manpower recruitment, allocation, and training capability to enable it to direct and complement such planning by all participants in electricity system development.
3.4.2.4 Carry out other studies, including:

- ☆ Designs
- ☆ Trade-offs
- ☆ Standardization
- ☆ Reliability
- ☆ Fuels
- ☆ Demand
- ☆ Research and development needs.

3.4.2.5 Periodically review the financing for all projects with the intent of strengthening the integrated electricity system projects.
3.4.2.6 Provide communications about the progress of all aspects of the integrated electricity system to all ministries and agencies.
3.4.2.7 Similarly, provide liaison with and information for private power companies.
3.4.2.8 As the need arises, develop power scheduling agencies that will serve the needs of both public and privately-owned agencies for allocation of blocks of generated power and operation of the associated transmission.

3.5 Institutional Development

3.5.1 Under the Ministry of Commerce and Industry, conduct detailed studies of a technical and administrative nature as described below to aid the Council of Ministers in establishing the form, charter, and organization of a national body that will regulate,

develop, and administer the overall electricity system of the Kingdom. These studies will require a period of six months to one year. Should a decree be issued by the end of the first year of the Plan, a staff and operating plan for the body could be initiated in the second year. The first operation of the national body would be the responsible development of the integrated electricity system plan.

3.5.2 Conduct the following technical studies so as to establish a technical base for the national body:

- ☆ Develop a preliminary 15-year electricity plan.
- ☆ Review regulatory aspects to identify standards, regulatory vehicles and practices, and statistical-analysis functions.
- ☆ Produce an outline plan for system development with the following elements:
  - Generation
  - Transmission
  - Distribution
  - Technical leadership
  - Manpower development
  - System innovation studies
  - Research and development requirements.
- ☆ Review and document system operation requirements regarding:
  - Interconnection
  - Load sharing and distribution
  - Operational coordination in interconnected network.
- ☆ Analyze the economics of power systems.
- ☆ Develop an electricity system planning model to provide evaluations for electricity system planning decisions. In addition to describing the distribution of demand, the model should be focused on decisions relating to:
  - Plant location and plant size.
  - Fuel economics as it affects plant and transmission.
  - Interconnection capacities.

3.5.3 Conduct the following administrative studies so as to establish alternatives for the administration of the Kingdom's electricity system:

- ☆ Forms of ownership and operation.
- ☆ Authorities and responsibilities.
- ☆ Social values associated with various outcomes related to electricity systems.
- ☆ Leadership functions to be ascribed to a national body.
- ☆ Possible future alternatives for electricity system organization.

☆ Interfaces with ministries and industry.
☆ Manpower requirements for a national body.

3.6 Training

As part of its technical planning and program management functions, the group established for these purposes will:

3.6.1 Establish at appropriate levels and timing on-the-job training programs in management, professional, technical, clerical, and specific skills categories.

3.6.2 Assure that the training focuses on direct improvement of the electricity system and results in practical operational capability.

4. Finance

Forecasts of the financial requirements for implementation of the electricity plan are summarized below. These forecasts are necessarily broad approximations but nevertheless indicate the magnitude of the required financing (SR millions).

4.1 Electric Services Department

	Budgeted 1394-95	*1395 -96*	*1396 -97*	*1397 -98*	*1398 -99*	*1399- 1400*	*Plan Total*
Recurrent	6.5	11	16	22	28	33	110
Project	73.6	340	455	410	380	285	1,870
Total	80.1	351	471	432	408	318	1,980

4.2 Subsidy

Preliminary figures based on the existing provisions for subsidy are as follows:

	Budgeted 1394-95	*1395 -96*	*1396 -97*	*1397 -98*	*1398 -99*	*1399- 1400*	*Plan Total*
Total	13.5	100	120	150	180	220	770

4.3 Investment

The total investment in the electric power generating system is estimated (see earlier table) at SR 6,428 million. After adjustments for the projects of the Electric Services Department and the generation capacity of the Water Desalination Organization, the net investment requirements are as follows:

1395 -96	*1396 -97*	*1397 -98*	*1398 -99*	*1399- 1400*	*Plan Total*
200	400	600	900	1,390	3,490

F. MANUFACTURING

1. Present Conditions

1.1 As stated in the Development Plan 1390, the main objective for the manufacturing sector in 1390-95 was to realize — as rapidly as organizational, manpower, technical, and financial constraints permitted — the Kingdom's high potential for industrial development, thereby making a major contribution to the growth and diversification of the economy. Stated or implied were a range of policies to be followed to achieve the targets for industry:

- ☆ Expansion of crude oil refining in accordance with world and domestic demand.
- ☆ Participation with foreign enterprises in the development of the petrochemical, fertilizer, and basic metal-processing industries, with special focus on utilizing the gas resources of the Kingdom.
- ☆ Reliance on private enterprise for the development of manufacturing activities.
- ☆ Support of industrial development by a wide range of government activities, including feasibility studies, industrial estates, and an Industrial Bank.
- ☆ Manpower to be imported as required to further industrialization, but training programs for Saudis to be accelerated.
- ☆ Some dispersion of industry among the different regions of the country.
- ☆ Utilization of existing institutional structure to implement these policies.

1.2 The average annual rate of growth in petroleum refining estimated for the period 1390-95 is 4.1 percent, compared with a target rate of growth of 9.1 percent. The growth rate estimated for other manufacturing, as defined in the national accounts[a], was 11.4 percent, while the targeted rate was 14 percent. This reflects a higher rate of growth than was expected for manufacturing not based on hydrocarbons — in particular, cement manufacturing estimated to have grown at 16.7 percent annually — and a lower rate of growth in hydrocarbon-based manufacturing as major projects in this sub-sector, other than SAFCO, have not yet been implemented.

1.3 While growth in manufacturing output has fallen below expectations, with the major exception of cement production, much progress has been made in mobilizing for major future expansion, including many new industries and output and employment far

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a Sub-sectors of Manufacturing in the national accounts are Petroleum Refining and Other Manufacturing. Subsectors used in planning are Hydrocarbon-based Industries, and Industries Not Based on Hydrocarbons.

exceeding present levels. Industrial infrastructure has been improved by the construction of industrial estates, plans are well advanced for the construction of extensive gas collection and treatment facilities under the management of Aramco, an industrial complex at Jubail is being planned, the Industrial Development Fund has started lending to industry, and several other actions have been taken to strengthen the institutional mechanisms supporting the growth of manufacturing in the Kingdom.

1.4 Employment in the manufacturing sector has grown from 36,100 in 1390 to 46,500 in 1395. Most of this employment is in manufacturing not based on hydrocarbons, which is less capital-intensive than hydrocarbon-based industry.

1.5 Private enterprise — both Saudi and foreign — is occupying an important role in the industrialization program of the Kingdom. Of 261 licenses for new plants or expansions granted in the years 1390-94, 79 involved capital participation by foreign investors while 182 were completely funded by Saudi interests.

1.6 Industrial Climate

1.6.1 The institutional structure for mobilizing and guiding the industrialization program of the Kingdom has evolved in orderly stages, with the Council of Ministers as the overall policy-making authority. The Ministry of Commerce and Industry is the principal agency for general administration of industrial policies and licensing of new manufacturing activities. The Industrial Studies and Development Center serves as a special agency charged with continuing studies of domestic industrial opportunities in manufacturing not based on hydrocarbons, and — together with the Ministry of Commerce and Industry — administers the industrial estate program. Petromin is responsible for major ventures in manufacturing based on hydrocarbon resources. Specific actions by these organizations included the following:

- ☆ A statement of Saudi Arabian Industrial Policy was issued by resolution of the Council of Ministers on 1 Muharram, 1394, setting forth the many incentives and policies (see Figure IV-7) designed to promote industrialization and the role of the private sector therein.
- ☆ A comprehensive Guide for Industrial Investments in Saudi Arabia was issued by the Industrial Studies and Development Center to inform interested organizations about the industrialization program.
- ☆ Additional policy decisions were made by the Ministry of Commerce and Industry concerning the Protection of Domestic Industries and Encouragement of Foreign-Capital Participation.
- ☆ Reviews are underway of the adequacy of present legal codes for industrial and commercial operations, tariff and subsidy policies, other incentives, and the general industrial climate of the Kingdom for a vigorous development program.

- ☆ The capabilities and staff of existing government offices were expanded for implementing industrial projects.
- ☆ Plans are near completion for the establishment of the Industrial Development Corporation, with responsibility for participating in and implementing major private-sector projects in non-oil manufacturing.
- ☆ A major reorganization of the Ministry of Commerce and Industry was effected with establishment of the Industry and Electricity Division to deal only with industrial and power activities within the Kingdom.
- ☆ It has been proposed that the Chambers of Commerce be organized into separate units representing industry and commerce, respectively. This action would strengthen the role of Saudi industrialists in the planning and implementation of industrial development.
- ☆ The Industrial Studies and Development Center has established itself as a viable and effective organization for the identification of potential manufacturing opportunities and for assisting existing enterprises and prospective entrepreneurs in further development of industries not based on hydrocarbons.
- ☆ The Saudi Industrial Development Fund was launched in 1394 and is already assuming an important role in providing capital loans to industrial ventures. As of Safar 1395, the Fund had received 101 applications of which 11 have been processed and approved. The loans committed for the approved projects total SR 86 million.
- ☆ A resolution was promulgated by the Council of Ministers enabling small investors to own shares in joint-stock companies. This decision will be administered by the General Investment Fund.
- ☆ Planning is underway for a major industrial estate in the Jubail area — to develop the infrastructure, community facilities, and land-use patterns for a manufacturing complex based on hydrocarbons — including oil refining, petrochemical production, steel and aluminum mills, and fertilizer plants.
- ☆ The industrial estates at Jiddah, Riyadh, and Dammam have met with excellent acceptance by industry, as shown by the following data for 1394:

	Total Lots Available	*Lots Leased*	*Factories Built or Being Built*
Riyadh	114	106	29
Jiddah	184	71	11
Dammam	82	32	7
Total	380	209	47

Studies are underway for expansion of these estates and for similar programs in new locations. These improved industrial sites available at nominal rents to industry have been an important factor in attracting industrial investors to the Kingdom.

Figure IV-7
SUMMARY OF SAUDI ARABIA'S INDUSTRIAL POLICY (1394)

In order to achieve the maximum economic and social benefits to the citizens of the Kingdom of Saudi Arabia from industrial development, the principles of industrial development policy shall be as follows:

☆ To achieve a diversified economy, the Government will adopt plans that will increase national income, lessen the impact of external economic disruptions, and open up new opportunities for the increasing technical capabilities and talents of the Saudi people.

☆ The Government recognizes that the goals of industrial development can be realized most effectively if private enterprise bears the primary responsibility for industrial projects.

☆ The Government will provide encouragement and financial incentives to industrial investors to enable well-managed companies to realize reasonable returns from operations. Such incentives may include the following measures:

- Equity capital and loans.
- Venture organization assistance.
- Feasibility studies.
- Operational assistance.
- Tariff exemptions on imported materials and equipment.
- Tax incentives.
- Procurement preferences.
- Tariff protection from imported products.
- Industrial estate sites.
- Training subsidies for Saudi manpower.
- Export assistance.

☆ The Government welcomes foreign capital and skills and invites them to contribute to industrial development in collaboration with Saudi investors.

1.6.2. Although the above accomplishments have contributed greatly to establishing a favorable industrial climate within the Kingdom, further actions will have to be taken during the next five years to alleviate constraints and problems such as the following:

☆ Concentration of present manufacturing employment in small enterprises which lack the productivity and management skills of larger operations.

☆ The need for intensified manpower recruitment and development programs to support expanding labor requirements of future major projects.

☆ The concurrent need for significant expansions of industrial infrastructure and community facilities to support industrialization plans.

☆ Limited progress made to date in assisting economic development of the northern, southwestern, and other less developed areas of the Kingdom.

☆ Continuing difficulties encountered in certain government and private-sector procedures, such as handling of imports, licensing procedures, financing of working capital, fiscal and legal frameworks, and recruitment of foreign personnel.

☆ The rapidly emerging need for improved coordination of all sectoral programs —

industrial and other — to ensure orderly procurement and utilization of such critical resources as materials, manpower, machinery, construction capacity, physical infrastructure, community facilities, and utilities.

1.7 Hydrocarbon-based Industries — Petromin

Specific developments within the hydrocarbon-based manufacturing sector during the period 1390-95 included the following:

- ☆ Output of the Ras Tanura refinery increased from 156 million barrels in 1969 to over 224 million barrels in 1974, whereas output from the Jiddah refinery declined from 2.6 million to 1.1 million barrels per year over the same period. A new refinery at Riyadh with a capacity of 15,000 barrels per day was brought on-stream in 1394.
- ☆ Asphalt production more than doubled during this period, to 6,700 barrels per day.
- ☆ The Jiddah lubricating-oil blending plant was completed in 1392 and is now producing 75,000 barrels annually.
- ☆ Fertilizer production by the new Saudi Arabian Fertilizer Company commenced in 1391 and is approaching its capacity of 300,000 tons of urea annually.
- ☆ Plans are developed for the gathering, treatment, and full utilization of the 3,600 million cubic feet per day of natural gas and natural gas liquids produced in association with oil production and which is now flared.
- ☆ Numerous new venture proposals for hydrocarbon-based industries were reviewed and evaluated.
- ☆ Steel reinforcing bar production at the Jiddah rolling mill reached about 22,000 tons annually as two-shift operations commenced in late 1394.

1.8 Industries Not Based on Hydrocarbons — Ministry of Commerce and Industry/Industrial Studies and Development Center.

1.8.1 Major developments within industries not based on hydrocarbon included the following:

- ☆ Cement production, the second largest industry in the Kingdom, expanded from 575,000 tons in 1389 to over 1,150,000 tons in 1394. Capacity, based on 330 operating days per year, is now 1.5 million tons. Plans are underway to increase annual capacity during the next five years to 10 million tons in support of major construction programs.
- ☆ Several new industries were founded and others expanded during the first plan period to the point that there are now substantial operations in:

- Basic construction materials and products
- Furniture
- Glass containers
- Food processing
- Beverages
- Textiles and apparel
- Paper products
- Plastic products
- Industrial gases
- Paints
- Household detergents
- Printing and publishing.

☆ Studies, engineering design, and site investigations were completed for three integrated grain silo, flour-milling, and feed-milling complexes at Jiddah, Riyadh, and Dammam and bids for construction were received. These complexes have a storage capacity for wheat equivalent to five or six months consumption. A training program for Saudi personnel was also initiated with 15 technical institute graduates taking educational and in-plant training in the United States. In addition, studies of small silos for storing locally produced wheat and other grains are being made in consultation with the Ministry of Agriculture and Water.

1.8.2 New licenses issued by the Ministry of Commerce and Industry for industries not based on hydrocarbons are shown below:

Industry[a]	*As of 1389*	*1390-94*
Foods and beverages	26	39
Textiles and clothing	7	5
Turning, carpentry, and furniture	39	61
Paper products and printing	18	28
Leather, rubbers, and chemicals	15	46
Building materials	44	14
Metal working	12	17
Shipbuilding and repair	3	-
Other	12	15
Total	176	261

a Some licensed plants are not operating.

The relatively small increase in the number of plants reflects the emphasis being placed on expanding the capacities and productivity of existing operations as well as focusing new ventures on larger-scale operations.

2. Objectives and Policies

2.1 The basic long-term goal of manufacturing development is to diversify the industrial base of the Kingdom so that it will realize greater economic self-sufficiency, cost advantages from domestic manufacturing, and protection from external disruptions. In the shorter term — that is, during the period of the second Plan — development effort will be focused mainly on (a) the hydrocarbon-based and other industries in which the Kingdom has comparative economic advantage, (b) industries that are essential to national security and well being, and (c) appropriate regional manufacturing activities that will increase the employment opportunities and real incomes of a growing proportion of the Saudi population.

2.2 To expand manufacturing, but in particular to assure its diversification, the major government agencies concerned will follow policies of cooperation both within the Government and between the public and private sectors. However, Petromin will retain primary responsibility for the development of industries based on hydrocarbons, while the Ministry of Commerce and Industry and the Industrial Studies and Development Center will encourage and support the growth and diversification of other manufacturing.

2.3 Major developments in 1395-1400 planned for industry based on hydrocarbons include:

- ☆ New refineries and expansions to existing ones to meet both domestic and export demands for petroleum products.
- ☆ Construction of gas gathering and treatment facilities in the Eastern Region, and design of petroleum and gas pipelines to the Central and Western regions.
- ☆ Design and construction of major new plants to manufacture petrochemicals, fertilizers, and steel and aluminum intermediate and finished products.

2.4 Major planned developments in industries not based on hydrocarbons include:

- ☆ Ten-fold expansion of cement production, to meet the Kingdom's construction requirements and to provide some surplus for export.
- ☆ Plants to supply agricultural inputs (such as for irrigation equipment) and to process agricultural outputs (including flour milling and sugar refining).
- ☆ New and expanded plants to produce a wide variety of products, including construction materials, household and commercial equipment, and inputs to the industries based on hydrocarbons.

2.5 The Ministry of Commerce and Industry and the Industrial Studies and Development Center will continue and develop policies for enhancing the participation of private enterprise within the guidelines of the Industrial Policy Statement of 1394. Among these policies is the continuous review improvement, and dissemination of

information on many aspects of the Kingdom's industrial climate, including:

- ☆ General incentives and specific forms of assistance available to private investors.
- ☆ Development of infrastructure to support industrialization.
- ☆ Legal, fiscal, and other institutional opportunities and constraints.
- ☆ Coordination and encouragement of manpower development programs to upgrade the skills of Saudi nationals while recognizing the significance of foreign manpower in assisting the Kingdom at its present stage of development.

2.6 The Industrial Studies and Development Center will expand its capabilities in research directly applicable to development of industries not based on hydrocarbons, with particular emphasis on feasibility studies for new ventures and analyses of labor requirements.

2.7 To assure that the constraints imposed on industry are minimal and in harmony with the long-term goal of industrial diversification, the Central Planning Organization will occupy a coordinating role for the many agencies whose specific responsibilities relate to industrial development. Also, because of the long lead-times required to develop many manufacturing enterprises to their full potential, the Central Planning Organization will encourage and coordinate plans for industrial development beyond the 1395-1400 period.

3. Programs and Projects

3.1 Industrial Climate

3.1.1 Continue the ongoing reviews by the Ministry of Commerce and Industry and the Industrial Studies and Development Center of present incentives to Saudi and foreign private enterprise to ensure that they are comparable to international incentives for such investments; include:

- ☆ Taxation policies
- ☆ Tariffs and subsidies
- ☆ Performance stipulations
- ☆ Capital transfers by foreign interests
- ☆ Investment risk insurance
- ☆ Tendering and contracting practices
- ☆ Loan and line-of-credit support
- ☆ Royalty payment policies
- ☆ Project approval practices
- ☆ Resource-mobilization assistance
- ☆ Domestic and export marketing assistance
- ☆ Labor policies.

3.1.1.1 In accord with the findings, refine and modify by 1397 the Industrial Policy Statement, the Guide for Industrial Investments, and the provisions for "Protection of Domestic Industries and Encouragement of Foreign Capital Participation."

3.1.1.2 Also in accord with the findings, continue to strengthen institutional assistance in support of present incentives, and implement any new measures adopted to enhance the industrial climate.

3.1.2 Authorization and Mobilization of New Ventures.

3.1.2.1 Complete implementation in 1395 of the Industry Department within the Ministry of Commerce and Industry as the focal point for administering the industrial policy of the Kingdom. Sections of the Department include:

- ☆ An Industrial Information Section to provide current information for internal use of the Ministry about the industrialization program and present industrial activity.
- ☆ A Joint-Venture Promotion Section to assist and develop relationships with foreign interests.
- ☆ Project Evaluation and Project Follow-up Sections to guide the establishment of industrial development activities and to follow-up their progress.
- ☆ An Industrial Subsidies Section to administer operational and training subsidies extended to industry within the framework of the Industrial Policy Statement.
- ☆ An Engineering Section to provide internal technical support on appropriate matters within the Industry Department.

3.1.2.2. Implement under ISDC auspices the plans for industrial exhibits for Jiddah, Riyadh, and Dammam — and mobile exhibits for other regions — to assist promotion of domestic manufactures (1395-98).

3.1.2.3. Continue to strengthen Petromin in promoting, organizing and assisting private enterprise in implementing new ventures in the hydrocarbon-based industries:

- ☆ Expedite implementation of the new Project Evaluation Department and expand this group by 1397 to assume full reponsibility for master planning of hydrocarbon-based industrial development.
- ☆ Expedite development of the new Project Coordination Department to become fully operational by 1397 as a control office over project implementation progress.
- ☆ Continue to strengthen the Technical Coordination Department to accommodate the increasing number of venture proposals and studies related thereto (1396).

3.1.2.4 Expedite plans for bringing the new Industrial Development Corporation into full-scale operation by 1397. This Corporation will participate in or establish selected

major industries not based on hydrocarbons. Its activities will be focused particularly on the following types of ventures:

- ☆ Essential projects that do not attract sufficient participation by private enterprise to start up.
- ☆ Selected ventures with foreign partners that require major government policy decisions and guidance in the negotiation and implementation stages.
- ☆ Projects developed through government-to-government negotiations and/or involving foreign governments in implementation.
- ☆ Projects directed to industrial development of less developed areas.

3.1.2.5 Expand the capabilities of the Industrial Studies and Development Center throughout the second development plan period in the following fields:

- ☆ Economic research in support of the general industrial development of the Kingdom in non-oil industries.
- ☆ Assistance to private interests and government offices on feasibility studies for new ventures and expansions.
- ☆ Analysis of labor requirements of present and projected industrial activity, non-oil industries, and formulation of recommendations to the responsible government offices for meeting these needs.

3.1.3 Capital Support

3.1.3.1 Expand the capacity of the Saudi Industrial Development Fund to provide capital loans to new ventures of private enterprise:

- ☆ Continue to refine operational procedures and policies for evaluation and approval of requests for financial assistance.
- ☆ Develop the necessary general economic information base for assisting venture organizations in formulating capital plans for new undertakings.
- ☆ Proceed with development of relationships with other government and private organizations — including international bodies — essential to coordination of SIDF functions with the world financial community.

3.1.3.2. Through the Saudi Arabian Monetary Agency, encourage expansion of equity and working capital for industrial enterprise by commercial banks and the several public and private investment funds now in being within Saudi Arabia and the Arab region.

3.1.3.3 Implement provisions of the Council of Minister's resolution of 2.4.1394, to be administered by the General Investment Fund, that enable small Saudi investors to own shares in joint-stock industrial companies (1395).

3.1.3.4 Determine, by 1396, the feasibility of creating a capital market within the

Kingdom to facilitate access by private investors to equity financing of industrial enterprise.

3.1.4 Industrial Estates and Infrastructure.

3.1.4.1 Under the direction of the Ministry of Commerce and Industry and the Industrial Studies and Development Center, extend the industrial estates program of the Kingdom to provide fully-developed industrial sites at nominal rents:

- ☆ Implement operations of the technical service workshops at the established Jiddah, Riyadh, and Dammam estates, and execute the second and third phases of expansions as now scheduled.
- ☆ Evaluate potential new industrial areas at Jiddah, Riyadh, and Dammam, and complete the plans for new estates at Mecca, Hofuf, and Qasim (1397).
- ☆ Study the feasibility of establishing industrial estates in other areas of the Kingdom (1397).

3.1.4.2 Under the direction of the Ministerial Planning Committee, complete the planning studies now underway for development of a major industrial estate complex for new hydrocarbon-based industries at Jubail. Implement construction starting in 1395.

3.1.5 Financial and Legal Frameworks.

3.1.5.1 Complete the programs and projects described later under "Commerce" for the overall development of the financial institutions of the Kingdom in support of vigorous and efficient commerce and industry.

3.1.5.2 Encourage the rapid expansion of commercial financial services directed particularly to the needs of industrial enterprise:

- ☆ Equity and working capital
- ☆ Line of credit policies and charges
- ☆ Mortgage arrangements
- ☆ Leasing of capital goods and facilities
- ☆ Branch services
- ☆ Financial advisory services
- ☆ Inventory financing
- ☆ Payroll accommodation
- ☆ Tax preparation
- ☆ Foreign money transfers
- ☆ Bank communications and records
- ☆ International banking arrangements.

3.1.5.3 By 1398 implement Ministry of Commerce and Industry plans for improvement of the commercial codes of the Kingdom, the adjudication of business disputes, and the clarification of legal matters.

3.1.5.4 Implement in 1395 a major review of tender laws to ensure that the operational problems of manufacturers are recognized in such stipulations; consider, for example, inflationary trends in costs, unforeseeable production shutdowns, and changes in tender specifications after bid approval.

3.1.5.5 By 1396 extend the Saudi legal framework to cover such transactions as mortgage, credit, licensing, royalty and insurance agreements. Many aspects of industrial business operation are not encompassed by the existing legal system.

3.1.5.6 By 1396 complete the review of licensing laws and procedures for new industrial ventures and expansions.

3.1.6 Manpower Mobilization and Training

3.1.6.1 Cooperate throughout the plan period with all manpower development agencies of the Kingdom in providing information concerning present and projected industrial manpower requirements, and in planning for recruitment and training of such manpower.

3.1.6.2 Implement plans of all agencies concerned with the industrial sector for their internal staffing and training, including training programs abroad for management and professional personnel.

3.1.6.3 Cooperate with the Ministry of Labor and other key agencies in implementing vocational training programs, including in-plant training requirements and subsidies.

3.1.6.4 Support all initiatives directed to coordinating manpower mobilization and utilization by the many sectors involved in the development plan of the Kingdom.

3.1.7 Long-Term Planning.

3.1.7.1 Proceed with projections of industrial development, by major industries, over the decade beyond the second Development Plan, in recognition of the lead-times required by many industries to optimize their growth potentials (1395).

3.1.7.2 Complete the planned reviews of potential constraints to industrial programs and proceed with any necessary action to alleviate these constraints (1395 and continuing).

3.1.7.3 Develop a system in 1395, and make it operational, for assigning priorities to major industrial development programs in case critical shortages arise in resources needed to implement all programs as now scheduled.

3.2 Hydrocarbon-Based Industries — Petromin

3.2.1 General Development Program.

3.2.1.1 Subject to final feasibility studies, implement a major program for expanding the use of petroleum and gas as feedstocks and energy, as summarized in Table IV-18. Crude and liquid gas pipelines will be constructed to the Western Region for export and for development of oil-based industries on the Red Sea coast. Down-stream linkages to additional new industries are included in longer range plans.

3.2.1.2 Subject to further study, schedule the design and construction of projects to be

initiated in the second development plan period as shown in Table IV-19.

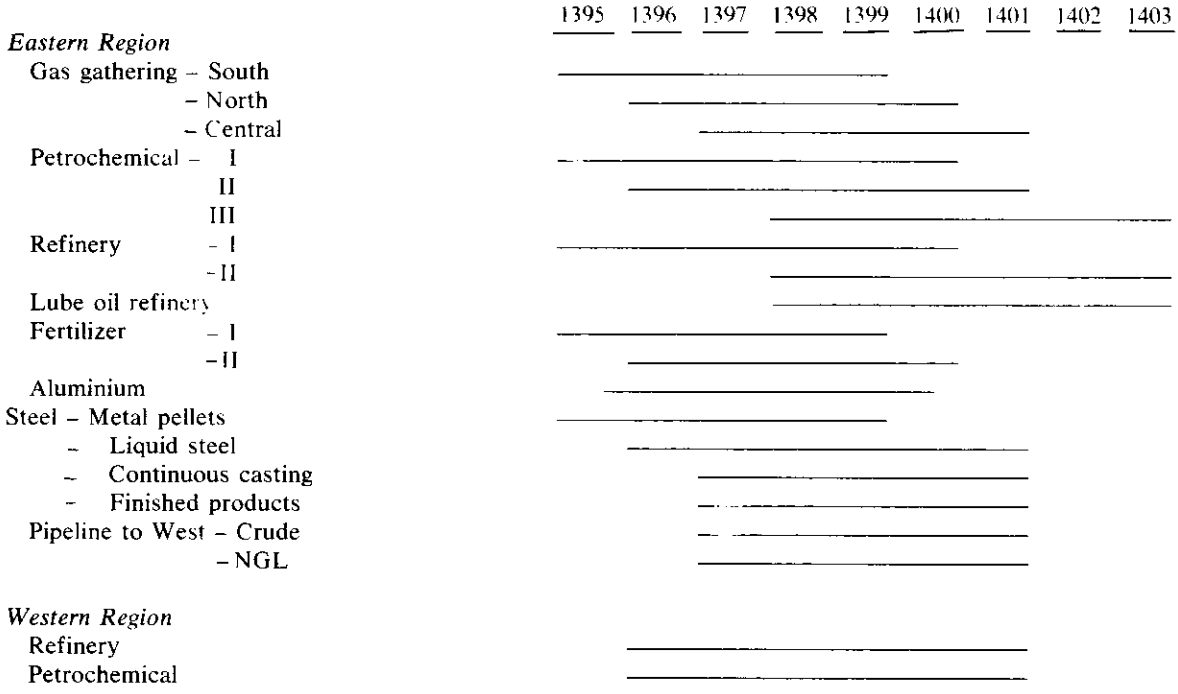
3.2.1.3 Maintain flexibility in scheduling implementation of the specific projects of this program so as to coordinate start-ups with construction lead times for required infrastructure, with availability and mobilization of other resources, and with changes in world market conditions affecting the selected industries.

Table IV – 18
MAJOR DEVELOPMENT PROGRAMS FOR HYDROCARBON-BASED INDUSTRIES, 1395 – 1405

Programs and Projects	*Investment (SR millions)*	*Capacity*	*Peak Employment*
Eastern Region			
Gas gathering and treatment	16,000	1,600 million cu. ft/day	2,300
Petrochemical complexes (4, of which 3 to be initiated, 1395-1400)	9,000	2.0 million tons/year equivalent ethylene	6,800
Export refineries (2)	4,600	500 thousand bbls/day	1,700
Lube oil refinery	2,040	107 thousand bbls/day[a]	550
Fertilizer plants (4, of which 2 to be initiated, 1395-1400)	1,400	2 million tons/year	2,000
Aluminum plant	1,300	210 thousand tons/year	1,900
Steel plant	5,500	3.5 million tons/year	8,600
Subtotal	39,840		23,850
Western Region			
Crude line to West	5,300	2.4 million bbls/day	550
NGL line to West	1,200	356 thousand bbls/day	
Export refinery	2,100	250 thousand bbls/day	850
Petrochemical complex	2,250	500 thousand tons/year equivalent ethylene	1,700
Subtotal	10,850		3,100
Total	50,690		26,950

a 12,000 bbls/day of lube stock, 95,000 bbls/day of low sulphur oil.

Table IV – 19
SCHEDULE FOR DESIGN AND CONSTRUCTION OF MAJOR PROJECTS
IN HYDROCARBON-BASED INDUSTRIES[a]



a Projects to be initiated in period 1395-1400. All projects schedules are subject to continuous review based on implementation progress.
Source: Petromin.

3.2.2 Petroleum Refining.

3.2.2.1 In 1395, expand the Riyadh domestic refinery capacity to 20,000 barrels per day. Initiate engineering studies in 1395 to construct additional capacity of 80,000 barrels per day by 1399.

3.2.2.2 In 1395, expand the Jiddah domestic refinery capacity to 60,000 barrels per day. Also in 1395, initiate engineering studies to construct an additional capacity of 80,000 barrels per day in 1399.

3.2.2.3 Continue present planning studies for additional domestic capacity in the 1400 – 05 period and implement construction programs therefor during the latter years of the second Development Plan — including consideration of possible refinery locations in Qasim, Yanbu', and Jaizan.

3.2.2.4 Subject to final feasibility studies, implement construction of three major export refineries with 250,000 barrels per day capacities, two located in the Eastern Region and one in the Western region.

3.2.2.5 Expand the Jiddah lube-oil blending facility (Petrolube) from its present capacity of 200 barrels per day to 850 by 1398.

3.2.2.6 Complete plans in 1395 for construction (by 1400) of a lubricating-oil refinery at the Jiddah site with an estimated capacity of 3,000 barrels per day. And subject to final feasibility studies, implement construction of a lube oil refinery in the Eastern Region with an output of 12,000 barrels per day of lube stock and 95,000 barrels per day of low sulphur oil.

3.2.2.7 Expand asphalt capacities of present and new refineries in the 1395-1400 period to a combined domestic capacity of 23,000 barrels per day on-stream, by 1400.

3.2.3 Gas Gathering and Treatment.

3.2.3.1 Construct extensive gas gathering and treatment facilities in the Eastern Region as the essential first-stage of the general development plan for new hydrocarbon based industries. The system will provide 1,600 million cubic feet per day of gas for industrial use.

3.2.3.2 Within the next two years, complete all feasibility studies now in progress for the production and marketing of gas products and immediate derivatives.

3.2.4 Petrochemicals.

Construct four petrochemical complexes, three in the Eastern Region and one in the Western. The first complex, in the Eastern Region (Petrochemical I) should be operational by the end of fiscal year 1399-1400. The remaining three complexes should be completed early in the next plan period.

3.2.5 Fertilizers.

3.2.5.1 Construct and bring into operation by the end of the plan period two new fertilizer plants in the Eastern Region, with a combined annual capacity of 220,000 tons of ammonia and 800,000 tons of urea.

3.2.5.2 Continue to improve operating efficiency of the SAFCO facilities in the Eastern Region.

3.2.6 Steel and Aluminum.

3.2.6.1 Implement plans for construction and operation of a 3.5 million ton steel plant in the Jubail area of the Eastern Region, to produce metal pellets, basic shapes and bar, and plant and pipes.

3.2.6.2 Implement plans for design and construction starting in 1396, of an aluminum plant in the Eastern Region.

3.2.6.3 Increase output in 1395 of the Jiddah steel-rolling mill to its full (three-shift) annual capacity of 45,000 tons of reinforcing bars. Complete feasibility studies by 1396 for the expansion of this mill to produce 90,000 to 120,000 tons per year.

3.2.6.4 Complete feasibility studies by 1396 for a major new rolling mill for reinforcing bars in the Western Region.

3.2.7 Other Hydrocarbon-Based Industries.

3.2.7.1 Implement plans for two sulphuric acid plants during the second Development Plan — to be located in the Eastern and Western regions respectively.

3.2.7.2 By 1395, complete the ongoing construction of additional bulk plant and

terminal facilities at Qasim, and feasibility studies for such facilities at Jaizan, Badanah, Salyle, Duba, and Yandu'.

3.3 Other Manufacturing Industries

The projects listed below include only those already identified by private investors or the Industrial Studies and Development Center as warranting immediate attention. (Many other projects are under study.) Projects in these sectors will be implemented by private investors or the Industrial Development Corporation. Major feasibility studies to be made during the 1395-1400 period will be conducted under the direction of the Industrial Studies and Development Center.

3.3.1 Agriculture and Food Processing.

3.3.1.1 Construct three large integrated grain-silo, flour-milling, and feed-milling complexes, with start-up at Riyadh in 1396-97, and at Jiddah and Dammam in 1397-98 (Table IV-20 shows the annual production targets); carry out training at all three complexes throughout the plan period.

3.3.1.2 Implement the other projects listed in Table IV-21 to expand processing of basic foods and production of important inputs to agriculture.

3.3.1.3 Complete a major study by 1397 of future domestic manufacturing opportunities in agriculture and food processing.

3.3.2 Construction Materials and Products.

3.3.2.1 Expand cement capacity from the present daily output of 4,400 tons to 31,400 by 1399-1400 for both domestic and export markets, as shown in Table IV-22.

3.3.2.2 Expand output of pipes and other construction materials and products, as Table IV-23 indicates.

3.3.2.3 Expand asphalt production as described earlier under "Hydrocarbon-Based Industries."

3.3.2.4 Complete a major study by 1396 of future domestic manufacturing opportunities in the construction industry.

3.3.3 Household and Commercial Products.

3.3.3.1 Complete and implement project plans for vehicle assembly and production of spare parts and operating supplies, as indicated in Table IV-24.

3.3.3.2 As also shown in that table, complete and implement the project plans for producing other important items of equipment and supplies.

3.3.4 Consumer and Related Products.

3.3.4.1 Implement approved manufacturing projects for a variety of consumer goods, as shown in Table IV-25.

Table IV–20
GRAIN-SILO, FLOUR-MILLING, AND FEED-MILLING COMPLEXES
AT RIYADH, JIDDAH, AND DAMMAM

	1396 –97	*1397 –98*	*1398 –99*	*1399 –1400*
Cumulative capacity (all complexes)				
Silos (metric tons)	40,000	160,000	210,000	210,000
Vessel discharging equipment (tons/hr)		400	800	800
Flour mills (tons/24 hr)	270	1,080	1,350	1,350
Feed mills (tons/8 hr)	100	200	300	300
Annual production of main products, (all complexes, thousands of metric tons)				
White flour				
85 percent extraction	40.1	135.2	166.1	175.9
75 percent extraction	24.5	63.0	94.7	100.6
Whole wheat flour	1.6	9.9	18.2	26.5
Bagged wheat	14.4	73.1	64.8	56.5
Pelletized mill feed (exports)	11.4	30.9	42.5	37.2
Poultry feed	3.6	16.4	31.5	48.4
Feed concentrates	8.8	29.7	32.3	35.2

Table IV–21
NEW MANUFACTURING PROJECTS IN AGRICULTURE AND FOOD PROCESSING
(LICENSES ISSUED OR APPLIED FOR)

Region/Project	*Annual Capacity*	*Estimated Investment (SR thousands)*
Western		
Dairy products	5,490 tons	8,000
Rice milling	20,000 tons	13,000
Oil and soap	200 000 tons	45,000
Sugar refining	100 000 tons	93,000
Mineral water	4.5 million bottles	7,000
Date packing	150 tons	70
Central		
Dairy products – 1	6,088 tons	10,000
Dairy products – 2	4,680 tons	14,600
Poultry feed & broilers	12,000 tons feed 3 million broilers	17,000
Livestock and poultry feed	4,800 tons	2,000
Yoghurt and milk – 1	345 tons	640
Yoghurt and milk – 2	1.2 million liters	3,780
Halawa and tahina	300 tons	390
Glass bottles plant	3,000 tons	24,000
Tomato paste and juice	3,000 tons paste 600 tons juice	6,000
Agricultural pumps assembly	300 pumps	590
Eastern		
Leather tanning	1.5 million square ft.	1,680
Sugar refining	100,000 tons	93,000
Phosphate fertilizers	500,000 tons	200,000
Northern		
Bottling plant	7 million bottles	4,600
Strawboard plant	2,400 tons	2,600
Skin pickling	175–350,000 skins	1,300

Table IV–22
PLANNED EXPANSION OF CEMENT PLANT CAPACITY
(Tons per Day)

	1394-95	1399-1400
Existing plants		
Hofuf	1,300	4,300
Riyadh	1,100	4,100
Jiddah	2,000	5,000
Subtotal	4,400	13,400
New plants		
Jubail area	–	3,000
Buraydah	–	3,000
Tabuk	–	3,000
Yanbu'	–	3,000
Hofuf	–	3,000
Southwestern area	–	3,000
Subtotal	–	18,000
Total daily capacity	4,400	31,400
Annual capacity[a]	1,450,000	10,360,000

a Based on 330 operating days per year.

Table IV–23
NEW MANUFACTURING PROJECTS FOR CONSTRUCTION MATERIALS AND PRODUCTS (LICENSES ISSUED OR APPLIED FOR)

Region/Project	*Annual Capacity*	*Estimated Investment (SR thousands)*
Western		
Aluminum doors and windows – 1	1,500 doors 6,000 windows	3,000
Aluminum doors and windows – 2	40 tons	370
Electrical wire and cable	6,000 tons	30,000
Central		
Paints – 1	1,500 tons	1,000
Paints – 2	3,000 tons	1,360
Slurry Seal (emulsion)	60,000 tons	2,260
Cement blocks	21 million blocks 15 million bricks	3,890
Red bricks	81,000 square meters	12,000
Prefabricated structures	800 units	10,300
Insulating materials	507,000 square meters	3,090
Electric power poles	10,000 poles	1,000
Pre-cast concrete	247,000 square meters	12,000
Tiles and ornamental stone	200,000 square meters gypsum 25,000 square meters tiles	7,220
Insulating paper	1.8 million square meters	1,890
Insulated concrete walls and ceilings	133,750 square meters	16,000
Metal doors	30,000 units	9,100
Eastern		
Aluminum doors and windows – 1	3,900 square meters	400
Aluminum doors and windows – 2	50 tons	800
Pipes and manholes	2,400 tons	1,980
Wire netting	14,000 rolls	420
Pipes and joints	1,800 tons	510
Oil pipelines	1,525 pipe units	1,790
Spiral-welded pipes	84,000 tons	77,000
Metal mesh and net	6,000 tons	1,500
Bricks and blocks	10 million blocks 15 million brick	15,000
Oil-well drilling mud	85,000 tons	12,500
Nails	1,000 tons	3,000
Steel pipes	3,400 tons	9,950
Northern		
Iron pipes	470 tons	590

Table IV-24
NEW MANUFACTURING PROJECTS FOR HOUSEHOLD AND COMMERCIAL PRODUCTS (LICENSES ISSUED OR APPLIED FOR)

Region/Project	*Annual Capacity*	*Estimated Investment (SR thousands)*
Western		
Machine-made carpets	7,100 tons	12,000
Metal furniture	460 tons	4,000
Wood furniture – 1	3,000 square meters	8,000
Wood furniture – 2	2,200 square meters	6,000
Printed paper bags	600 tons	460
Sensitive and carbon paper	187 tons	30
Paper sheets from rolls	8,000 tons	1,000
Envelopes	227 tons	1,500
Paper bags	900 tons	950
Paper bags and envelopes	1,110 tons	1,750
Metal car bodies	6,000 bodies	7,200
Truck bodies	1,000 tons	7,200
Bicycle assembly	3,600 bicycles	1,150
Lube oil tins and barrels	—	12,290
Barrels	240,000 barrels	5,440
Tire retreading	13,200 units	1,000
Tire manufacturing	3,000,000 units	60,000
Truck assembly	4,040 units	140,800
Dump-truck assembly	400 units	9,000
Mattresses	30,000 units	1,150
Floor carpets	684,000 square meters	12,000
Metal products (furniture and garbage containers)	350 tons	4,000
Safes	6,600 units	260
Paper and school copybooks	17 million units	5,070
Central		
Fiberglass products	200 sitting room sets 220 false ceilings	1,100
Bus bodies	200 units	1,200
Ceramics	2,700 tons	16,500
Sanitary fixtures	1,200 tons	460
Lighting equipment	12,000 units	1,270
Arc welding electrodes	1,200 tons	2,900
Construction barrows and equipment	10,000 barrows 40,000 buckets	1,720
Fluorescent appliances assembly	40,000 units	1,150
Prayer carpets	400,000 square meters	4,350
School desks	100,000 units	6,390
Oxygen	30,000 cylinders	1,110
Fluorescent lamps assembly	50,000 lamps	460
Floor carpets	600,000 square meters	13,690
Tin cans	—	10,000
Dry batteries	10 million units	15,000

CONTINUED

Eastern		
Wood furniture	2,000 tons	6,200
Wood mobile platforms	110,880 units	2,000
Computer paper forms – 1	45 million forms	900
Computer paper forms – 2	40 million forms	1,800
Polypropylene bags	12 million bags	4,000
Air conditioners assembly	10,000 units	2,900
Copper wire and generator refurbishing	172,000 Hp. of engines	6,060

Table IV-25

NEW MANUFACTURING PROJECTS FOR CONSUMER AND RELATED PRODUCTS (LICENSES ISSUED OR APPLIED FOR)

Region/Project	*Annual Capacity*	*Estimated Investment (SR thousands)*
Western		
Polyester fabrics	12,000 tons	5,000
Perfumes and cosmetics	2.8 million cubic meters	4,200
Plastic products	3,900 tons	16,000
Medical solutions	3,114 kilograms of glucose	14,000
Glass products from waste glass	950 tons	1,000
Cloths and tents	3,000 tents	840
Central		
Nylon bags and plates	525 tons	500
Plastic containers – 1	370 tons	1,400
Plastic containers – 2	310 tons	1,530
Cologne and perfumes	300 tons cologne 120 tons perfume	1,940
Cooking utensils	1,000 tons	40,000
Ready-made apparel	150,000 pieces	11,500
Eastern		
Household utensils	30,00 units	3,230
Medicines	180 million tables	3,800
Southwestern		
Perfumes	6,000 grams of rose oil 100,000 liters of cologne	1,950

3.3.4.2 Complete a major study by 1396 of domestic manufacturing opportunities in support of the education and health programs of the Kingdom.

3.3.4.3 Complete a feasibility study by 1396 of an experimental workshop program, in cooperation with the Ministry of Labor and Social Affairs, for the design and manufacture of handicrafts in rural communities, to be sold in international markets.

4. Finance

The financial requirements of the agencies concerned with the development of manufacturing are estimated separately below (SR millions):

4.1 Industry Department (Ministry of Commerce and Industry).

	Pudgeted 1394-95	*1395 -96*	*1396 -97*	*1397 -98*	*1398 -99*	*1399- 1400*	*Plan Total*
Recurrent	3.9	7.3	9.4	12.5	15.4	17.6	62.2
Project	18.4	410.2	180.0	194.0	223.7	236.1	1,244.0
Total	22.3	417.5	189.4	206.5	239.1	253.7	1,306.2

4.2 Industrial Studies and Development Center.

	Budgeted 1394-95	*1395 -96*	*1396 -97*	*1397 -98*	*1398 -99*	*1399- 1400*	*Plan Total*
Recurrent	9.7	11.8	14.1	17.0	20.4	24.5	87.8
Project	13.5	6.4	7.0	2.0	2.3	2.5	20.2
Total	23.2	18.2	21.1	19.0	22.7	27.0	108.0

4.3 Petromin Headquarters.

	Budgeted 1394-95	*1395 -96*	*1396 -97*	*1397 -98*	*1398 -99*	*1399- 1400*	*Plan Total*
Recurrent	28.5	31.4	34.5	37.9	41.7	45.9	191.4
Project	-	-	-	-	-	-	-
Total	28.5	31.4	34.5	37.9	41.7	45.9	191.4

4.4 In addition, all or part of the finance will be provided for the following investment programs, the costs of which have been scheduled on the basis of preliminary planning data as shown below (SR millions):

	1395 -96	*1396 -97*	*1397 -98*	*1398 -99*	*1399- 1400*	*Plan Total*
Hydrocarbon-based[a]	500	3,500	6,000	9,000	11,400	30,400
Jubail complex[b]	700	1,400	2,800	2,800	1,100	8,800
Other industry[c]	500	1,000	1,400	1,850	2,200	6,950
Total	1,700	5,900	10,200	13,650	14,700	46,150

a Includes gas gathering and oil and NGL pipeline to the west coast. Scheduled investment assumes that 60 percent of total investment in projects to be initiated during the Plan (SR 50,690 million) will actually be made during the Plan.

b Excludes housing, electric power generation, and water desalination included in other sectoral plans.

c Expansion of existing plants and expected new projects in industry not based on hydrocarbon; includes investment of the Grain Silos and Flour Mills Organization.

G. CONSTRUCTION

1. Present Conditions

1.1 Total construction activity increased significantly during the first development plan period — from SR 1,868 million in gross domestic product in 1389-90 to an estimated SR 4,362 million in 1394-95. Growth was particularly strong from 1392-93 on, as the following data show (SR millions at 1394-95 prices):

Year	*GDP*	*Annual Growth (percent)*
1390-91	1,914	2.5
1391-92	2,106	10.0
1392-93	2,792	32.6
1393-94	3,489	25.0[a]
1394-95	4,362	25.0[a]

a Estimated.

1.2 Some indicators of the high levels in both public- and private-sector construction activity in 1390–95 are listed below.

Intercity roads	–	4,100 kilometers paved
Ports	–	17 new berths completed.
Telephones	–	Plant for 100,000 automatic exhange lines
Airports	–	15 airports improved or under construction
Municipalities:		
Streets	–	1,000 kilometers paved
Sewage networks	–	8 projects completed or under development
Markets and slaughterhouses	–	68 projects completed or under development
Municipal offices	–	32 projects completed or under development
Hospitals	–	15 new public hospitals completed or under construction
Factories	–	150 new plants or major expansions
Housing	–	75,000 new units
Schools (through secondary level)	–	12,000 classrooms (includes some acquired. not built).

1.3 Employment in the construction industries rose from 140,000 to 250,000, with substantial numbers recruited from neighboring countries. Total cement consumption expanded from 1.2 million tons in 1390 to over 2.0 million tons in 1395, necessitating government assistance to the industry to ensure adequate imported supplies at reasonable prices. Domestic cement production increased from 600,000 tons in 1390 to over 1.2 million tons in 1394. Steel reinforcing bar production (at the Jiddah mill) reached 22,000 tons annually in late 1394.

1.4 Although construction industry output has been expanding rapidly since 1393, the accelerating development programs of the Kingdom are placing considerable stress on available construction resources. At present, labor is in short supply in some areas, tenders for building projects are attracting fewer bids, and inflationary pressures have doubled building labor costs between 1392 and 1394, and nearly doubled building material costs:

	Index Year	*1392*	*1394*
Material costs[a]	1389	103	194
Labor costs[b]	1392	100	200

a Composite index of 20 building materials and products.
b ISDC Survey, December 1974.

1.5 The total gross value of construction within the Kingdom is now estimated to be SR 10,000 million annually at 1394-95 prices. The major construction programs already scheduled in all sectors for the second development plan period and the years beyond will require construction capacity far exceeding the present level. The total fixed capital investment of the projects included in the Plan exceeds an estimated SR 300,000 million (see table later) and construction of necessary facilities is a key to accomplishing most of the social and economic development goals of the Kingdom – better education, health, housing, community life, communications and transport, and more productive employment opportunities for the society.

1.6 It is evident, therefore, that bold new measures must be taken immediately by the Government to expand construction capacity to much higher levels if the present growth rate of construction activity is to be sustained, let alone exceeded during the second Plan. Such actions include:

- ☆ Strengthening overall programming for, coordination of, and assistance to contractors in mobilizing the necessary construction resources.
- ☆ Enhancing the general operating environment to attract new domestic and foreign contractors and facilitate their operation within the Kingdom.
- ☆ Assisting expansion of the capacities of existing contractor organizations to take full advantage of their experience and resources.
- ☆ Promoting optimum utilization of modern construction designs, work practices,

and time-and labor-saving equipment to foster most efficient use of available resources.

1.7 Apart from the planned great expansion in domestic cement production capacity and expected increase in production of aggregate and concrete products, the Kingdom's construction plants and other resources are approaching the limits of their capacities. New construction will be very largely dependent on the effective utilization of foreign contractors, laborers, materials, and machinery and equipment.

2. Objectives and Policies

In support of the massive construction programs planned for the 1395-1400 period, four basic objectives can be defined for the construction sector, as follows.

2.1 Strive to sustain the present momentum of the construction industry which has experienced an annual GDP growth rate of 25 percent or more during the past three years.

2.2 Implement bold new measures that will assist and expedite expansion of existing construction industry capacity within the Kingdom: strengthening its financial capacity, facilitating contractors' tendering, limiting their responsibility for uncontrollable delays and changes in costs, and promoting their utilization of time- and labor-saving construction designs and work practices.

2.3 Concurrently, greatly strengthen actions to assist and expedite procurement of additional foreign construction industry resources — contractors, labor, materials, and equipment.

2.4 Finally, establish an office to overview major construction programs and projects throughout the second Development Plan, coordinate industry-wide matters requiring special attention, and assign national priorities to the several sector programs if temporary resource constraints require such measures.

3. Programs and Projects

3.1 The estimated capital investments in selected major construction programs to be implemented in the second Development Plan are shown in Table IV – 26.

3.2 Construction Industry Planning, Programming, and Coordination

3.2.1 Initiate a program immediately within the Central Planning Organization to develop a system for assigning priorities to the major construction programs and projects underway or planned throughout the Kingdom.

3.2.2 Establish immediately a central office within the Government to monitor the overall construction program of the Kingdom and coordinate matters affecting all types of construction. This office will:

Table IV-26
ESTIMATED CAPITAL INVESTMENT IN PLANNED MAJOR CONSTRUCTION PROGRAMS[a]
(SR Millions at 1394-95 Prices)

Program	*Estimated Funding*
Buildings	
Schools	33,000
Housing	29,000
Hospitals	12,000
Military bases	9,000
Other government	5,000
Commercial	4,000
Subtotal	92,000
Civil Engineering Works	
Municipalities	46,000
Highways	10,000
Airports	8,000
Ports	6,000
Electricity generation	6,000
Desalination plants	20,000
Subtotal	96,000
Industrial Plants	70,000[b]
Total	258,000

a Estimates are for major programs only. Miscellaneous additional projects are estimated to add at least 15 to 20 percent to the capital funding.

b Includes Aramco capital investment programs and the Jubail infrastructure costs (excluding housing, electricity generation, and water desalination).

- ☆ Obtain and analyze up-to-date information on major construction programs and projects — underway or planned — in respect to contract status, contractor assignments, funding, project progress, key resource requirements, and other pertinent inputs.
- ☆ Publish information and serve as a clearing house for inquiries about the general status and outlook of construction activity.
- ☆ Advise responsible public and private-sector organizations about matters which need special attention to sustain growth in the industry's capacity, such as critical resource problems, major project delays, and modern construction technologies.
- ☆ Develop and coordinate close working relationships between major organizations and groups in the public and private sectors involved in construction on important matters of mutual interest.

- ☆ Promote the adoption of all new measures and techniques that may significantly expand the domestic industry's capacity.
- ☆ Promote actions to improve organizational efficiency of the construction industry, such as limiting the number of organizations involved in key policy and implementation decisions, and maximizing the effectiveness of general contractor and sub-contractor relationships, especially where both foreign and domestic organizations are involved in major project implementation.
- ☆ Organize and schedule a major conference at the start of the second development plan period, to be attended by representatives of all private and public groups involved with the construction industry. They will discuss the make-up and magnitude of the programs to be implemented and develop a consensus about major new actions that should be taken to accomplish these goals. Attendance should be representative of the government institutions concerned with each sector program and those responsible for administering construction industry affairs, as well as contractors, architectural firms, building material producers and importers, construction equipment suppliers, and other important participants within the private sector.
- ☆ Take immediate actions to promote implementation of the recommendations forthcoming from this conference.

3.3 Construction Industry Procedures and Regulations

3.3.1 Initiate immediately a comprehensive review of regulations, codes, contract stipulations, and other procedures bearing upon contractor operations, and take whatever actions are necessary to align contractual and other procedures with international practices for construction projects. Such a review will include:

- ☆ Tendering procedures.
- ☆ Contract financial guarantees.
- ☆ Construction codes.
- ☆ Product specifications.
- ☆ Taxes.
- ☆ Settlement of disputes.
- ☆ Cost escalation clauses.
- ☆ Labor force regulations and procedures, including recruitment and employment of foreign personnel.
- ☆ Job-training assistance.
- ☆ Assistance in procuring critical materials and equipment.
- ☆ Import procedures, including customs clearance.
- ☆ Contractor licensing.
- ☆ Cost-estimating information.

3.3.2 Concurrent with the above review, implement studies immediately of several measures already advocated by representative contractors from several sectors of the industry to expand and facilitate construction operations:

- ☆ Grant contractors block quotas for imports of foreign construction labor, supported by government-to-government agreements if possible, to overcome delays now encountered with individual visa issuance procedures and other regulations affecting procurement of foreign construction labor.
- ☆ Take immediate actions to eliminate port delays by use of any temporary or improvised means whereby construction materials and equipment can be unloaded, cleared through customs, transported, and stored in accord with project schedules. Among such possible measures are 24-hour operations at ports, free-port zones, elimination of translating of certain cargo documents, temporary pier facilities, and bulk-handling of selected commodities.
- ☆ Grant contractors the option of operating under fixed-fee instead of the existing lumpsum contracts which have no provisions for escalation of labor and material costs at a time when international and domestic inflationary pressures are causing major difficulties in preparing bid estimates. Also, immediately develop cost indices for the Kingdom's construction labor and material, to facilitate contractor operations and government monitoring of contractor performances.
- ☆ Establish legal procedures immediately for prompt adjudication of disputes arising during contractor operations, and clarify the legal status of consultants during project implementation.

3.3.3 Complete reviews in 1395 of the IBRD proposal for establishment of a Contractor Development Agency under government auspices to perform the following functions on behalf of domestic contractors:

- ☆ Assist contractors in the preparation of bids, the effective use of cost planning and control, personnel and contract labor management, manpower training, and other management functions.
- ☆ Assist contractors to improve their structural organization — and review procedural matters with both contractors and government staff to recommend changes, where deemed appropriate.
- ☆ Assist in reviews, monitoring, counseling and guidance of contractors on financial matters — and maintain liaison with government, industry, and financial institutions involved in construction finance in order to ensure their participation and effective support in the growth of domestic contractors.

3.3.4 Continue to expedite all actions underway, planned, or recognized as necessary to

establish and refine standards and guidelines for all types of construction industry work within the Kingdom, and create the mechanisms for promoting their acceptance. Such guidelines include:

- ☆ Construction material and product standards and specification.
- ☆ Construction work standards and specification.
- ☆ Municipal planning standards and building standards.

3.4 Procurement of Construction Industry Resources

3.4.1 Expedite in 1395 a study of the key resources — contractor capacity, materials, labor, and construction machinery and equipment — necessary to support the major construction programs of the several sectors of demand:

- ☆ Establish the general magnitudes of total requirements and their procurement schedules.
- ☆ Determine the breakdown of these requirements between domestic and foreign resources.
- ☆ Survey potential foreign sources of supply.
- ☆ Determine any special actions necessary to ensure procurement of foreign resources to meet construction schedules, coordinating such plants with those of contractor groups assigned to the projects.

3.4.2 As warranted by the results of the study, take special actions to expedite procurement and application of selected critical resources. Such actions may include:

- ☆ Development of new sources of supply for all resources.
- ☆ Contracting for their procurement.
- ☆ Financing procurement of materials and machinery.
- ☆ Facilitating import of labor, materials, and machinery.
- ☆ Maintaining domestic inventories of imported materials and machinery.
- ☆ Establishing leasing arrangements for high-cost construction machinery and equipment to make them available to all contractors.

3.5 Construction Technology

3.5.1 Expedite a comprehensive evaluation in 1395 of each construction subsector — such as highways, schools, municipal works, industrial buildings — to determine the extent to which design approaches used in other countries can be applied to current and planned major construction projects in Saudi Arabia. Include consideration of such important factors as:

- ☆ Durability.

- ☆ Maintenance costs.
- ☆ Use of readily-available materials.
- ☆ Use of labor-saving and time-saving equipment to minimize construction time.
- ☆ Use of available unskilled labor.
- ☆ Use of readily-available products meeting recognized specifications.

3.5.2 Concurrently, take action in 1395 to expand and accelerate present programs directed to using manufactured components — for housing, classrooms, commercial and industrial buildings, and other suitable structures — as a significant means of expanding construction capacity within the Kingdom.

3.5.3 Also expedite a comprehensive evaluation in 1395 of the extent to which labor-saving and time-saving construction machinery, equipment, and work methods are being utilized within each construction subsector including:

- ☆ Bulk materials-handling and mixing, and transport-to-job equipment.
- ☆ Earth-moving machinery and equipment.
- ☆ Re-usable forms.
- ☆ On-site materials-handling equipment.
- ☆ On-site automatic tools.
- ☆ On-site prefabrication of structural components.

3.5.4. Based on the above findings, implement new actions throughout the second Development Plan that may significantly expand the construction capacity of the Kingdom.

3.5.5 Expand the capacity of the Public Works Department to undertake public construction programs:

- ☆ Open new branches at Tabuk, Qasim, Hayil, Tayif, Jaizan, al-Jawf, Najran, al-Hasa, Wadi ad-Dawasir, and al-Bahah.
- ☆ Establish material testing laboratories in Jiddah, Dammam, and Medina.
- ☆ Expand headquarters facilities.

4. Finance

Costs of construction programs are included in the relevant sector programs. Finance for the Public Works Department is estimated as follows (SR millions):

	Budgeted 1394-95	*1395 -96*	*1396 -97*	*1397 -98*	*1398 -99*	*1399-1400*	*Plan Total*
Recurrent	21.6	33.1	41.6	49.2	58.1	67.2	249.2
Project	164.4	190.4	39.2	26.5	21.3	13.1	290.5
Total	186.0	223.5	80.8	75.7	79.4	80.3	539.7

In addition, finance will be required in support of the activities of the Saudi Contractors Credit Fund.

H. COMMERCE

1. Present Conditions

1.1 Commercial activities within the Kingdom expanded rapidly during the first development plan, with significant increases in all four sub-sectors: trade, transportation, finance, and services. The estimated increase in their gross domestic product was as follows (SR millions at 1394-95 prices):

	1389-90	*1394-95*	*Average Annual Growth (percent)*
Wholesale and retail trade, hotels, and restaurants	1,460.8	2,580.0	12.0
Transportation, storage, and communications	1,801.5	3,637.8	15.1
Finance, insurance, real estate, and business services	603.0	895.2	8.2
Community, social, and personal services	345.5	522.4	8.6
	4,210.8	7,635.4	12.6

1.2 Wholesale and Retail Trade

1.2.1 Domestic trade will have more than doubled in value between the base year 1389-90 and 1394-95 in current prices — from SR 5,400 million to more than SR 13,000 million at the producers' (wholesale) level.

1.2.2 Imported goods increased from SR 4,000 million in the base year to SR 7,400 million in 1393 and should exceed SR 10,000 million in 1394-95 (current prices delivered to distributors). Imports occupy an important role in the trade of the Kingdom at this stage of development, accounting for more than 70 percent of the value of goods handled. Domestic agricultural output represents about 10 percent and domestic manufactures 15 percent of total trade.

1.2.3 Total tonnage of all commodity movements increased from 7 million tons in 1388 to 11 million in 1393 and should approach 13 million tons in 1395. The growth in tonnage by commodity group to 1393 (the latest year for which data are available) is indicated below (thousands of tons):

Category	*1388*	*1393*
Livestock and products	600	707
Crops and prepared foods	3,131	3,747
Consumer goods	630	750
Transportation equipment	193	422
Petroleum products	1,074	2,745
Industrial goods	194	300
Construction materials	1,474	2,244
Ores	10	13
Total	7,306	10,928

The breakdown for 1393 between domestic production and imports is as follows (thousands of tons):

Category	*Domestic Production*[a]	*Imports*[b]	*Total*
Livestock and products	562	152	714
Crops and prepared foods	2,819	1,148	3,967
Consumer goods	28	722	750
Transportation equipment	–	422	422
Petroleum products	2,745	–	2,745
Industrial goods	125	285	410
Construction material	1,458	786	2,244
Ores	13	–	13
Total	7,750	3,515	11,265

a Including exports of 337,000 tons.
b The value per ton of imports is considerably higher than for domestic goods, thus contributing to the high total values, noted earlier, of goods moved.

1.2.4 The present structure of wholesale and retail trade consists of (a) a number of import firms, many handling significant volumes, including major industrial companies and contractors importing materials, equipment, and supplies; (b) some large importer-wholesaler firms in the domestic distribution channels; and (c) a multitude of retail outlets with typically one to three employees selling foods, drugs, hardware, housewares, textiles, clothing, appliances, and other consumer and commercial goods.

1.2.5 This long established structure is changing gradually as opportunities evolve for new and larger businesses and more integration of wholesaler-retailer operations. Municipal development plans for new retail and wholesale areas should speed the change. At present, however, retail distribution is not efficient because of excessive duplication of inventories, employment in low-level sales or clerical positions, and floor space in small retailers — and lack of professional managers who can realize economies of scale in the larger operations.

1.2.6 Retail chains are limited and only a few full-line department stores and modern shopping centers have yet been established in the major cities. The consumer's

expanding purchasing power, increasing shopping mobility, and desire for convenience are forces that are leading to many new and substantial opportunities for commercial entrepreneurs within the Kingdom.

1.2.7 Rising costs and supply problems led the Government in 1394 to assist in the procurement and price control of selected basic commodities — sugar, cereals, vegetable oils, milk, meat, and cement. A resolution was also approved by the Council of Ministers for establishing a Supplies Corporation within the Ministry of Commerce and Industry (Commerce and Supplies Division) to manage procurement and distribution of such commodities. This function, soon to be implemented, will represent both public and private-sector interests. A Supplies section has also been established to administer all commodity subsidy programs. Contracts are being negotiated for construction of modern storage facilities to stockpile supplies of the basic commodities within the Kingdom.

1.2.8 Another measure in support of consumer interests was a resolution by the Council of Ministers in 1394 that all retail outlets clearly label the prices of their merchandise. Local consumer councils have been formed by the Ministry of Commerce and Industry to monitor this program.

1.2.9 A reorganization of the Ministry of Commerce and Industry was initiated in 1394 to separate administration of commercial from industrial affairs, an action which should afford more institutional support for development of the former. A corollary action was taken to separate the commerce and industry memberships of the Chambers of Commerce in recognition of the differing interests of these two groups.

1.2.10 Importers and merchants continue to experience excessive delays in port discharge and customs clearance of imported goods. Commercial trade disputes are often difficult to settle. The subsidy programs have led to a number of new regulations and operating procedures for those engaged in trading these particular commodities. Communication services for trade have been significantly improved in recent years but difficulties continue to be experienced, especially with foreign-based suppliers.

1.3 Hotels and Restaurants

1.3.1 Demand for hotel accommodation has outstripped available capacity in the Kingdom's major urban centers owing to the build-up in number of visitors as greatly accelerated development plans are initiated within the Kingdom. New hotels in al-Khobar and Riyadh were opened midway through the first development plan period, and two additional hotel complexes are scheduled for opening at Mecca and Riyadh in 1395. A major project with 2,000 rooms is in the planning stage near the Dhahran airport and several feasibility studies are in progress for new hotels.

1.3.2 The Council of Ministers, by Resolution 1126 dated 24/8/94, provided for the formation of a joint stock company with public and private shareholding to establish and

operate hotel and tourist centers; and provisions for the regulation of hotels are under consideration.

1.3.3 Good restaurants for dining-out by local residents and visitors are still very limited but should increase considerably within the next three years.

1.4 Transportation and Storage

1.4.1 Domestic commercial transport activity grew by 100 percent or more during the period 1390-95, to accommodate the increased trade in consumer, commercial, industrial, and construction goods, and government activities.

1.4.2 The major survey completed in 1394 — the Saudi Arabia National Transport Survey — encompassed port capacities as well as roads, railroad, and airports expansions required to meet the projected demand for the next 15 years. Many of its findings are reflected in Chapter VII of this document.

1.4.3 Truck transport is the dominant mode and the number of commercial vehicles increased from 35,000 in 1388 to 91,000 in 1393. More than 20,000 trucks are now imported annually. Truck transport is characterized at present by a large number of individual operators serving the commercial trade through transportation brokers who receive orders, assign them to available owner-drivers, and charge a fee for this service. Major trucking operations have developed in only a few fields, such as petroleum and cement transport, where the high volumes have supported the establishment of specialized firms with fleet-sized operations. It is expected that the structure of the trucking industry will change during the next five years as industry and trade reach levels which require more efficient transport services, modern terminals, well-maintained vehicles, and close scheduling of pick-ups and deliveries.

1.4.4 Inter-city passenger transport is provided today by numerous independent bus operators and taxis. Again, the opportunity is developing for the establishment of bus companies with fleets, perhaps subsidized by the Government during start-up operations, to serve the increasing numbers of city-to-city passengers.

1.4.5 The Council of Ministers, by Resolution 1031 dated 26/7/94, provided for the establishment of a company jointly owned by the Government, existing transportation companies, and the general public to provide internal transport services for the Hajj and inter-city bus services.

1.4.6 The Council of Ministers, by Resolution 831 dated 13/6/94, provided for the establishment of a shipping company to operate shipping services (excluding those related to oil).

1.4.7 As the urban boundaries of the major cities are expanding rapidly with population, industrial, and commercial growth, municipalities will be faced with the need to provide modern terminal and warehousing areas for the transportation and storage industries. Such facilities do not exist at the present time.

1.4.8 The development of modern commercial transport and storage operations will also necessitate government regulatory procedures to support an efficient and competitive industry within the Kingdom.

1.5 Finance and Business Services

1.5.1 Growth in the commercial finance sector in recent years is reflected in the following data (SR millions at current prices):

	End of	
Activity	*1389–90*	*1393–94*
Import financing	2.029	5.358
Private-sector credit	1.565	2.284[a]
Clearing house returns[b]	320	1.622
Commercial bank deposits	1,616	4.095[a]
Bank offices	59	70

a As of end of 1393.

b or Calendar years 1390 and 1394.

Source: Statistical Summary, Second Issue 1394-95, SAMA.

1.5.2 Banking operations in the Kingdom have been traditionally oriented to financing import trade and domestic commerce, and the expanded volume of such business is reflected above. However, the much higher rate of growth in clearing house returns probably reflects more accurately the overall rate of growth in commercial transactions taking place within the Kingdom.

1.5.3 The Saudi Arabian Monetary Agency, the Ministry of Finance and National Economy, and the commercial banks have worked closely together to expand the commercial finance sector and its range of services, to mobilize individual savings for commercial use, and to direct funds to support the many specialized financial institutions now established or planned.

1.5.4 In addition, many branch offices to service outlying communities have been opened in recent years. SAMA now has branch offices in Mecca, Medina, Riyadh, Jiddah, Dammam, Tayif, Buraydah, Jaizan, Tabuk, and Abha to serve local governments, banks, and other parts of the financial community. Thirteen new branches were established by commercial banks in the period 1390-93.

1.5.5 Several specialized financial institutions have now been established to support economic development of the Kingdom. These include:

- ☆ Saudi Industrial Development Fund — Provides capital loans to industrial ventures.
- ☆ Real Estate Development Fund — Grants interest-free loans and subsidies in certain instances to encourage housing construction and individual home ownership.
- ☆ General Investment Fund — Provides for government participation in newly

established joint-stock domestic corporations, and eventual sale of such stock to Saudi individuals. (The GIF was originally established to extend funds to such independent agencies as Petromin and SAUDIA.)

- ☆ Agricultural Bank — Provides capital loan assistance to the agricultural sector of the Kingdom.
- ☆ Saudi Credit Bank — Makes small loans to citizens with limited incomes.
- ☆ Saudi Contractors Fund — Provides financial loans to contractors.

1.5.6 Although considerable progress has been made in developing their financial services, the commercial banks do not as yet provide a full range of services to commercial and industrial firms — especially in meeting the working capital requirements of small and medium-sized businesses, and consumer credit needs. Plans are now under way to more adequately serve these customers.

2. Objectives and Policies

Two primary objectives can be defined for development of the commercial sector during the second Plan: to provide effective support to the social and economic development activities within the Kingdown, and to do so with maximum efficiency at reasonable costs. These objectives and policies associated with them are presented in more detail below.

2.1 A doubling of the gross domestic product of the commercial sub-sectors is projected, as follows (SR millions at 1394-95 prices):

	1394-95	*1399-1400*	*Average Annual Growth (percent)*
Wholesale and retail trade, hotels, and restaurants	2,580.0	5,189.4	15.0
Transportation, storage, and communications	3,637.8	7,317.1	15.0
Finance, insurance, real estate, and business services	895.2	1,800.6	15.0
Community, social, and personal services	522.4	1,005.8	14.0
Total	7,635.4	15,312.9	14.9

2.2 To support the projected growth and broadening of the commercial sector, the Ministry of Commerce and Industry will:

- ☆ Continue to strengthen its role in guiding the overall development of the commercial sector.
- ☆ Expedite organization and operations of the newly formed Commerce and Supplies Division.

- ☆ Within that Division, expedite implementation of the Supplies Department and its administration of the commodity price subsidy and procurement assistance programs established in 1394 for selected basic commodities.

2.3 Guiding objectives and policies of the commercial sub-sectors are as follows.
2.3.1 For wholesale and retail trade, promote sound inventory control practices, efficient use of facilities and personnel, and maintenance of trade margins at levels which yield adequate but not exorbitant returns to the distributors.
2.3.2 Continue to promote expansion of hotel and restaurant accommodation to meet the needs of the rapidly increasing flow of visitors to the Kingdom and also serve the growing interest among the resident population in such facilities. The Municipalities Department will cooperate with other concerned agencies in these actions.
2.3.3 Promote the development of commercial truck transport and inter-city passenger transport with terminal facilities that meet modern standards of timely and efficient service at reasonable rates.
2.3.4 Continue development of the financial institutions and their range of services in support of all economic sectors under the general guidance of the Saudi Arabian Monetary Agency in cooperation with other public agencies, the commercial banks, and the several specialized institutions.

3. Programs and Projects
3.1 Reorganization Within Ministry of Commerce and Industry
3.1.1 Complete the review of proposed organization plans in 1395.
3.1.2 Proceed with implementation of plans for the Commerce and Supplies Division with the objective of attaining an effective operating staff level by 1396-97 within the following sections:

- ☆ Administration
- ☆ Domestic Commerce
- ☆ Foreign Commerce
- ☆ Supplies
- ☆ Consumer Protection
- ☆ Company Register
- ☆ Arab Regional Affairs
- ☆ Ministry Branches.

3.1.3 Expedite especially organization of the Supplies Section, completing final reviews and drafting the charter of the Supply Corporation by mid-1395 with the goal of implementing operation in 1395-96. The Supplies Corporation is proposed as a non-profit organization representing both public and private-sector interests, including importers and distributors. Its functions are proposed to include:

- ☆ Determination of long-term requirements and price outlooks for the selected commodities judged to need government assistance (including price subsidies).
- ☆ Development of adequate supply sources and assistance in procurement and financing of stocks.
- ☆ Stockpiling to protect against external trade disruptions, and coordinating needs for new storage facilities with the Ministry of Finance.
- ☆ Coordinating activities with all ministries and agencies involved in the flow of these commodities, including the Ministry of Finance, Ministry of Agriculture, and Ministry of Communications.
- ☆ Special studies of potential supply constraints such as domestic port, warehouse, and truck transport capacity.
- ☆ Special efficiency studies of domestic distribution including distributor size, turnover, and margins.
- ☆ Measures to achieve stability in the prices of major food items and construction materials, including enforcement of price subsidy regulations.

3.1.4 Launch a major study by the Ministry of Commerce and Industry in 1396 of the organization and operational efficiency of existing commercial activities within the Kindgom and means of optimizing their effectiveness in support of a modern and expanding economic and social order. Complete this study by 1397.

3.2 Development of Chambers of Commerce

3.2.1 Carry out the present program for enlisting maximum participation by commercial establishments in Chamber activities.

3.2.2 Strengthen formal relationships of the Chambers with the Ministry of Commerce and Industry to promote joint-participation in planning and implementing future development of the commercial subsectors.

3.3 Wholesale and Retail Trade

3.3.1 Expedite the programs for gathering census data on retail and wholesale trade by the Central Department of Statistics, to provide basic information about the progress of these sectors (continuing).

3.3.2 Establish procedures by 1397 — through a joint effort of the Ministry of Commerce and the Ministry of the Interior — whereby municipal planning for land use and future urban development are coordinated with expansion needs of wholesale and retail trade.

3.3.3 Complete a feasibility study by 1397 of the merits of establishing a special office within the Commerce and Supplies Division to analyze the productivity of retail and wholesale trade and means of improving it over time.

3.3.4 Launch a special program by 1396 in the Commerce and Supplies Division for strengthening public administration of matters relating to the import trade of the Kingdom. This program would include:

- ☆ Forecasts of requirements for all goods imported in large volume.
- ☆ Identification of present or potential international shortages of goods and instigation of special measures to ensure adequate supplies of such items.
- ☆ Development of current information about import volumes in relation to established requirements.
- ☆ Studies of the efficiency of the existing structure for procurement, port handling, and distribution of imports.
- ☆ Establishment and administration of procedures for allocating imported materials in short supply and for any price controls and subsidy programs judged necessary for these items.

3.3.5 Establish a special commercial trade information office by 1396 within the Commerce and Supplies Division to provide data to interested entrepreneurs on development projects in the commercial sector and possible investment opportunities.

3.4 Transportation and Storage

3.4.1 Complete reviews in 1395 by the Ministry of Communications of the Saudi Arabia National Transport Survey and proceed with planning of a modern commercial transport and storage industry that will provide:

- ☆ A full range of services to shippers and consignees, including adequate transport and storage capacities.
- ☆ Efficient scheduling of operations.
- ☆ Modern terminal facilities and materials-handling equipment and practices.
- ☆ Effective cost controls and procedures for establishing rates and billing customers.
- ☆ Sound maintenance and safety practices.
- ☆ Regulatory controls to encourage efficiency and competition.

3.4.2 Complete a study by 1396 by the Ministry of Communications of the feasibility of a bus transport network for inter-city passenger travel within the Kingdom. Consider the possibility of providing subsidies to such operations during the start-up stages. If judged feasible, initate operations by 1397-98.

3.4.3 Coordinate transport system planning with municipal land use planning to provide adequate terminal locations for both freight and passengers.

3.4.4 Undertake construction of modern storage facilities to stockpile supplies of basic commodities.

3.5 Finance and Business Services

3.5.1 Undertake a comprehensive study in 1395 — conducted jointly by the Saudi Arabian Monetary Agency and representative participants from private businesses — of

all commercial financial services within the Kingdom in support of commerce, industry, agriculture, and consumers to determine their present adequacy and what changes need to be made. Include:

- ☆ Money transfers.
- ☆ Capital loan policies and practices.
- ☆ Line-of-credit policies and practices.
- ☆ Trade financing arrangements.
- ☆ Collateral policies.
- ☆ Finance charges.
- ☆ Business advisory services.
- ☆ Potential need for a specialized institution to accommodate long-term capital needs of commercial firms.
- ☆ Consumer finance.
- ☆ Mortage finance.
- ☆ Trust management.
- ☆ Regional coverage.
- ☆ Relationships with other domestic and international financial institutions.

3.5.2 Initiate a similar review in 1395 by the Ministry of Commerce and Industry of the commercial insurance industry within the Kingdom to determine the future demand for insurance services and take whatever actions are dictated to meet such requirements. Include:

- ☆ Insurance rate practices.
- ☆ Claim adjustment policies and practices.
- ☆ Investment regulations.
- ☆ Industry structure and marketing practices.
- ☆ Operating climate.
- ☆ Commercial court procedures.
- ☆ Protection of foreign investments.
- ☆ Types of coverage
  - Casualty
  - Marine
  - Property
  - Life
  - Vehicle
  - Contract performance
  - Private retirement programs.

3.5.3 Proceed in 1395 with the scheduled review by the Ministry of Commerce and Industry in cooperation with the Ministry of Finance of commercial contracting and tendering procedures. Include:

- ☆ Selection procedures for contractors and supplies.
- ☆ Contract stipulations.
- ☆ Performance guarantees.
- ☆ Adjudication of disputes.

3.5.4 Under the direction of the Ministry of Commerce and Industry, continue to encourage the development of adequate business services in the fields of accounting, law, engineering, management consulting, and business research. Encourage the utilization of expert foreign assistance as necessary for these support services.

3.5.5 Continue to regulate personal service establishments and personnel to assure their activities are in the public interest and responsive to health, safety, and ethical considerations.

4. Finance

The financial requirements of the Commerce and Supplies Division within the Ministry of Commerce and Industry are estimated as follows (SR millions):

	Budgeted 1394-95	*1395 -96*	*1396 -97*	*1397 -98*	*1398 -99*	*1399-1400*	*Plan Total*
Recurrent	26.0	40.3	49.6	55.1	60.3	65.3	270.6
Project	22.4	71.4	72.0	75.2	53.5	4.0	276.1
Total	48.4	111.7	121.6	130.3	113.8	69.3	546.7

In addition, finance will be provided for the Supplies Corporation and the hotel, transportation and non-oil shipping companies, in accordance with needs yet to be determined.

V. HUMAN RESOURCE DEVELOPMENT

V. Human Resource Development

So that the Saudi people may profit from as well as contribute to the development of their Kingdom, the enrichment of their individual working skills and intellectual and cultural lives is a primary concern of the Government for the period 1395-1400. The plans for this development are described in this chapter under six major headings: manpower, training, labor affairs, education, cultural affairs, and information services.

A. MANPOWER

The manpower plan described below includes the broad objectives and policies of labor force development, and the planned programs that are designed to ameliorate the Kingdom's extremely tight labor market, both present and predicted, throughout the Second Plan. The major manpower planning and institutional changes required are described and the tasks requiring action are listed. The establishment of a new manpower planning department within the Central Planning Organization, and a national manpower training organization as a separate government agency, are described.

V.A. MANPOWER

1. Present Conditions

1.1 Labor force developments have greatly affected the rate of implementation of development projects during the first plan period. As the requirements for skilled workers build up, the continued large–scale expansion of the non–Saudi segment of the labor force becomes more and more evident.

1.2 Total employment is estimated to have increased at an annual rate of 6.6 percent during the first plan and is expected to accelerate to 8.9 percent annually to reach 2.33 million by 1400 if the labor demands in the private and public sectors are to be met. The manpower needs in the private sector will increase at about 7.9 percent annually during the second Plan while in the public sector, the increase must average about 15.9 percent annually to achieve the development requirement. This massive increase in employment has direct implications on the training effort required by both government and industry because:

- ☆ A high proportion of the Saudi labor force need to be trained in skills and serve in high productivity occupations.
- ☆ About 20 percent of the total labor force — largely in the skilled and technical occupations — already have to be imported.
- ☆ Rapid development is greatly increasing manpower demand in the construction trades and in technical and managerial occupations.
- ☆ Wages are rising rapidly, particularly in the private sector, owing to the extremely tight labor market.
- ☆ The participation of women in the labor force remains marginal.
- ☆ Many of the new labor-force entrants come from rural areas. They are often unable to be fully productive owing to a lack of training opportunities in the rural environment.
- ☆ Although greatly expanded in the past few years, training and educational programs are insufficient both quantitatively and qualitatively to produce graduates capable of productive work in either the private or public sectors without further training.
- ☆ In-service training programs are largely undeveloped in the private sector, with the exception of the oil companies and a few others.
- ☆ University training abroad of Saudis is extensive in the government and private sectors but is still insufficient to meet the demand for managerial and technical skills.

1.3 The massive population shifts from rural areas into urban centers will put increasing pressure on the social and physical infrastructure of the cities. Manpower development programs will have to adjust to meet this new challenge.

2. Objectives And Policies

Four basic objectives can be defined for the massive program of manpower development implied by the sectoral plans described later.

2.1 Raise the labor productivity of new labor force entrants, giving priority to getting Saudis into managerial and technical positions. Thus provide the Kingdom with the quality and diversity of Saudi manpower to meet the long-term objective of a diversified economy with maximum Saudi participation.

2.2 Increase the participation rates of Saudis in the labor force in order to raise the number of Saudis at all age levels actively taking part in the Kingdom's massive development.

2.3 Supplement the labor force with non-Saudis to the extent required for diversified industrial development. Foreign workers of high quality must be attracted to the Kingdom in sufficient numbers and with the appropriate skills to meet the predicted shortfall in the Saudi labor force.

2.4 Establish the institutional arrangements for planning and organization needed to implement the above objectives.

Policies to carry out these objectives are as follows.

2.5 Through the educational and training programs, prepare the new Saudi labor force entrants for occupations requiring higher productivity; through intensive in-service training programs within the private and public sectors, upgrade the existing Saudi labor force. The estimated number of Saudis in the labor force, based on an assumed occupational structure in 1395 and the projected labor force structure in 1400, is shown in Table V-1.

2.6 Increase the labor force participation rates by creating better educational and training opportunities for all citizens of the Kingdom, by increasing the reward system through differential earnings based on productivity, and by providing better working conditions for all male and female members of the work force.

2.7 Adopt whatever measures are necessary and appropriate to ensure that foreign workers can be obtained and retained in sufficient numbers to meet development requirements. The estimated number of foreign workers required to achieve the Development Plan's objectives, based on an assumed structure of employment, is shown in Table V-2.

3. Programs And Projects

3.1 Expand both quantitatively and qualitatively the educational and training systems as described in subsequent sections of this chapter. The increase in the number of graduates expected from the base year — academic year 1394-95 — to the final year of the Plan is estimated in Table V-3.

3.2 Follow up all students now studying at universities abroad who will enter directly

into the labor force as a form of "repayment" for their study grants. Table V-4 shows the numbers of assigned and unassigned grantees studying abroad at the higher educational levels in 1394-95.

Table V-1
ESTIMATED SAUDI MANPOWER BY OCCUPATIONAL GROUP,
1395 AND 1400
(Thousands)

Occupational Group	*1395*	*1400*	*Increase 1395-1400*
Managers, officials	7.4	8.7	1.3
Professionals	48.4	52.9	4.5
Technicians and sub-professionals	25.0	33.4	8.4
Clerical workers	67.5	99.6	32.1
Sales workers	82.3	97.2	14.9
Service workers	105.2	134.5	29.3
Operatives	40.0	57.1	17.1
Skilled workers	70.1	93.5	23.4
Semi-skilled workers	170.0	265.0	95.0
Unskilled workers	244.0	296.4	52.4
Farmers	311.2	281.0	(30.2)
Bedouins	114.9	98.7	(16.2)
Total	1,286.0	1,518.0	232.0

Table V-2
ESTIMATED NON-SAUDI MANPOWER BY OCCUPATIONAL GROUP,
1395 AND 1400
(Thousands)

Occupational group	*1395*	*1400*	*Increase 1395-1400*
Managers	6.3	12.4	6.1
Professionals	15.7	23.5	7.8
Technicians and sub-professionals	31.4	81.3	49.9
Clerical workers	31.4	121.8	90.4
Sales workers	47.1	112.6	65.5
Service workers	47.1	145.2	98.1
Operatives	25.1	51.4	26.3
Skilled workers	47.1	101.9	54.8
Semi-skilled workers	62.8	162.5	99.7
Total	314.0	812.6	498.6

Table V-3
ESTIMATED GRADUATES BY EDUCATIONAL PROGRAM, 1395 AND 1400

Educational Program	*Number of Graduates* 1395	1400	*Increase* 1395-1400
General and Technical			
Elementary			
Boys	31,118	58,536	27,418
Girls	18,545	38,464	19,919
Subtotal (Elementary)	49,663	97,000	47,337
Intermediate			
Boys	14,717	28,207	13,490
Girls	7,177	17,401	10,224
Subtotal (Intermediate)	21,894	45,608	23,714
General Secondary			
Boys: Arts	1,400	2,936	1,536
Boys: Sciences	2,802	6,468	3,666
Subtotal (Boys: General Secondary)	4,202	9,404	5,202
Girls: Arts	720	2,519	1,799
Girls: Sciences	627	1,898	1,271
Subtotal (Girls: General Secondary)	1,347	4,417	3,070
Subtotal (General Secondary)	5,549	13,821	8,272
Vocational Training			
Craft Level (Ministry of Labor)	1,200	7,960	6,760
Teacher Training (Secondary)			
Boys: General	2,156	3,474	1,318
Boys: Art	96	147	51
Boys: Physical Education	64	189	125
Girls: General	1,220	3,504	2,284
Subtotal (Teacher Training, Secondary)	3,536	7,314	3,778
Boys: Industrial Secondary	297	1,650	1,353
Boys: Commercial Secondary	328	1,146	818
Boys: Agriculture Secondary	-	131	131
Girls: Technical Secondary	232	542	310
Teacher Training (Post Secondary)			
Men: Junior College	-	949	949
Women: Junior College	-	692	692
Subtotal (Teacher Training, Post Secondary)		1,641	1,641

Table V-3 *(continued)*

Educational Program	*Number of Graduates* 1395	1400	*Increase* 1395-1400
Men: Science and Mathematics	-	1,099	1,099
Men: Higher Commercial	-	312	312
Men: Higher Industrial	42	106	64
Total - General and Technical	81,541	170.370	88,829
Higher Education			
University of Riyadh	581	1,803	1,222
King Abdul Aziz University			
Men	326	1,485	1,159
Women	105	95	(10)
Subtotal (King Abdul Aziz University)	431	1,580	1,149
University of Petroleum and Minerals	155	459	304
Women's Teacher College, Riyadh	74	692	618
Women's Teacher College, Jiddah	-	659	659
Total-Higher Education	1,241	5,193	3,952
Religious Education			
Holy Qur'an (Elementary)	111	481	370
Holy Qur'an (Intermediate)	18	139	121
Religious Institutes			
(Islamic Univ.)	135	298	163
(Ibn Saud Univ.)	1,628	3,287	1,659
Subtotal (Intermediate)	1,781	3,724	1,943
Holy Qur'an (Secondary)	-	49	49
Religious Institutes			
(Islamic Univ.)	-	534	534
(Ibn Saud Univ.)	1,100	2,030	930
Subtotal (Secondary)	1,100	2,613	1,513
Islamic University	128	506	378
Imam Mohammed Ibn Saud Islamic University	334	1,459	1,125
Subtotal (Higher)	462	1,965	1,503
Total - Religious Education	3,454	8,783	5,329

Table V – 4
SAUDI GRANTEES STUDYING AT FOREIGN UNIVERSITIES BY DEGREE LEVEL, 1395

Assigned Grantees	Educational Level: Diploma B. S., B. A.	M. S., M. A.	Ph. D.	Total	Percent Distribution
Ministry of Defense	400	11	6	417	26.7
University of Riyadh	11	86	242	339	21.7
King Abdul Aziz University	2	7	189	198	12.7
Ministry of Communications	148	2	–	150	9.6
Ministry of Education	47	82	3	132	8.5
Ministry of Interior	64	9	3	76	4.9
University of Petroleum and Minerals	4	16	47	67	4.3
Ministry of Health	42	8	9	59	3.8
Ministry of Information	37	3	–	40	2.6
Ministry of Agriculture	–	12	2	14	0.9
Ministry of Finance	–	9	4	13	0.8
Ministry of Petroleum	3	5	4	12	0.8
Ministry of Labor and Social Affairs	–	5	2	7	0.4
Ministry of Commerce and Industry	2	3	–	5	0.3
Other government agencies	12	17	4	33	2.1
Total assigned grantees	772	275	515	1,562	100.0
Unassigned grantees	831	87	66	984	
Total all grantees	1,603	362	581	2,546	
Percentage Distribution	63.0%	14.2%	22.8%	100.0%	

3.3 Develop an institutional framework for personnel recruitment, placement, follow-up, and evaluation within the government sector. The critical need for optimum utilization of government employees is becoming apparent. Emphasis should therefore be given to establish a priority system of position-approval and recruitment of scarce manpower for the governmental development programs.

3.3.1 An additional 170,636 employees, excluding normal attrition of existing employees, are required within the governmental institutions covered in the development Plan. New budgeted positions are estimated at 148,014 which is a 96 percent increase from the 1394-95 budget. In that portion of the civil service covered in the second Plan, employment must grow at an annual rate of 18 percent since the total number of positions required by 1400 is 302,488. However, total government employment should reach about 353,000 by 1400, an increase of 83 percent from the 1394-95 budget. The extent of this massive growth by each governmental development program covered in the Plan is shown in Table V-5.

3.3.2 The occupational distribution of the manpower required for the government development programs is depicted in Table V-6. The 170,636 new civil servants needed, excluding attrition, will be largely in the professional group; about 54,000 professionals

needed just for those programs covered within the Plan, account for about 31.5 percent of the total additional government manpower required to meet the Plan's targets. Almost two-thirds of this large professional group are teachers required to staff the tremendous planned development in educational programs.

3.4 Establish a manpower training organization as a separate, independent government agency assigned the following functions.

3.4.1 Assure that formulated plans for the quantitative expansion and qualitative improvement of the overall formal and non-formal training programs are efficiently implemented.

3.4.2 Determine the functions and programs of study at each training institution in response to the manpower demands projected by the Central Planning Organization for implementation of the Kingdom's development policies.

Table V-5
MANPOWER REQUIREMENTS OF PLANNED PROGRAMS BY GOVERNMENT AGENCY, 1395-1400

Government Agency	*Employment 1394-95*	*Budgeted 1394-95*	*Planned Cumulative Positions* 1395-96	1396-97	1397-98	1398-99	1399-1400
Ministry of Agriculture and Water							
Water	264	378	580	742	927	1,102	1,204
Agriculture	3,682	4,498	5,997	6,920	7,653	8,223	8,635
	3,946	4,876	6,577	7,662	8,580	9,325	9,839
Agricultural Bank	538	913	1,014	1,168	1,304	1,453	1,606
Ministry of Petroleum							
Aerial Survey and Mapping	100	166	275	397	513	605	696
Ministry of Petroleum							
Headquarters	178	222	259	315	389	451	513
Technical Affairs	200	263	310	347	378	399	411
	478	651	844	1,059	1,280	1,455	1,620
Directorate General							
Mineral Resources	380	446	469	493	514	533	548
Ministry of Commerce and Industry							
Electric Services Department	79	149	237	347	467	582	697
Commerce and Supplies Department	569	781	1,080	1,309	1,456	1,601	1,700
Industry Department	62	94	145	188	250	308	353
	710	1,024	1,462	1,844	2,173	2,491	2,750

Table V-5 (continued)

Government Agency	Employment 1394-95	Budgeted 1394-95	Planned Cumulative Positions 1395-96	1396-97	1397-98	1398-99	1399-1400
Industrial Studies and Development Center	189	278	339	400	461	522	583
Institute of Public Administration	221	343	426	486	562	674	765
Vocational Training Department	656	905	1,051	2,221	3,231	3,251	3,251
Labor Affairs	793	1,079	1,498	1,749	1,959	2,168	2,305
Ministry of Education	48,364	50,051	57,915	66,390	75,463	84,026	92,965
Thagr Model School	144	200	144	144	144	144	144
Al-Asma Model School	269	339	376	553	651	714	766
Girls' Education Directorate	16,677	21,315	19,767	22,525	25,952	30,028	34,784
University of Riyadh	2,158	2,500	2,987	3,463	3,912	4,333	4,743
King Abdul Aziz University	1,035	1,215	1,515	1,954	2,370	2,906	3,453
University of Petroleum and Minerals	642	670	1,194	1,450	1,498	1,635	1,693
General Administration for Women's Colleges	190	321	362	635	863	1,130	1,398
Islamic University	431	448	854	1,066	1,278	1,518	1,805
Ministry of Information	1,876	2,687	4,081	5,099	6,103	6,953	7,461
Ministry of Health	18,227	23,057	25,407	28,417	36,145	46,265	48,388
Red Crescent Society	558	741	1,103	1,470	1,787	1,903	2,019
Social Affairs	1,377	1,720	2,890	3,875	4,775	5,745	6,309
Social Security	819	928	1,283	1,583	1,805	2,016	2,196
Social Insurance	242	387	494	585	702	812	930
Youth Welfare	384	529	588	660	823	999	999
Roads and Ports Department	1,553	2,166	2,285	2,700	3,275	3,585	3,900
Civil Aviation Department	2,116	2,663	2,957	4,586	6,062	7,285	8,573
SAUDIA	5,126	5,701	7,798	8,604	9,339	9,991	10,545
Railroad Organization	1,676	2,205	2,630	3,004	3,344	3,650	3,922
Telecommunications	4,702	6,189	5,722	7,315	8,134	8,845	9,354
Postal Service	3,582	3,928	4,849	6,516	7,682	8,524	9,505
Municipalities Department	10,585	11,803	13,658	15,192	16,575	17,869	19,040
Public Works Department	558	761	840	955	1,100	1,335	1,570
Central Department of Statistics	158	411	450	515	605	647	676
National Computer Center	4	57	98	150	193	207	245
Meteorology Department	381	474	581	766	966	1,094	1,202
Standards Organization	72	72	122	158	195	223	255
Grain Silos and Flour Mills	35	66	120	223	381	381	381
Total	131,852	154,119	176,750	207,635	242,186	276,635	302,488

Table V–6
MANPOWER REQUIREMENTS OF PLANNED GOVERNMENT PROGRAMS
BY OCCUPATIONAL GROUP
1395 AND 1400
(Thousands)

	Employment 1394–95	*Percent Distribution*	*Total Planned Positions 1399–1400*	*Percent Distribution*	*Employment Increase 1394–1400*	*Percent Distribution*
Managerial	2.6	2.0	6.9	2.3	4.3	2.5
Professional	51.2	38.8	105.0	34.7	53.8	31.5
Sub-professional and technical	12.7	9.6	43.2	14.3	30.5	17.9
Clerical and related	30.0	22.7	67.4	22.3	37.4	21.9
Skilled	8.4	6.4	22.1	7.3	13.7	8.0
Manual and service	27.0	20.5	57.9	19.1	30.9	18.1
Total	131.9	100.0	302.5	100.0	170.6	100.0

3.4.3 Determine policy and take action on the formulation of new training programs, laying down guidelines and criteria for their organization within the framework of short-term and long-term manpower needs.

3.4.4 Establish the certification system for successful completion of the training programs at each institution.

3.4.5 Establish a placement, follow-up, and evaluation system to be administered by the individual institution.

3.4.6 Prepare and exercise budgetary controls on the overall Kingdom manpower training plan, based on reviews of proposals from the training institutions and of manpower requirements from the Central Planning Organization.

3.4.7 Receive the lump-sum training budget and allocate it to the manpower training institutions and agencies; facilitate their efficient acqusition of equipment and other budgeted items.

3.4.8 Determine the amount of student stipends needed to promote the recruitment of adequate numbers of trainees into the training programs according to national manpower priorities.

3.5 Establish a manpower planning department within the Central Planning Organization to coordinate the manpower development and utilization of the Saudi and non-Saudi manpower within the economy. Assign the functions to this manpower planning body as follows.

3.5.1 Recommend the basic overall manpower policies to the Government derived from its short-and long-term economic and social goals.

3.5.2 Recommend instruments and measures for developing human resources that will mobilize and effectively utilize Saudi and non-Saudi manpower.

3.5.3 Issue periodic manpower progress reports and forecasts on the manpower requirements, resources, utilization, wages and salaries, and training situation.

3.5.4 Issue "directives" to operating ministries, agencies, and departments to deal with problems related to manpower development.

3.5.5 Coordinate the national manpower development program in conjunction with the manpower requirements and labor force characteristics; supervise the application of the Kingdom's policy of increasing the proportion of Saudis in managerial and professional positions.

3.5.6 Stimulate and assist government agencies in developing the information and statistical base needed for rational planning.

4. Finance

The financial requirements of the new manpower training organization will be estimated upon its establishment. The requirements for the special department within the Central Planning Organization are included in the CPO estimates in Chapter VIII.

B. TRAINING

Training programs are operating at the pre-service and in-service levels both within and outside the government. The Institute of Public Administration (IPA), discussed first on the following pages, is greatly expanding both its scope of programs offered to government civil employees and its physical facilities in Riyadh, Jiddah, and Dammam. The IPA is also developing its pre-service training field with a major program in industrial management, as well as other subject areas, for university graduates.

Vocational training is entering a new stage with a massive effort being launched within the Ministry of Labor and Social Affairs to greatly expand the types and numbers of trainees largely in the construction and metal-working trades. Pre-vocational centers are operating in three locations for 14 to 17 year-old youths, while on-the-job training programs are offered in most of the larger companies.

Almost all government ministries and agencies have some form of in-service training for employees, most in administrative and technical skills. Training abroad is also available to employees in many agencies; if it extends over a period of more than two months, it is administered through a training committee within the General Personnel Bureau, thus bringing a degree of coordination to the overseas training programs of the different agencies.

V.B.1. INSTITUTE OF PUBLIC ADMINISTRATION

1. Present Conditions

1.1 The Institute of Public Administration (IPA) carries out in-service training for government employees at its main center and at the two branches in Jiddah and Dammam. The following training for government employees was provided by IPA in the last year of the first plan:

	Number of Trainees
High administrative level	120
Intermediate administrative level	250
Operational administrative level	714
English language program	230
Special programs	50
Total in 1394-95	1,364

1.2 Pre-service training for government work is provided through two-year programs in seven subject areas:

	Number of Trainees
Law studies	46
Financial studies	109
Administrative studies	82
Statistical studies	60
Hospital administration	30
Materials administration	30
Typing[a]	115
Total in 1394-95	472

a A six-month course.

1.3 The IPA's total teaching staff comprises 40 full-time and 15 part-time employees, ot whom 14 are Saudis. Teaching facilities include 17 study halls, 2 language laboratories, and a room for audio-visual aids in the Riyadh center; 6 study halls in Jiddah; and 4 study halls in Dammam.

1.4 The IPA also carries out research and has published 46 studies since its beginning in 1380, as well as 15 manuals and directories.

1.5 The IPA provides consulting service to government agencies in solving organizational and administrative problems. Its Printing and Publications Department provides technical advice to other government agencies as well as support for IPA's other functions.

1.6 The Documentation Center contains more than 25,000 documents on public administration and more than 4,000 reports. The IPA Library contains 28,610 volumes and currently subscribes to 218 periodicals.

1.7 The Administrative Department maintains personnel and financial records, the archives, and maintenance services.

2. Objectives and Policies

2.1 Contribute to the development of the manpower needed by the civil service as a whole.

2.2 Provide training in industrial management and finance for the development of high level management in the industrial and financial sectors.

2.3 Provide training at the pre-service and in-service levels in areas of public administration.

2.4 Provide government agencies with consulting services to solve organizational and administrative problems.

3. Programs and Projects

3.1 High Administrative Training
(Cadre Level 11-15)

3.1.1 Conduct short courses (one to three weeks duration) in the following fields:

- ☆ Project evaluation.
- ☆ Administrative behavior and analysis.
- ☆ Modern public finance and accounting.
- ☆ Budgeting techniques and modern trends.
- ☆ Computer data processing and its utilization.
- ☆ Trends in investment of surplus funds.
- ☆ Manpower planning techniques.
- ☆ Public relations and administrative procedures.
- ☆ Public services administration and coordination.
- ☆ Personnel evaluation techniques.
- ☆ Administration of local offices.

3.1.2 Conduct industrial management training for university graduates to aid development of the industrial sector.

3.1.3 Conduct financial and banking training for university graduates, to prepare them for high-level employment in banking institutions, the Real Estate Development Fund, the Public Investment Fund, credit banks, and the Industrial Development Fund.

3.2 Intermediate Administrative Training
(Cadre Level 6-10)

3.2.1 Conduct the following courses in planning, supervision, and implementation techniques:

- ☆ Public administration techniques.
- ☆ Public relations and administrative behavior.
- ☆ Computer data processing techniques.
- ☆ Applied statistical methods.
- ☆ Administration of local offices and applied techniques.
- ☆ Applied accounting and budgeting procedures.
- ☆ Administration for elementary, intermediate, and secondary school principals.
- ☆ Organizational and management techniques.
- ☆ Planning and development methods and evaluation.
- ☆ Financial auditing.
- ☆ Library management and classification methods.

3.3 Operational Administration Training
(Cadre Level 5 and below)

Conduct training courses at this level at the main center in Riyadh and in Jiddah and Dammam, including the following:

- ☆ Personnel affairs.
- ☆ Clerical skills.
- ☆ Financial affairs.
- ☆ Statistical skills.
- ☆ Secretarial skills.

3.4 English Language Training comprising three stages. Each stage is 330 hours or 22 weeks of training.

3.4.1 Conduct preparatory and special English Language programs for specific government agencies, as the need arises.

3.4.2 Expand the English Language Program and open new programs in the Jiddah and Dammam branches.

3.5 Design and conduct special training courses for particular government agencies, as the need arises.

3.6 Design and conduct mutual training programs for groups within the same professional field among government agencies, as the need arises.

3.7 Table V-7 shows the projected number of trainees in the in-service programs described above and in the pre-service program described below.

3.8 Pre-service Training

Conduct courses for secondary school graduates in the following fields:

- ☆ Local administrative development techniques.
- ☆ Organization and management techniques.

- ☆ Materials management (purchases and storage).
- ☆ Planning and evaluation of development projects.
- ☆ Training methods for use in government agencies.
- ☆ Passports and immigration administration.
- ☆ Computer use and data processing.
- ☆ Library administration.

Table V-7
PROJECTED NUMBER OF PARTICIPANTS IN IPA TRAINING TRAINING PROGRAMS, 1395–1400

	1395 -96	*1396 -97*	*1397 -98*	*1398 -99*	*1399 -1400*
In-service training					
High administrative[a]	170	200	240	300	300
Intermediate admin.	305	455	525	780	780
Operational admin.	795	795	825	1,150	1,250
English language	470	530	610	690	770
Special programs	80	90	100	120	140
Mutual programs	60	70	80	90	100
Total in-service	1,880	2,140	2,380	3,130	3,340
Pre-service					
Enroll	488	555	610	690	770
Graduate	218	240	255	280	320

a Excludes participants in short-term seminar programs.

3.9 Continue both applied and basic research in the following fields:

- ☆ Administrative laws and regulations, and desired changes.
- ☆ Types of administrative reform.
- ☆ Administrative studies in budgeting and civil service manpower.
- ☆ Existing administrative problems and their solutions.
- ☆ Economic, statistical, and behavioral studies.

3.10 Continue to publish texts on public administration subjects applicable to Saudi Arabia.

3.11 Continue to provide consulting services to improve administrative procedures in government agencies.

3.12 Increase the library services by:

- ☆ Increasing the number of volumes to 70,000.
- ☆ Developing the branch IPA libraries in Jiddah and Dammam to the present standard of the Riyadh IPA library.
- ☆ Providing the necessary staff for the three libraries.
- ☆ Providing the necessary equipment and facilities at all three libraries.

3.13 Increase the Documentation Center's services by acquiring all official government documents and relevant documents from other Arab and foreign sources. Issue a periodical directory on new acquisitions to all government agencies and other interested parties.

4. Finance

The annual financial requirements of the Institute of Public Administration are estimated as follows (SR millions):

	Budgeted 1394-95	*1395 -96*	*1396 -97*	*1397 -98*	*1398 -99*	*1399-1400*	*Plan Total*
Recurrent	18.0	15.6	17.7	24.5	31.2	35.4	124.4
Project[a]	–	12.0	56.0	53.0	41.0	–	162.0
Total	18.0	27.6	73.7	77.5	72.2	35.4	286.4

a Only construction of new buildings in Jiddah and Dammam, and the projected new building and expansion of present one in Riyadh.

V.B.2 VOCATIONAL TRAINING

1. Present Conditions

1.1 The Government's vocational training program is designed to train young men in a variety of manual skills useful for jobs in either the private or public sectors.

1.2 The Vocational Training Department within the Ministry of Labor and Social Affairs has five major operational responsibilities:

- ☆ Vocational training centers (see Figure V-1).
- ☆ Pre-vocational training centers.
- ☆ On-the-job training programs within private establishments.
- ☆ Program evaluation.
- ☆ Purchasing.

1.3 The four vocational training centers already established at the start of the first plan period — in Riyadh, Jiddah, Dammam, and Buraydah — had then a total enrollment of approximately 760. During the first plan period two more centers were added — in al-Jawf and Abha — and by the start of the second Plan, the six centers are expected to have a total enrollment of nearly 1,800. Table V-8 shows the distribution of these trainees among the different trades. Most of these trade courses are 18 months in duration and operate 8 hours per day 6 days per week.

1.4 There were no pre-vocational training centers in 1390, but three had been established by 1394, under the direction of UNICEF. The 40-week courses offered in these centers in Riyadh, Jiddah, and Dammam aim to provide boys 14 to 17 years old with basic skill training in industrial or commercial trades. The expected number of trainees in the three centers by the end of the first plan is as follows:

Industrial section:	192
Commercial section:	48
Total	240

1.5 During the first plan a special department for on-the-job training was established to collaborate with private establishments in promoting training programs within industrial and business firms.

1.6 The Programs and Evaluation Department develops uniform standards for all the training centers, and has a continuing responsibility for evaluating the training programs and developing curricula and staffing patterns.

1.7 The newly formed Central Purchasing Department purchases and stores training materials for all the training centers.

1.8 Table V-9 shows the staff (excluding support) in departments at the beginning of the Plan. One of the major problems in operating the vocational training program has been a lack of qualified staff.

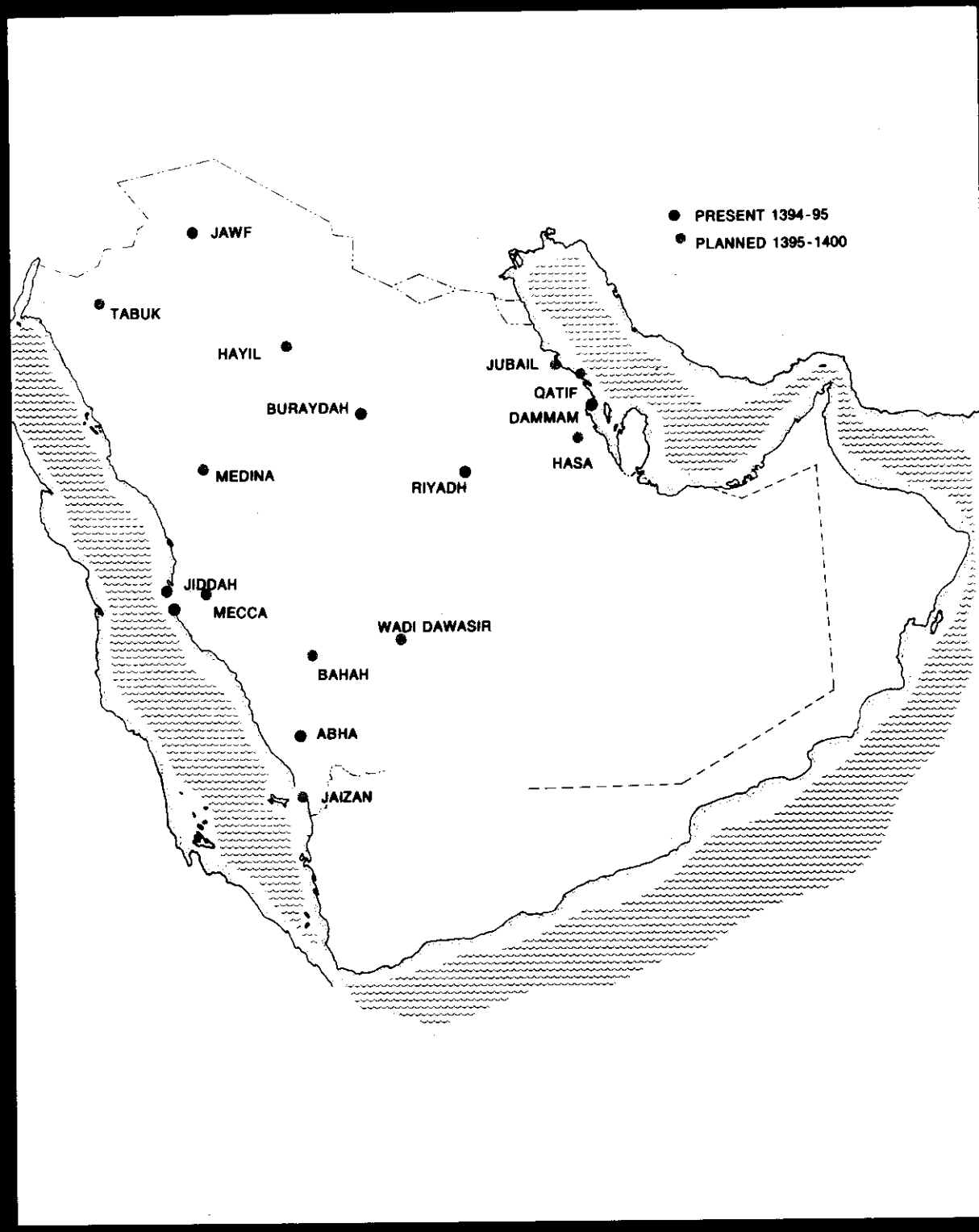

PRESENT 1394-95
PLANNED 1395-1400
JAWF
TABUK
HAYIL
BURAYDAH
MEDINA
RIYADH
JUBAIL
QATIF
DAMMAM
HASA
JIDDAH
MECCA
WADI DAWASIR
BAHAH
ABHA
JAIZAN

Table V-8
EXPECTED NUMBER OF ENROLLEES IN VOCATIONAL TRAINING CENTERS AT BEGINNING OF SECOND PLAN, BY TRADE

Trade	*Number of Trainees*	*Percentage Distribution*
Mechanical		
General mechanics	165	9.2
Automotive mechanics	218	12.2
Diesel mechanics	60	3.4
Subtotal, mechanical	443	24.7[a]
Electrical	250	14.0
Carpentry	200	11.2
Welding	161	9.0
Building	150	8.4
Plumbing	130	7.3
Sheet metal	121	6.8
Refrigeration	100	5.6
Tailoring	60	3.4
Printing	60	3.4
Radio and television	40	2.2
Office machines	35	2.0
Painting	16	0.9
Hairdressing	15	0.8
Upholstering	10	0.6
Total	1,791	100.0[a]

a Numbers do not add due to rounding.

Table V-9
STAFF IN VOCATIONAL AND PRE-VOCATIONAL TRAINING PROGRAMS BY OCCUPATIONAL GROUP IN 1395

	Managers	*Professionals*	*Instructors*
Vocational Training Centers	6	68	303
Pre-vocational Training Centers	4	12	34
Programs and Evaluation Department	1	9	-
Central Purchasing Department	1	–	-
On-the-job Training Department	1	1	-
Total	13	90	337

2. Objectives and Policies

2.1 The basic goal of the Kingdom's vocational training in the period 1395-1400 is to rapidly increase the capacity of the training programs according to national development priorities while establishing a recognized system of skills' certification.

2.2 The planned increases in training capacity for skilled and semi-skilled workers are shown in Figure V-2, and described below as specific objectives.

2.2.1 Provide combined literacy and skill training (Industrial Induction Training) in one year of day and evening courses for an estimated 8 percent of new labor-force entrants with less than elementary completion during the plan period. This calls for an annual capacity of about 6,200 by 1399-1400 and would provide training for approximately 17,000 entrants into the labor force during the Plan. Skill training should be divided between the construction industry crafts (66 percent) and the metalworking crafts (34 percent).

2.2.2 Provide craft training on a full-time basis — courses will average one year — to supply 17 percent of the increase in the demand by the private sector for semi-skilled workers. A capacity of 8,000 places is required by 1399-1400 and would provide training for a total about 28,000 suitable applicants during the Plan — a seven-fold increase over the first plan total, as shown in Figure V-3.

2.2.3 Provide part-time training (Upgrading Training) at vocational training centers to reach at least half of one percent of persons already employed and train them to higher skill levels. Accommodation for 1,900 trainees is needed by 1399-1400, and would upgrade the skills of 3,150 employees during the Plan.

2.2.4 Expand the coverage of the on-the-job training system to reach at least 5 percent of the skilled and semi-skilled labor force. Annual training should cover about 12,000 employees by 1399-1400 and would reach a total of 35,000 employees over the plan period.

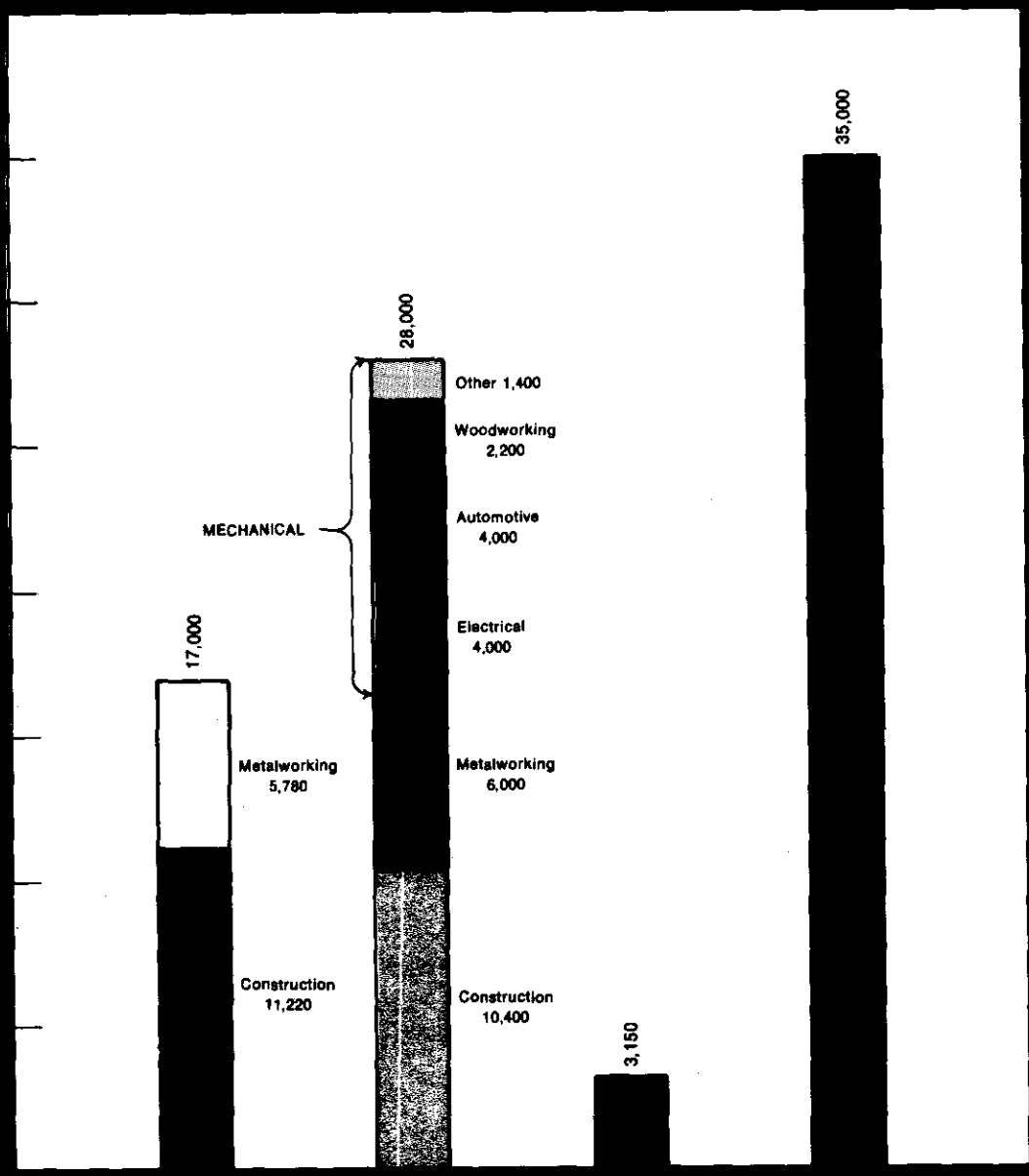
2.2.5 Achieve rapid establishment of the required new and expanded vocational training centers by adopting the turn-key approach to design, construction, and equipment of the centers.

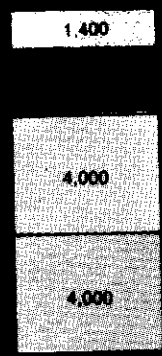
2.3 To establish training standards at all levels — semi-skilled, skilled, and advanced — an authoritative system of certification will be developed so that certificates issued will be recognized throughout the Kingdom.

2.4 The above objectives will be attained by policies designed to develop and coordinate the potentials of the Ministry of Labor's vocational training and labor functions on the one hand and those of employers in the public and private sectors on the other, so that all will be concerned with improving the employability and working skills of the Saudi manual labor force. Included in these policies are the following.

2.4.1 Combine vocational training with the employment service functions of the labor offices to ensure that vocational training programs are integrated with both (a) the capabilities and aspirations of the labor force, and (b) the needs of industry.

2.4.2 Provide within the rationalized overall system a program for training of management and instructional staff that will lead to the development of a cadre of managers and instructors with industrial experience.


17,000
Metalworking
5,780
Construction
11,220
28,000
MECHANICAL
Other 1,400
Woodworking
2,200
Automotive
4,000
Electrical
4,000
Metalworking
6,000
Construction
10,400
3,150
35,000


1,400
4,000
4,000


800
700

2.4.3 Overcome problems of staffing, operation, and trainee motivation by providing incentive allowances, dormitories, dining and recreational facilities, transportation, and the previously-mentioned, widely-recognized certificate upon completion of a training program.

3. Programs and Projects

3.1 Increase output of the different vocational training programs, as follows:

	1395-96	*1396-97*	*1397-98*	*1398-99*	*1399-1400*	*Plan Total*
Industrial induction	–	400	4,475	5,500	6,175	16,550
Craft	2,170	2,590	7,330	7,740	7,960	27,790
Upgrading	–	450	900	900	900	3,150
On-the-job	2,000	4,000	7,000	10,000	12,000	35,000
Instructor training						
New instructors	–	80	90	90	90	350
In-service instructors	100	120	400	680	700	2,000

3.2 Establish vocational training centers in accordance with the following program.

3.2.1 Build new 1,000-capacity vocational training centers, with dormitories, for multi-purpose training in Riyadh, Jiddah, and Dammam (1395-97).

3.2.2 Convert existing vocational training centers into upgrading centers, without dormitories, with a capacity of 700 at Riyadh and 600 at Jiddah and Dammam (1396-97).

3.2.3 Build a new 400-capacity instructor training center, with dormitories, in Riyadh for instructor development (1395-97).

3.2.4 Expand the existing vocational training center at Buraydah to a capacity of 500 with dormitories, for multi-purpose training (1395-97).

3.2.5 Build a new 500-capacity vocational training center in Jubail, with dormitories, for multi-purpose training (1396-98).

3.2.6 Expand the existing vocational training centers in Abha and al-Jawf to a capacity of 500 and 300 respectively, with dormitories, for multi-purpose training (1395-97).

3.2.7 Build 11 new 300-capacity vocational training centers, with dormitories, for multi-purpose training in Mecca, Medina, Hayil, al-Hasa, al-Bahah, Wadi ad-Dawasir, Tabuk, Qatif, Jaizan and two other locations depending upon industrial development (1395-98).

3.2.8 Obtain and equip 10 mobile training centers, with a class-capacity of 20 each, for industrial-induction training in the construction and metal trades (1395-97).

3.3 Evaluate the present Pre-vocational Training system and modify it according to the results of this evaluation (1395-96).

4. Finance

4.1 The annual financial requirements of the vocational training programs (excluding pre-vocational training) within the Ministry of Labor and Social Affairs are estimated as follows (SR millions):

	Budgeted 1394-95	*1395 -96*	*1396 -97*	*1397 -98*	*1398 -99*	*1399-1400*	*Plan Total*
Recurrent	45.4	98.9	174.1	340.9	370.9	390.9	1,375.7
Project	43.2	370.5	555.5	28.0	–	–	954.0
Total	88.6	469.4	729.6	368.9	370.9	390.9	2,329.7

V.B.3. GOVERNMENT DEPARTMENTAL TRAINING

1. Present Conditions

1.1 The Institute of Public Administration is the principal organization geared to training civil servants, but many other ministries and agencies operate departmental training programs at various levels.

1.2 Most departmental training is in administrative or technical skills. It takes place both within the Kingdom and abroad. Training abroad is coordinated through a Training Committee within the General Personnel Bureau if the program is longer than two months duration. About 100 government civil servants are approved for training abroad annually through the General Personnel Bureau.

1.3 There is no organization concerned with maintaining records on the status, content, variety, and utilization of department training programs. Moreover, statistics are required on the inputs, process, and outputs of the wide range of government departmental training programs if the productivity of the government employees is to rise. There is a need for a follow-up of trainees in most government agencies.

2. Objectives and Policies

2.1 The primary objective of development in this area of training during the plan period is to increase the effectiveness of the governmental administrative system by improving productivity and the managerial-technical skills of Saudi government employees.

2.2 Policies to achieve the objective include the following.

2.2.1 Utilize the common training facilities provided by the Institute of Public Administration and other government agencies to maximize the efficiency of in-service training in similar training subjects.

2.2.2 Make available opportunities for in-service training to all government workers throughout their careers.

2.2.3 Increase the labor productivity through training at all levels but give priority to the middle and upper managerial and technical levels.

2.2.4 Provide incentives to employees for participating in training programs and recognition upon successful completion.

3. Programs and Projects

3.1 Develop a complete system of information on departmental training activities through the planned manpower training organization (1395-97).

3.2 Coordinate through that organization the expansion and improvement of current training programs.

3.3 Implement the training programs by the various agencies listed below:

3.3.1	Agriculture	Ministry of Agriculture and Water. - Short courses at the training centers - On-the-job training. Agricultural Bank - Administrative procedures - Technical courses in agriculture production and financial management.
3.3.2	Industry	Standards Organization Department of Meteorology Electric Services Department Management program Technical and professional program Clerical program Ministry of Petroleum and Mineral Resources Aerial Survey Department.
3.3.3	Commerce	Saudi Arabian Monetary Agency. Saudi Credit Bank.
3.3.4	Public administration	Institute of Public Administration High Administrative: - Short courses and seminars - Industrial management - Financial and banking Intermediate Administrative: - Planning - Supervision - Implementation techniques. Operational Administrative: - Personnel and clerical skills at all three centers. - English Language training - Special programs - Mutual training programs. Central Department of Statistics National Computer Center - Computer operations - Computer maintenance.

3.3.5	Education	Ministry of Education (Boys' Education) – Up-grading of elementary teachers – On-the-job teacher training – Special study programs inside Kingdom and abroad. Girls' Education Directorate – Up-grading of elementary teachers. Riyadh University, King Abdul Aziz University, and University of Petroleum and Minerals – Faculty development and up-grading.
3.3.6	Health	Ministry of Health – Health institutes – Nursing schools – Model socio-medical training centers. Saudi Red Crescent Society.
3.3.7	Services	Ministry of Labor and Social Affairs Community Development training center, Labor Affairs training program: – Labor inspection – Labor health and safety services – Labor services – Labor disputes settlement – Labor information and general administration. General Presidency for Youth Welfare – Youth Welfare athletic program – Referee training – Activity leader training. Institute of Training for Municipal Affairs – Building and construction supervision – Basic town planning – Public health and sanitation – Mechanics. Ministry of Information, Broadcast Training Institute – Television and radio (technical and administrative) – Production and research activities.

	Ministry of Communications Postal Services training centers Telecommunications training program: - Managerial - Technical - Craft.
3.3.8 Transportation	Roads (Ministry of Communications) - Courses for maintenance technicians and operators of heavy equipment - Courses for technical and administrative personnel. Ports (Ministry of Communications) - Training programs in Dammam and Jiddah Civil Aviation Department - Aeronautical Training Center. SAUDIA - Organization and Manpower Development - Technical services - Other services.

4. Finance

The financing for government departmental training is included (usually as recurrent costs) in the estimated financial requirements of the agencies' plans described elsewhere.

C. LABOR AFFAIRS

The labor affairs program of the Ministry of Labor and Social Affairs includes:

- ☆ Labor law
- ☆ Labor services
- ☆ Labor information
- ☆ Labor training.

The first three subjects are discussed below; labor training has been described earlier in this chapter.

1. Present Conditions

1.1 Under the Labor and Workmen Law, which came into effect in 1389, First Instance Committees for the settlement of labor disputes are operating in Jiddah, Riyadh, and Dammam; three more committees are proposed but are not yet functional owing to the lack of qualified staff. The High Committee for the settlement of labor disputes, located in Riyadh, makes the final decisions on all disputes.

1.2 Labor offices are carrying out many functions, including inspection, employment services, statistics, issuance of permits to non-Saudi workers, and mediation of labor disputes. Again, the capability to perform these functions is limited by a lack of qualified manpower; near the end of the first plan period, about 23 percent of the allocated posts in labor offices were vacant.

1.2.1 Labor offices are located in 25 areas as shown in Figure V-4.

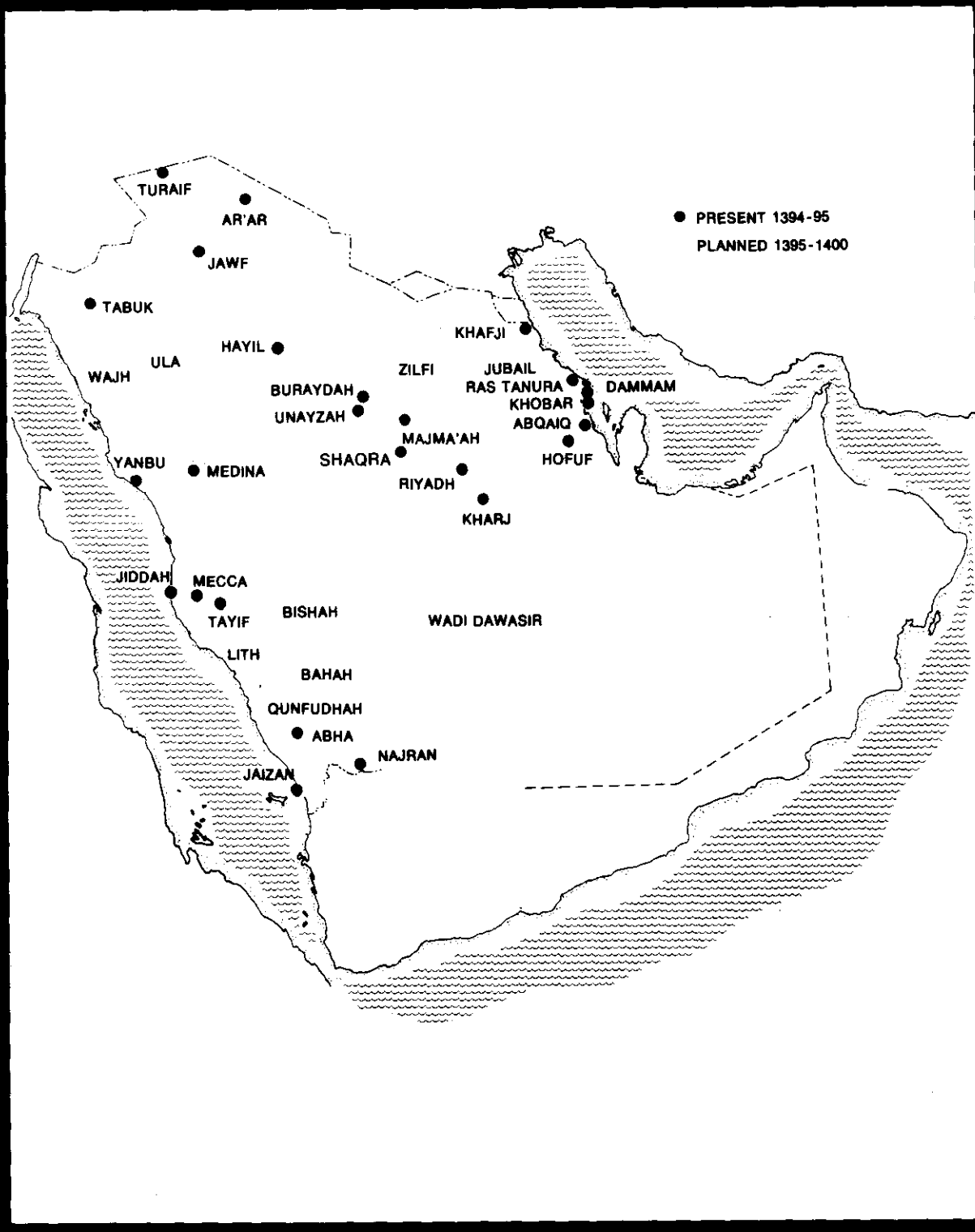
1.2.2 A Labor Inspection Department within each main labor office operates in the areas of social welfare, social services, and safety and health within the working environment. Branch labor offices usually have a labor inspector.

1.2.3 Employment services are provided for both the job-seeker and employer at the labor offices.

1.2.4 The labor offices issue a work permit to a foreigner if a Saudi is not available for the particular job, following approval by the Ministry of Labor and the Ministry of Interior. Annual residence permits are reviewed by the labor offices before renewal to ensure that foreigners are not competing with Saudis for the same jobs.

1.2.5 Statistical work to date includes:

- ☆ Survey of Employees in Private Establishments — data gathered at the


PRESENT 1394-95
PLANNED 1395-1400
TURAIF
AR'AR
JAWF
TABUK
HAYIL
ULA
WAJH
KHAFJI
ZILFI
JUBAIL
RAS TANURA
DAMMAM
KHOBAR
ABQAIQ
BURAYDAH
UNAYZAH
MAJMA'AH
SHAQRA
HOFUF
YANBU
MEDINA
RIYADH
KHARJ
JIDDAH
MECCA
TAYIF
BISHAH
WADI DAWASIR
LITH
BAHAH
QUNFUDHAH
ABHA
NAJRAN
JAIZAN

beginning of 1392-93, not yet published.

- ☆ Survey of Foreigners Approved for Visas in Private Establishments — data gathered on an annual basis, not yet published.

1.3 A radio program is broadcast weekly from Riyadh and Jiddah to provide information on the labor law and rights of workers and employers.

2. Objectives and Policies

2.1 Contribute to the development of the labor force by continuing to enforce the provisions of the Labor and Workmen Law and by amending and elaborating it where necessary to create better working conditions and a more productive work environment.

2.2 Improve the labor market by providing more and better information about job opportunities to employees and about availability of manpower to employers.

2.3 Provide a better understanding of the Kingdom's labor situation by continuing the collection and dissemination of labor statistics.

3. Programs and Projects

3.1 Labor Legislation

Modify the Labor and Workmen Law after a comprehensive review, and issue resolutions to elaborate the various sections of the Labor Law (1395-1400).

3.2 Labor Conditions

3.2.1 Implement a study of work regulations appropriate for business establishments of 20 or more employees (1395-1400).

3.2.2 Increase inspection visits to establishments.

3.2.3 Improve the Labor Health and Safety Services by the following actions:

- ☆ Expand the labor health laboratory in Riyadh (1395-96).
- ☆ Construct new laboratories in Jiddah and Dammam (1395-96) and equip them fully for operation.
- ☆ Establish a labor protection and security exhibition in each laboratory (1396-97).
- ☆ In collaboration with the Saudi Red Crescent Society, train workers within industrial establishments in first aid techniques.
- ☆ Issue bulletins and films on labor health and safety.

3.3 Labor Services

3.3.1 Develop an efficient process to register and certify all Saudis seeking employment.

3.3.2 Accelerate the processing of foreign work-permits.

3.3.3 Establish nine new branch labor offices, in the following areas:

☆ al-Bahah and Jubail:	1395-96
☆ Bishah and al-Wajh:	1396-97
☆ az-Zilfi and al-ʾUla:	1397-98
☆ al-Qunfudhah and al-Lith:	1398-99
☆ Wadi ad-Dawasir:	1399-1400

3.3.4 Establish two new First Instance Committees, in Medina and Mecca, and strengthen the existing committees.
3.3.5 Implement a public media series on labor issues in addition to the present radio program.

3.4 Labor Information
3.4.1 Implement a survey of the social services provided by business in the Kingdom, beginning with the petroleum companies, cement companies, and electricity companies (1396-98).
3.4.2 Complete the job classification system for the private sector begun during the first plan (1395-96).
3.4.3 Undertake two surveys of employees in private establishments to compare wage levels, occupational structure, and working hours in 61 cities and towns (1395-96 and again in 1398-99).
3.4.4 Cooperate with the Central Department of Statistics in undertaking two labor force surveys (1396-97 and again in 1399-1400).
3.4.5 Undertake annual surveys of foreign workers in the private sector by analyzing the work permits issued by the Ministry of Labor; in addition, analyze immigration data from the Ministry of Interior on the types of jobs and locations of all foreigners entering the Kingdom.
3.4.6 Cooperate with the Central Department of Statistics in undertaking annual wage surveys by occupational group and economic activity.
3.4.7 Issue annual statistical reports from all the branch labor offices and main offices on levels of employment, numbers of foreign workers, labor problems, occupational accidents, and other matters.

3.5 General Administration
3.5.1 Construct new buildings for the existing rented labor offices as follows:

☆ Mecca and al-Khobar:	1395-96
☆ Abha and Abqaiq:	1396-97
☆ Hofuf and Tabuk:	1397-98

☆ Tayif and Hayil: 1398-99
☆ Buraydah: 1399-1400

The new labor offices should be part of the vocational training center complex and be located on the same sites if possible.

3.5.2 Add a wing to the Ministry of Labor offices in Riyadh (1396-98).

3.6 Training

3.6.1 Training programs are planned for the 1395-1400 period as shown in Table V-10.

Table V-10
LABOR AFFAIRS TRAINEES, 1395-1400

	Location of Training		
Program	*Saudi Arabia*	*Abroad*	*Total*
Labor inspection	15	33	48
Labor health and safety services	20	18	38
Labor services	60	-	60
Labor disputes settlement	75	-	75
Labor information and general administration	165	12	177
Total	335	63	398

4. Finance

The annual financial requirements of the Labor Affairs portion of the Ministry of Labor are estimated as follows (SR millions):

	Budgeted 1394-95	*1395 -96*	*1396 -97*	*1397 -98*	*1398 -99*	*1399-1400*	*Plan Total*
Recurrent	23.7	37.8	41.6	45.4	48.7	50.8	224.3
Project[a]	5.1	1.8	4.7	4.4	1.4	0.7	13.0
Total	28.8	39.6	46.4	49.8	50.1	51.5	237.3

a Includes only construction costs of planned labor offices and a new wing for the Ministry of Labor and Social Affairs building.

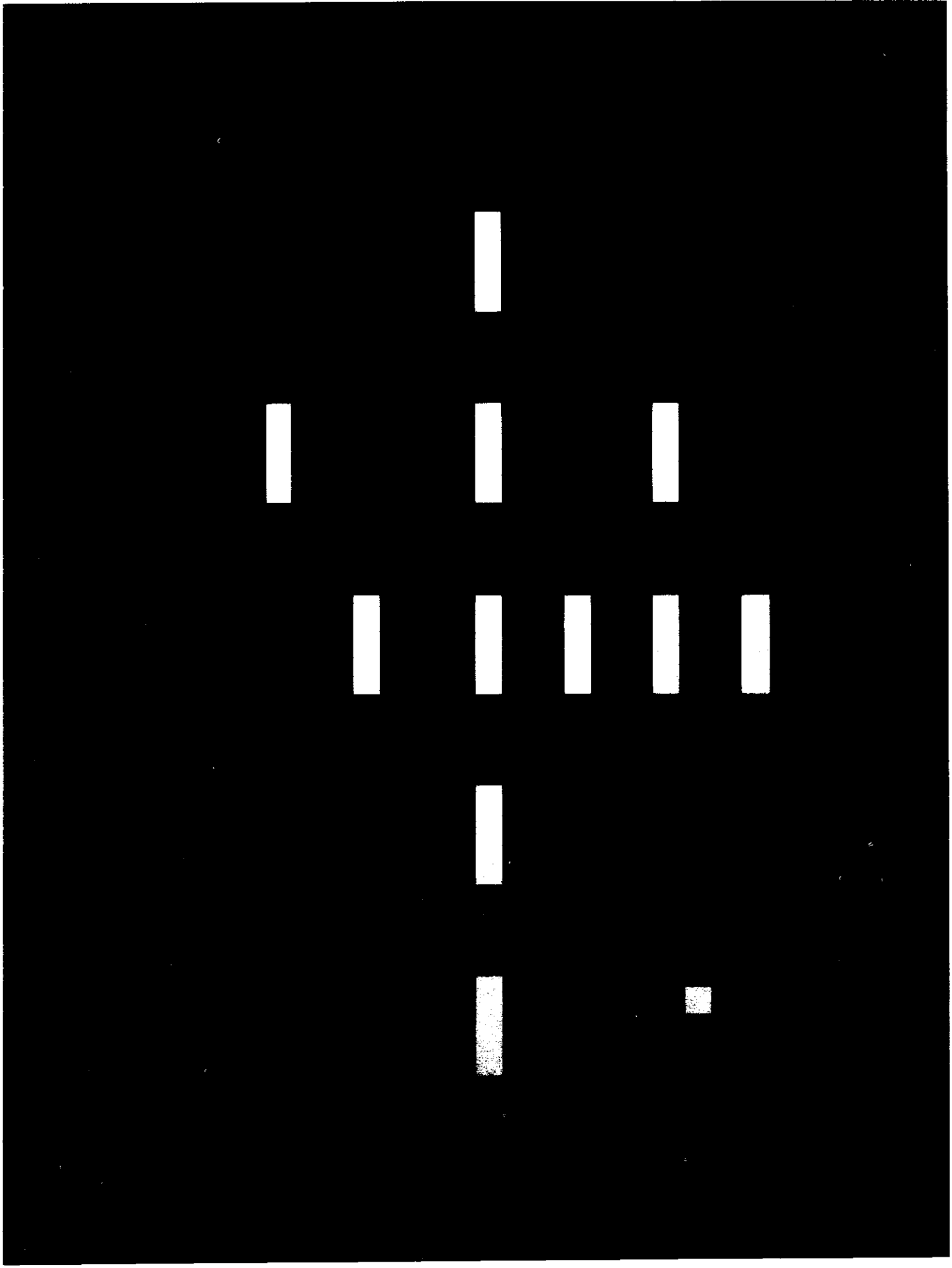
D. EDUCATION

The near-term and long-term roles that education will play in national development are reflected in the following plans of the agencies with primary responsibility for education in the Kingdom. The structure of the national education system envisioned by the end of the plan period is shown in Figure V-5.

Plans for boys' and girls' education include teacher training, technical education, special education, and adult education. However, general programs that lead to a degree in the academic or professional disciplines are grouped in the section on higher education.

The organization of the presentation follows a broad classification of general and religious education; however, this must not be interpreted as implying that religion is excluded from consideration in the general education programs. On the contrary, the intrinsic values of Islam are inherent in all the educational programs described.

A statistical summary of data on education appears in Table V-15 at the end of this section.



V.D.1. BOYS' EDUCATION

V.D.1.1 MINISTRY OF EDUCATION

1. Present Conditions

1.1 Over a half-million boys are enrolled as full-time students in Ministry of Education schools for elementary, intermediate, secondary, teacher training, and technical education as of 1394-95. This number is within 5 percent of the goal of the first development plan.

1.2 The total of 2,435 elementary and intermediate schools in operation in 1394-95 is 123 more than the plan target of 2,312 schools for these levels. Secondary schools, 65 as of 1394-95, are as forecast in the plan, but the 16 teacher training institutes and 4 industrial education schools are both below the plan targets of 24 and 10, respectively.

1.3 Although enrollment and schools are at or close to plan targets, there has been less success in meeting the requirements for teachers. The number of instructors in every level and type of education is almost 14 percent below that planned for 1394-95. However, considerable effort is being directed toward teacher development through programs such as the Center for Science and Mathematics, the teacher upgrading centers, and the special English Language program. In addition, planning for the establishment of teacher training at the junior college level is nearing completion.

1.4 The industrial education program in the secondary level technical institutes has not progressed at the pace anticipated in the first development plan; as already noted, only four of the ten proposed institutes are in operation and enrollments prior to 1394-95 have been well below plan projections.

1.5 The commercial education program, initiated in 1391-92, has proved highly successful, with enrollment growing from 134 to 715 students in 1394-95, well above plan estimates.

1.6 On the other hand, the agricultural technical school at Buraydah is still under construction and no work has been done on other agricultural institutes that were scheduled in the plan.

1.7 The pilot educational television project, which was to be in operation by the 1393-94 school year, has only moved through the planning stage and arrangements for execution have yet to be made.

1.8 The school meal program was initiated as planned and its application on a pilot basis has provided the background and experience for substantial expansion during the next plan.

1.9 Work on the national school design project has been completed, reviewed, and modified to provide the Ministry with a flexible planning tool for school construction and development.

1.10 Attention is being focused on a number of problem areas that have become

apparent with the Kingdom's rapid growth in education and the changing economic environment. Studies concerning curriculum, school attendance patterns, educational technology and information systems are either now under way or under negotiation. Concurrently, the Ministry is reviewing a comprehensive report and array of projects for educational development prepared by the World Bank to determine the degree to which they can be implemented.

2. Objectives and Policies

The following objectives and policies are in keeping with the announced intention to assure each Saudi boy a quality education throughout his school career. Education will be available for all boys who reach school-going age as well as opportunities for all to continue their education through the secondary level.

2.1 Pre-elementary Education

Review the current program of pre-elementary education to determine appropriate courses of action regarding continuation, expansion, and sponsorship.

2.2 Elementary Education

2.2.1 Enroll in 1395-96 all boys aged 7 and 8 in school and 90 percent of the boys aged 6. Beginning in 1396-97 and each year thereafter, enroll all boys aged 7 not in school and 90 percent of the boys aged 6.

2.2.2 Increase the number of schools and classes, with emphasis on the rural areas.

2.2.3 Improve the promotion rates by reducing both the incidence of repeating and drop-outs in all grades.

2.2.4 Eliminate overcrowding in all classes.

2.3 Intermediate Education

2.3.1 Maintain the capability of enrolling all elementary school graduates who would be expected to apply for admission (up to 95 percent of graduates by the end of the plan).

2.3.2 Assure that opportunities for intermediate education are available in rural as well as urban areas.

2.3.3 Improve the promotion rates by reducing both the incidence of repeating and drop-out in all grades.

2.3.4 Revise the curriculum to provide a broader base for further education or training.

2.3.5 Evaluate the modern intermediate school experience in Saudi Arabia.

2.4 Secondary Education

2.4.1 Continue to enroll at least 50 percent of the intermediate school graduates as well as all other applicants with appropriate qualifications.

2.4.2 Continue the program of opening schools at new locations (as well as in communities with schools) to expand the availability of secondary education.
2.4.3 Raise the graduation rate to an average of 90 percent by the third year of the plan.
2.4.4 Revise the curriculum in keeping with modern educational practices and objectives.
2.4.5 Investigate the applicability of the comprehensive approach to the structure of secondary education.

2.5 Teacher Training
2.5.1 Enable the teacher training program to meet all requirements for elementary teachers through expansion of the secondary level institutes and the establishing of a junior college system for teacher training.
2.5.2 Increase opportunities for specialized teacher training with emphasis on subjects of critical need.
2.5.3 Provide continuing educational opportunities for assigned teachers.

2.6 Technical Education
2.6.1 Expand the industrial education program at the secondary level to achieve the capability of graduating at least 1,600 students annually by 1399-1400.
2.6.2 Introduce new fields of study and specialization in keeping with the Kingdom's manpower requirements associated with industrial growth.
2.6.3 Increase student participation in the Higher Industrial Institute.
2.6.4 Expand the commercial education program at the secondary level to achieve the capability of graduating at least 900 students annually by 1399-1400.
2.6.5 Continue to provide evening programs in commercial subjects.
2.6.6 Establish a Higher Commercial Institute in 1395-96.
2.6.7 Initiate a secondary-level program in agricultural education in 1396-97.

2.7 Special Education
2.7.1 Expand and improve educational services for the blind, the deaf, and the mentally retarded.
2.7.2 Broaden public understanding of the limitations and potentials of the handicapped person.

2.8 Holy Qur'an Studies
2.8.1 Expand the elementary and intermediate level programs for studies of the Holy Qur'an.
2.8.2 Introduce in 1395-96 a secondary level program for studies of the Holy Qur'an.

2.9 Adult Education and Literacy

2.9.1 Expand opportunities for part-time education at the intermediate and secondary levels.

2.9.2 Expand the ongoing literacy program to reach uneducated adults and elementary school drop-outs in all areas of the Kingdom.

2.9.3 Organize summer campaigns to provide literacy training to nomadic and rural groups.

2.9.4 Initiate an incentive program to stimulate participation in literacy classes.

2.10 Services

2.10.1 Expand the school meal program at the elementary level and introduce the program on a pilot basis in selected intermediate schools.

2.10.2 Develop the school transportation system to meet the needs of the rural school expansion program.

2.10.3 Expand the health service program for students and staff.

2.10.4 Develop a guidance program to assist students in their academic choices.

2.10.5 Expand the youth development program of cultural, social, and athletic activities for boys.

2.11 Educational Technology

2.11.1 Establish a National Center for Educational Technology for the development, testing, production, and distribution of classroom teaching aids; curriculum research; and equipment and program testing.

2.11.2 Initiate the pilot educational television project.

2.11.3 Introduce a simplified language-laboratory system for English instruction at the secondary level.

2.11.4 Develop an experimental audio system for Arabic language instruction in elementary schools.

2.11.5 Design and introduce combined facilities classrooms (theory and practice) on a pilot basis at the secondary level.

2.11.6 Establish experimental schools for testing innovations in educational approaches and equipment.

2.11.7 Utilize mobile and prefabricated classrooms in the school expansion program.

2.12 Educational Quality

2.12.1 Expand the teacher guidance and the inspector programs to improve teaching practices and ensure comprehensive coverage of the curricula.

2.12.2 Provide opportunities to teachers and administrators for upgrading, refresher courses, and other forms of professional development.

2.12.3 Publish and distribute a periodical covering research findings of relevance to the educational system of the Kingdom.
2.12.4 Review the examination system and its effectiveness as an instrument for student education.
2.12.5 Encourage an atmosphere of mutual cooperation between the schoolteacher and the administrator in resolving educational problems.
2.12.6 Ensure that all schools have the necessary classroom equipment, instructional aids, texts, and student supplies, and that buildings include all required utility services.

2.13 Administration and Operations
2.13.1 Modify the departmental organzation of the Ministry to provide a more efficient structure for the management of educational affairs.
2.13.2 Simplify administrative procedures and extend the delegation of responsibility.
2.13.3 Decentralize control of school operations through the reorganization of the existing system of school districts.
2.13.4 Develop a responsive information storage and retrieval system.
2.13.5 Establish a functional internal accounting and budgeting system.

2.14 Staffing
2.14.1 Increase the number of teachers to maintain average teacher:class ratios of 1.25:1 in elementary, 1.80:1 in intermediate, and 1.93:1 in secondary schools and 2.14:1 in secondary-level teacher training. Ratios in other programs will vary according to the nature of the instruction, from 1.50:1 for elementary Qur'an to 2.66:1 for special teacher training programs.
2.14.2 Provide schools with necessary administrative and clerical staff to relieve teachers from non-instructional assignments.
2.14.3 Expand all staff sections and departments of the Ministry in keeping with the administration and technical support required by the educational development program.
2.14.4 Increase the district office staffs in keeping with their responsibility for supervision of school programs.

2.15 Facilities
2.15.1 Complete construction of currently authorized school building projects with minimum delay.
2.15.2 Initiate a comprehensive building program for additional schools at all levels to increase the proportion of government-owned school buildings to more than 59 percent by the end of the Plan.
2.15.3 Undertake a program of surveys and studies to support the expanding school construction program.

2.15.4 Construct administrative and technical office buildings and annexes for the Ministry to replace rented facilities and meet requirements for expansion.
2.15.5 Replace rented space and provide additional offices for the district administration.
2.15.6 Build a system of health units to serve all educational districts.
2.15.7 Construct facilities for the National Center for Educational Technology and the pilot educational television center.
2.15.8 Build a system of scout centers, student hostels, and youth development instruction centers.
2.15.9 Provide for the regular maintenance and repair of existing facilities — government-owned and rented — during the plan period.

3. Programs and Projects

The following programs and projects represent Ministry of Education approaches at this time to the achievement of the above objectives. However, the schedules and scope of many of these programs will undoubtedly be modified to reflect expansion and acceleration in light of recommendations made by international agencies, such as the World Bank and UNESCO, and of private consulting organizations.

3.1 Pre-elementary Education

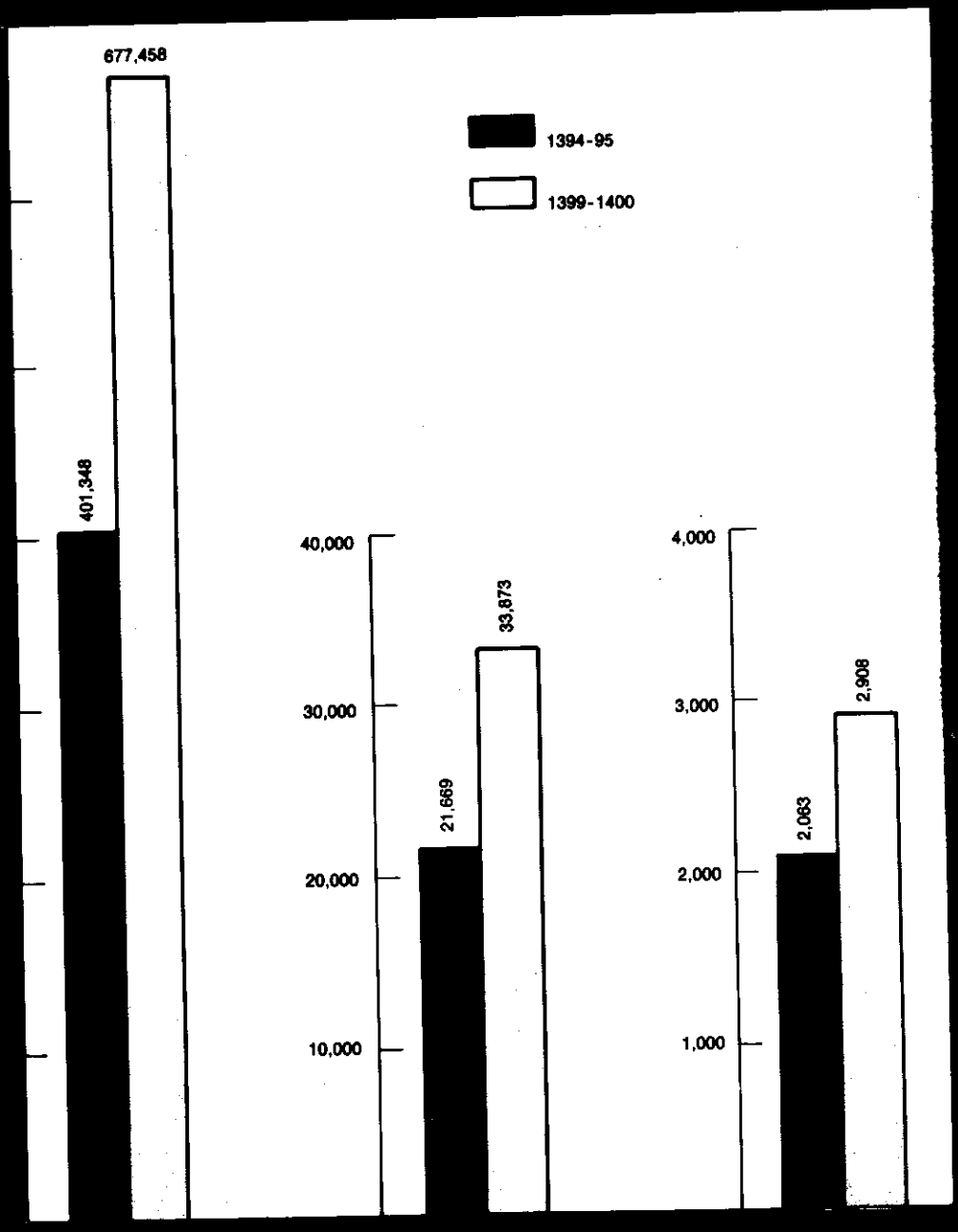
Initiate a study in 1395-96 of the kindergarten system with recommendations for action provided by 1397-98.

3.2 Elementary Education

The scope of the plan for boys' elementary education is indicated in Figure V-6.
3.2.1 Provide for the following annual intake of new pupils to assure enrollment of all 6- and 7-year-old boys in school:

1395-96	126,967
1396-97	104,425
1397-98	107,557
1398-99	110,780
1399-1400	114,103.

3.2.2 Increase the number of schools from 2,063 in 1394-95 to 2,908 in 1399-1400, opening 596 of the 845 new schools in rural areas. Increase the total number of classes from 16,729 to 27,098 during the same period, adding 6,075 classes to existing schools (the remaining 4,294 classes will be in the new schools).


677,458
401,348
1394-95
1399-1400
40,000
30,000
20,000
10,000
33,873
21,669
4,000
3,000
2,000
1,000
2,908
2,063

3.2.3 Initiate four research projects — concerning the elementary curriculum, non-enrollment and repeating, slow learners, and drop-outs — beginning in 1395-96, and complete the evaluation of the examination system to achieve, as a minimum, the following improvement in promotion rates by 1399-1400:

	Grade 1	*Grade 2*	*Grade 3*	*Grade 4*	*Grade 5*	*Grade 6*
1394-95	71%	79%	79%	68%	73%	72%
1399-1400	82%	86%	86%	77%	83%	84%

3.2.4 Maintain an average of 25 students per class to help assure elimination of overcrowding in all classes and grades over the plan period.

3.3 Intermediate Education

Figure V-7 summarizes the scope of the intermediate level growth.

3.3.1 As a minimum enroll the following percentages of elementary school graduates during the plan period:

1395-96	91% of elementary graduates of 1394-95
1396-97	92% of elementary graduates of 1395-96
1397-98	93% of elementary graduates of 1396-97
1398-99	94% of elementary graduates of 1397-98
1399-1400	95% of elementary graduates of 1398-99.

3.3.2 Open 224 new intermediate schools, 111 in rural and 113 in urban areas during the plan period. This will increase the number of intermediate schools from 372 in 1394-95 to 596 by the end of the Plan.

3.3.3 Improve methods of instruction, raise standards of teaching and take other appropriate action to achieve as a minimum the following improvement in promotion rates by 1399-1400:

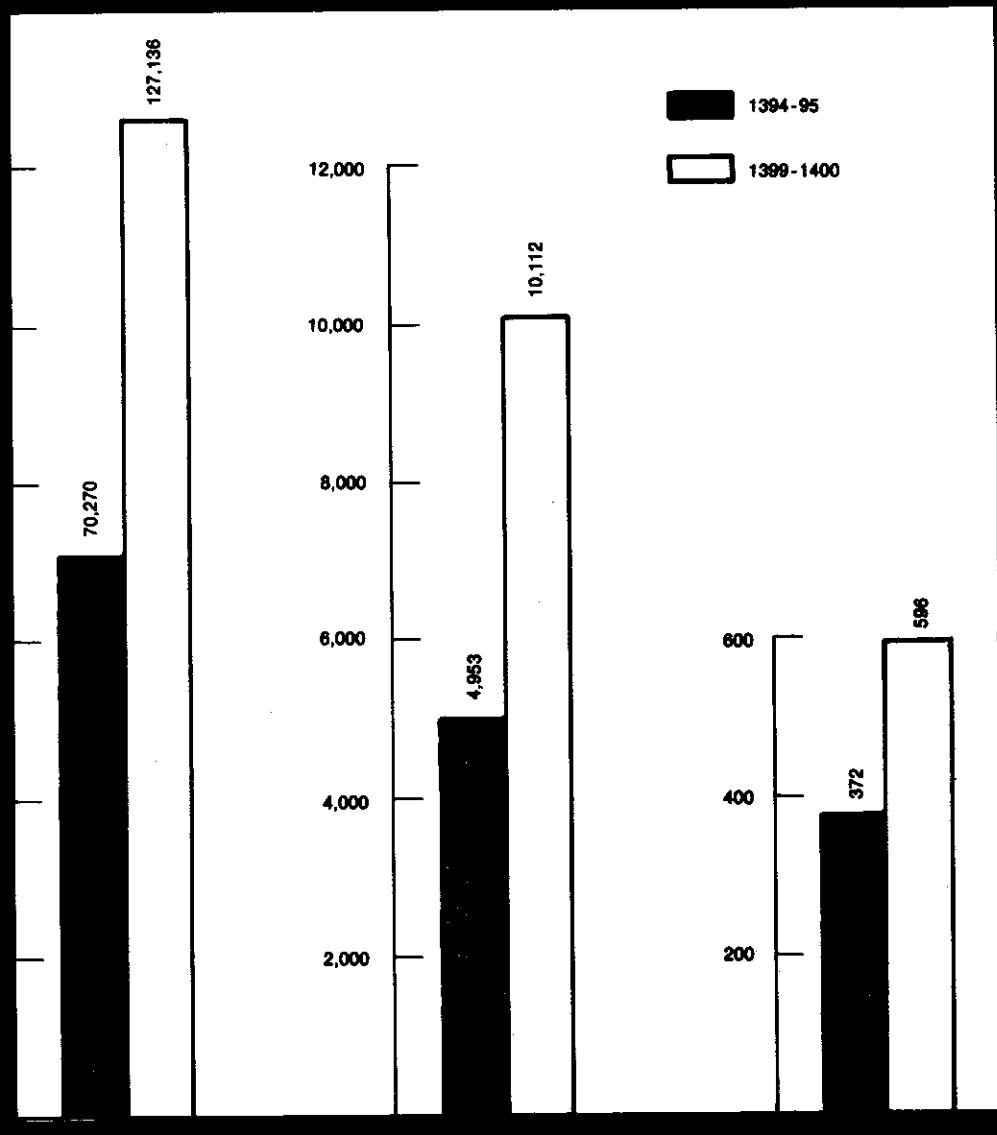
	Grade 1	*Grade 2*	*Grade 3*
1394-95	75%	80%	77%
1399-1400	82%	87%	84%.

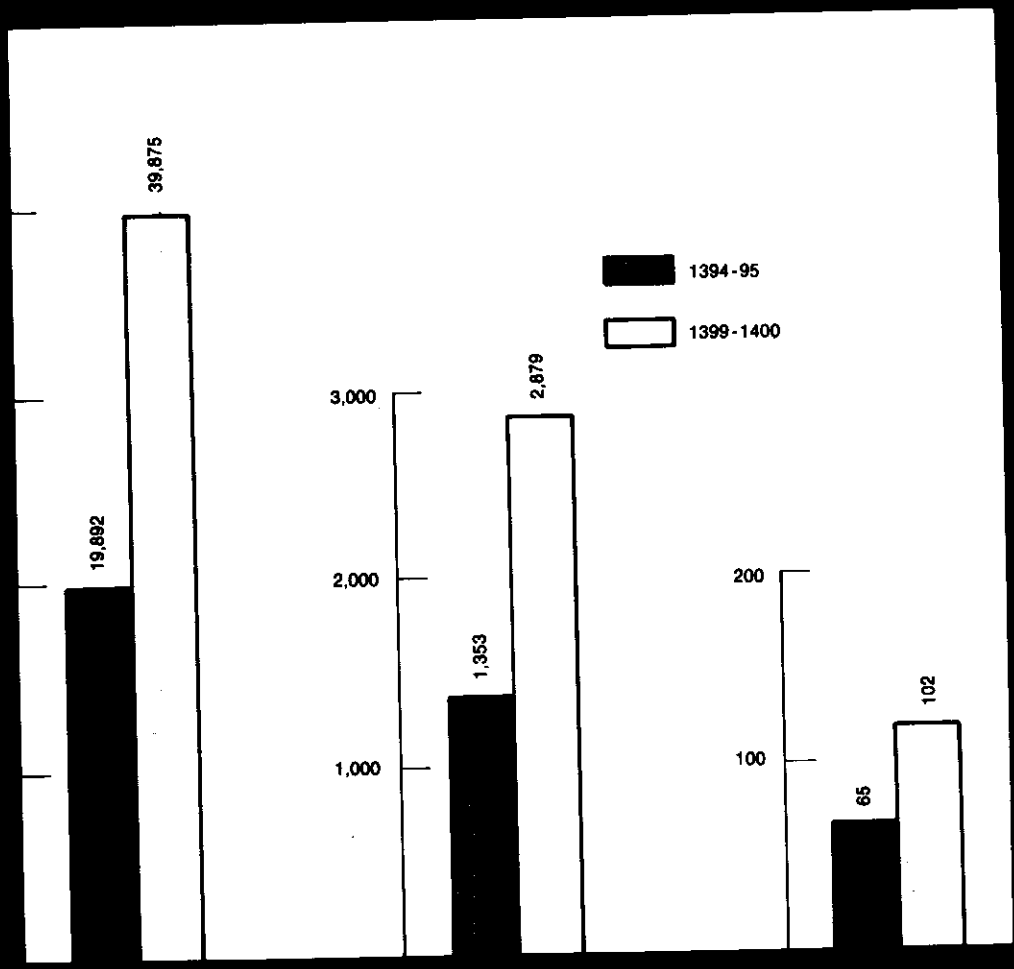
3.3.4 During 1395-96, review and revise the curriculum to incorporate subject matter of relevance to those who may leave school as well as those who will continue at the secondary level. Preparation of texts, teaching materials, teacher training, and pilot application of new curriculum are planned to begin in 1396-97.

3.3.5 Conduct a comparative analysis in 1395-96 of the modern and conventional intermediate-school systems now in operation, and determine whether the modern intermediate approach should be expanded or terminated by the end of 1396.

3.4 Secondary Education

Growth of secondary education during the plan period is shown in Figure V-8.


1394-95
1399-1400
127,136
70,270
12,000
10,000
8,000
6,000
4,000
2,000
10,112
4,953
600
400
200
596
372


39,875
19,892
1394-95
1399-1400
3,000
2,000
1,000
2,879
1,353
200
100
102
65

3.4.1 Enroll the following percentages of intermediate school graduates during the plan period:

1395-96	54.3% of intermediate graduates of 1394-95
1396-97	54.7% of intermediate graduates of 1395-96
1397-98	55.1% of intermediate graduates of 1396-97
1398-99	57.9% of intermediate graduates of 1397-98
1399-1400	60.3% of intermediate graduates of 1398-99.

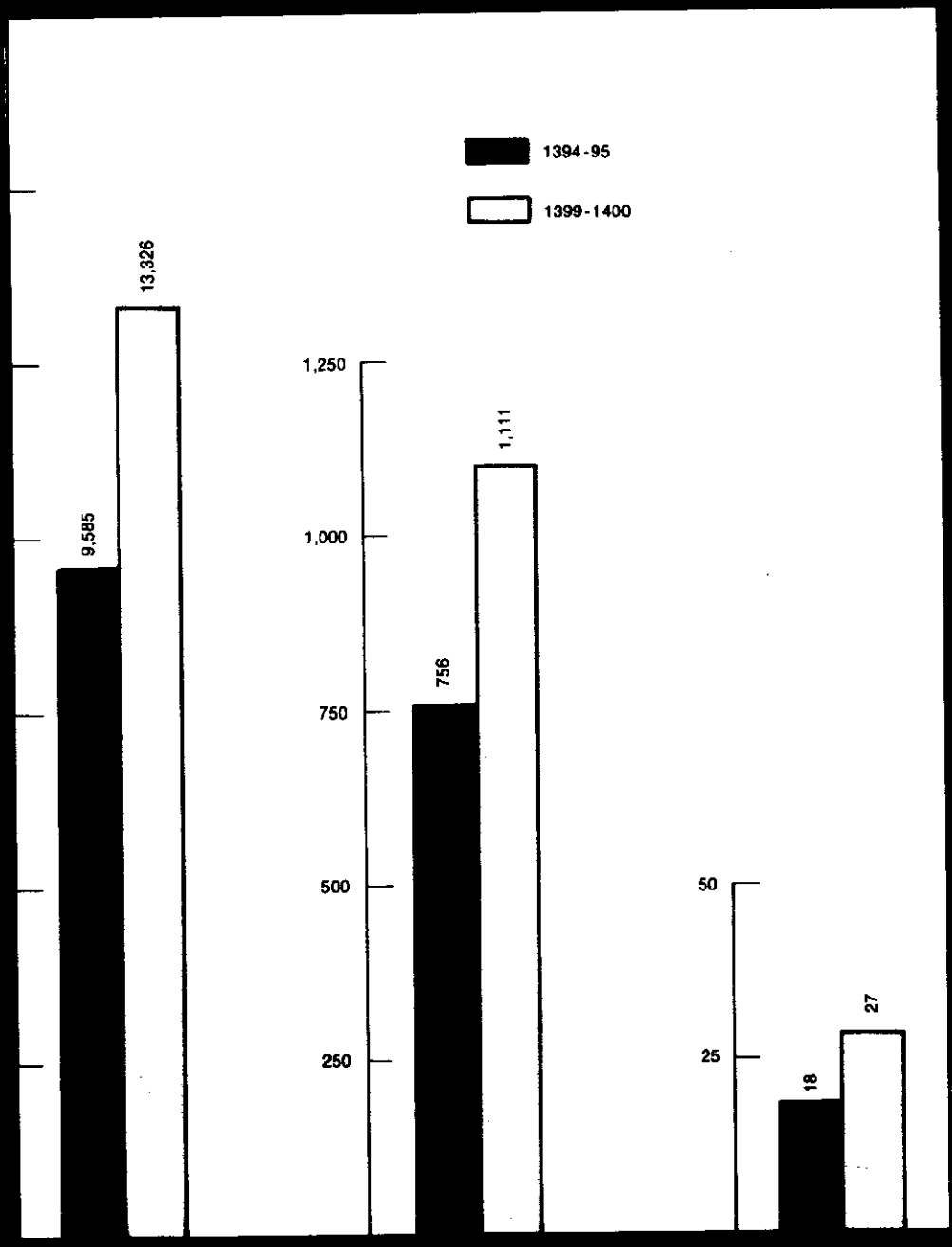
3.4.2 Increase the number of secondary schools from 65 in 1394-95 to 102 in 1399-1400. Increase the total number of classes from 703 to 1,494 during the same period, adding 684 classes in expanding existing schools and 107 classes with the newly opened schools.
3.4.3 Achieve graduation rates as follows during the plan:

	Science	*Arts*	*Average*
1395-96	84.5%	93.0%	88.7%
1396-97	85.0%	94.0%	89.5%
1397-98	86.0%	94.0%	90.0%
1398-99	87.0%	95.0%	91.0%
1399-1400	88.0%	95.0%	91.5%

3.4.4 Continue work initiated in 1394-95 on revision of curriculum and begin experimental application of new 1st year curriculum in 1395-96, new 2nd year in 1396-97, and new 3rd year in 1397-98. Concurrently, prepare the training program for teachers.
3.4.5 Examine the applicability of a multi-purpose secondary education structure in Saudi Arabia. This program will begin in 1395-96 and will include visits abroad, recruiting from countries using multi-purpose curricula, curriculum design, text preparation, and teacher training in preparing for a pilot application to begin in 1398-99.

3.5 Teacher Training

Teacher training development is summarized in Figure V-9.
3.5.1 Expand the present secondary-level teacher training program from 16 institutes with 9,093 students in 1394-95 to 21 with 12,139 students by the end of the Plan. During the five years, the number of graduates is estimated at more than 15,600, more than sufficient to meet the need for approximately 13,000 additional elementary teachers.
3.5.2 Complete the testing of the junior college curriculum developed in 1394-95, and in 1395-96 begin the preparation of texts, instructional methods, and laboratory requirements.
3.5.3 Establish the junior college program to train elementary teachers, beginning in 1396-97 with one school and 210 students and increasing to five schools and 2,225 students by the end of the Plan. This program, which will graduate 1,674 students during


1394-95
1399-1400
9,585
13,326
1,250
1,000
750
500
250
756
1,111
50
25
18
27

the plan period, will eventually replace the secondary institutes as the principal source of elementary teachers.

3.5.4 Expand the Art Institute program for the preparation of specialized art instructors from one to three institutes by 1399-1400, reaching an enrollment of 500 students. Some 522 graduates are projected over the plan period.

3.5.5 Increase the number of Physical Education Institutes from one to three by 1399-1400 with a total enrollment of 687 students. During the five years of the second plan, a total of 530 graduates are forecast.

3.5.6 Expand the Center for Science and Mathematics program, which prepares teachers for intermediate schools, to include 4 branches by 1396-97 and increase total enrollment from 100 students in 1394-95 to 4,929 by 1399-1400. Graduates will number 2,118 by the end of the Plan.

3.5.7 Continue the special training program in English Language with an annual enrollment of 70 students.

3.5.8 Increase the total enrollment in the teacher-upgrading centers from 1,000 students in 1395-96 to 1,200 in 1396-97 and maintain this level during the remainder of the plan period.

3.5.9 Undertake a study of on-the-job teacher training in 1395-96 for application and evaluation beginning in 1397-98.

3.5.10 Establish annual scholarship quotas for continuing teacher education within and outside the Kingdom, beginning in 1395-96.

3.6 Technical Education

3.6.1 Expand the present secondary level industrial education program from 4 schools with 2,160 students in 1394-95 to 13 schools with 7,375 students by the end of the Plan. The number of graduates will increase from 297 in 1394-95 to 1,650 in 1399-1400 for a total of 5,537 over the plan period.

3.6.2 Expand existing fields of study and introduce new programs in such subjects as electronics, petrochemical technology, civil engineering, mechanics, and hotel services.

3.6.3 Increase enrollment in the Higher Industrial Institute from 105 students in 1394-95 to 375 students in 1399-1400. This program will graduate 285 students during the plan period.

3.6.4 Expand the present secondary level commercial education program from 5 schools with 715 students in 1394-95 to 9 schools and 3,303 students in 1399-1400. During the plan period, the program will graduate 2,574 students, reaching an annual output of 915 graduates by 1399-1400.

3.6.5 Continue to offer the evening program in commercial education at three schools until 1398-99 when three additional schools will be opened.

3.6.6 Open one Higher Commercial Institute in 1395-96 with an initial enrollment of 105 students and add two institutes the following year. Enrollment will increase from 105 in 1395-96 to 741 in 1399-1400, and the program will graduate 947 students during the plan period.

3.6.7 Start the secondary level program in agricultural education at Buraydah in 1396-97 with 175 students and open 4 additional institutes in 1398-99. Total enrollment in 1399-1400 is 1,259 students and the Buraydah school will have graduated 226 students by the end of the plan period.

3.7 Special Education

3.7.1 Increase the number of institutes providing education for blind, deaf, or retarded students from 15 as of 1394-95 to 28 by the end of the Plan. The number of students served will increase from 2,119 in 1394-95 to 4,416 in 1399-1400.

3.7.2 Develop an audio library system for use by the handicapped.

3.7.3 Initiate a continuing program of public education and information concerning the handicapped person.

3.8 Holy Qur'an Studies

3.8.1 During the plan period, add 16 schools at the elementary level for instruction in the Holy Qur'an to increase the total to 23 schools by 1399-1400. The number of students will increase from 2,306 in 1394-95 to 8,687 in 1399-1400.

3.8.2 Continue to operate 4 intermediate level schools for this program; student enrollment will increase from 128 in 1394-95 to 950 in 1399-1400.

3.8.3 Initiate a secondary level program in 1395-96 with one school and 15 students, opening additional schools beginning in 1397-98 to reach a total of four schools by the end of the Plan. Enrollment as of 1399-1400 will be 315 students.

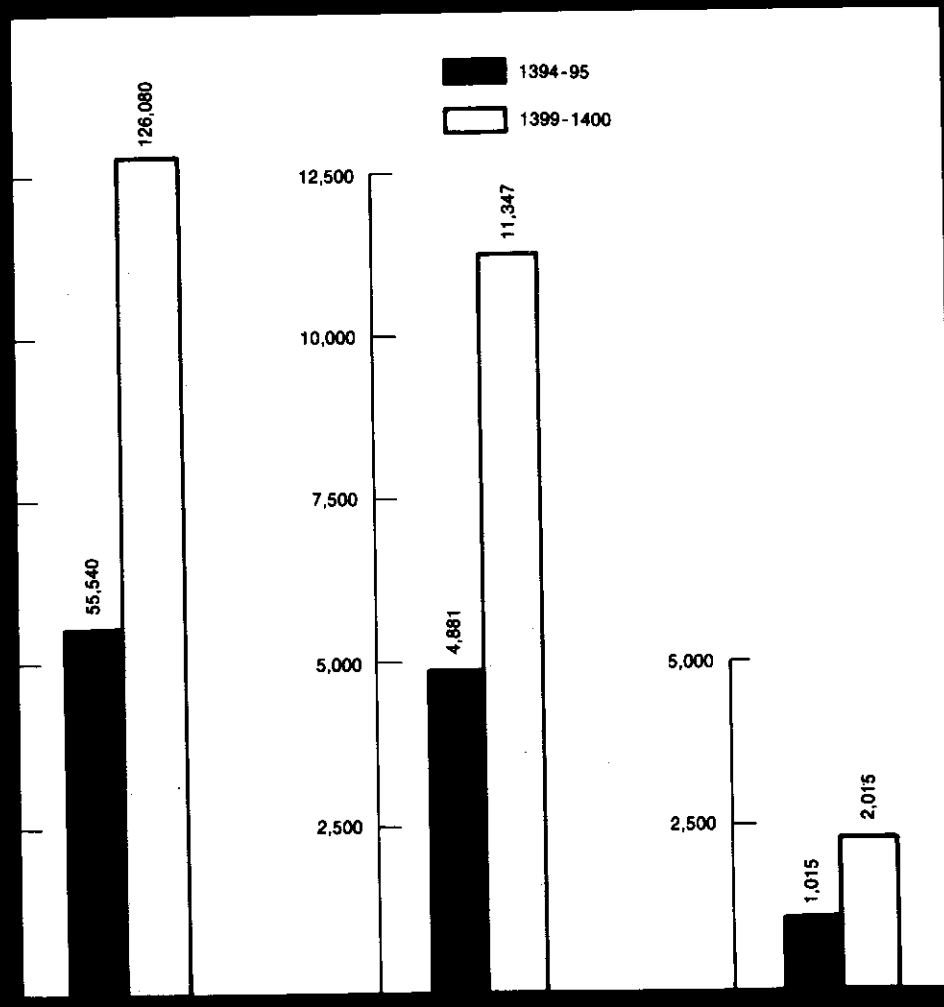
3.9 Adult Education and Literacy

The expansion of the adult literacy program during the plan period is illustrated in Figure V-10.

3.9.1 Add 68 schools to the evening intermediate-school program for adults and 15 to the evening secondary program during the plan period. Intermediate enrollment will increase from 6,570 students as of 1394-95 to 16,290 in 1399-1400, and secondary from 1,623 to 3,014 students during the same period.

3.9.2 Continue the two-stage program for adult literacy, adding 200 schools a year so that 2,015 schools will be operating by 1399-1400. Enrollment will grow from 55,540 students in 1394-95 to 126,080 in 1399-1400.

3.9.3 Beginning in 1396-97, establish special literacy centers in selected Community Development centers. A total of 17 literacy centers will be in operation by 1399-1400.


1394-95
1399-1400
126,080
55,540
12,500
10,000
7,500
5,000
2,500
11,347
4,881
5,000
2,500
2,015
1,015

3.9.4 Organize annual summer campaigns, beginning in 1395-96, to provide literacy training to nomadic and rural groups. The initial target is 3,000 participants, increasing to 5,000 in the campaign for 1399-1400; a total of 20,000 participants is projected for the plan period.
3.9.5 Establish an award program beginning in 1395–96, offering SR 500 to all who graduate from the literacy course.

3.10 Services
3.10.1 Expand the school meal program, beginning in 1395-96, to cover all elementary students. An annual average of 160 meals per student will be provided.
3.10.2 Prepare a plan in 1396-97 for introducing the school meal program at the intermediate level and initiate a pilot program with 26,000 students in 1397-98. Expand the program to cover all intermediate students, beginning in 1398-99.
3.10.3 Study the implications and requirements during 1399-1400 for a universal school meal program.
3.10.4 Improve the school transportation system in rural areas to serve students living at a distance from school locations.
3.10.5 Augment the existing school health unit system through the introduction, in 1395-96, of mobile units with facilities for X-ray and dental care. Expand the program, beginning in 1396-97, with fully equipped mobile health units capable of providing full preventive health services.
3.10.6 Study students and their performance as a basis for guidance in academic work and program choices.
3.10.7 Provide a full range of sports activity at school and utilize schools and sports centers for continuing programs during the summer months.
3.10.8 Expand the scouting program at cub, regular, and senior scout levels and add 4 permanent camps and 16 training centers during the plan period.
3.10.9 Establish summer youth centers in all educational districts and arrange for student exchange trips between centers and abroad.
3.10.10 Provide specialized training for outstanding students in athletics, art, scouting, and social affairs to prepare them as representatives of the Kingdom in international youth events.

3.11 Educational Technology
3.11.1 Establish a National Center for Educational Technology in Riyadh in 1395-96 for the development of educational aids and materials, curriculum research, program development and testing, and equipment testing and evaluation.
3.11.2 Establish an Educational Television Center in Riyadh in 1395-96, for the preparation of classroom programs for broadcast to selected intermediate schools as part of the pilot educational television project.

3.11.3 Supply 200 portable English Language laboratories to secondary schools in 1395-96, an additional 60 a year for the next two years, and 65 a year for the final two years of the plan period for a total of 450 units.

3.11.4 Initiate in 1396-97 the development of an experimental audio system for Arabic Language instruction in elementary schools, and complete all testing and development of teaching materials by the end of the plan period.

3.11.5 Design and introduce multi-purpose classrooms combining theory and laboratory practice facilities in 30 secondary schools, beginning with 3 in 1395-96, and adding 5 in 1396-97, 6 in 1397-98, and 8 in 1398-99 and 1399-1400. Concurrently, establish miniature museums as secondary school exhibits in three districts, one each in 1395-96, 1397-98, and 1399-1400.

3.11.6 Plan during 1395-96 to establish one experimental elementary, intermediate, and secondary school, and prepare curricula and associated texts and educational material for operational application beginning in 1398-99.

3.11.7 Utilize mobile and prefabricated classrooms, particularly in the rural areas and in the literacy campaigns, to implement the school expansion program.

3.12 Educational Quality

3.12.1 Increase the inspectorate staff for elementary education from 191 in 1394-95 to 339 by the end of the Plan, maintaining a level of one inspector for one hundred teachers throughout the plan period. In addition, develop a cadre of personnel to provide guidance to teachers in instructional practices and personal relations.

3.12.2 Allocate scholarships each year for teachers and administrators to participate in special courses, and degree and diploma programs both within and outside the Kingdom. Each year of the Plan, release for upgrading classes between 500 and 600 elementary teachers who do not hold the secondary certificate.

3.12.3 Beginning in 1395-96, publish a journal on educational research for international as well as internal distribution.

3.12.4 Evaluate in 1395 the examination system review project which began in 1394, and train teachers initially in the Riyadh area during 1395-96 in testing techniques and test construction, for application in 1396.

3.12.5 Use all possible means to encourage the development of an atmosphere of mutual understanding and cooperation between teachers and administrators.

3.12.6 Develop procedures for periodic reporting of the status of school facilities and equipment, and streamline administrative processing of requests for supplies to reduce delays in delivery.

3.13 Administration and Operations

3.13.1 Beginning in 1395-96 and continuing through the plan period, analyze the departmental structure of the Ministry and introduce modifications where indicated to

provide a more efficient management system. Concurrently, identify personnel requirements and qualifications in keeping with the changing structure.

3.13.2 Initiate in 1395 a continuing program of job analysis directed toward the simplification of administrative procedures and rearrangement of centers of responsibility.

3.13.3 Undertake the reorganization of the existing system of 23 educational districts beginning in 1395-96, dividing the Kingdom into a small number of general departments with subordinate elements to provide coverage of all educational activities.

3.13.4 Continue the work that began in 1394 on the development of computer programs for information storage and retrieval, and investigate the potential of microfilm or similar devices for record and file maintenance.

3.13.5 Review the preliminary study completed in 1394 concerning introduction of a functional internal accounting and budgeting system, modify as necessary, and arrange for its application during the plan period.

3.14 Teaching Staff

Increase teaching staffs as shown in table V-11.

Table V-11
PLANNED INCREASES IN TEACHING STAFF,[a] 1395 - 1400

	1394-95			*1399-1400*		
	Teachers	*Ratio to Students*	*Ratio to Classes*	*Teachers*	*Ratio to Students*	*Ratio to Classes*
Elementary	21,669	1:19	1.29:1	33,873	1:20	1.25:1
Intermediate	4,953	1:14	1.80:1	10,112	1:13	1.80:1
Secondary	1,353	1:15	1.92:1	2,879	1:14	1.93:1
Teacher training, secondary level	698	1:13	2.34:1	968	1:13	2.41:1
Teacher training, junior college	–	–	–	156	1:14	2.00:1
Special teacher training program[b]	131	1:12	2.30:1	237	1:10	2.66:1
Qur'an, elementary	116	1:20	1.51:1	435	1:20	1.50:1
Qur'an, intermediate and secondary	13	1:10	1.44:1	40	1:10	2.00:1
Agricultural, commercial, and industrial (all levels)	370	1:8	2.81:1	1,359	1:10	2.57:1
Special education	612	1:3	2.66:1	975	1:5	2.22:1
	29,915	1:17	1.42:1	51,034	1:17	1.41:1

a Does not include advisors or inspectors.

b Does not include teachers at Centers for Science and Mathematics where instruction is conducted in a unit basis instead of a class basis.

3.15 Facilities

3.15.1 Complete the execution of currently authorized projects for which 29.8 percent of the original total funding of SR 1,454.79 million extends into the new plan period.

3.15.2 Beginning in 1395-96, initiate school construction projects (new and replacement) which will be phased over the plan period to achieve the following:

Elementary:	Additional schools with a total of 17,412 classrooms and 508 special-purpose rooms.
Intermediate:	Additional schools with a total of 4,614 classrooms and 215 special-purpose rooms.
Secondary:	Additional schools with a total of 762 classrooms and 301 special-purpose rooms.
Teacher Training:	9 new secondary-level institutes, 103 additional classrooms, and 16 special-purpose rooms. 5 new junior colleges. 1 center for Science and Mathematics in Riyadh and 4 branch centers.
Technical Education:	12 new industrial education schools. 5 new agro-industrial institutes. 5 new commercial schools. 1 Higher Commercial Institute.
Special Education:	16 new institutes, 3 student dormitories, and 4 special-purpose buildings.

3.15.3 Under the supervision of the Ministry's Engineering Department, study the availability of land in locations where school construction or expansion can be expected.

3.15.4 Establish through the Engineering Department standards for projects and develop simplified models and specifications for schools in remote areas.

3.15.5 Initiate the following construction projects for Ministry buildings to be phased over the first three years of the plan period, as follows:

1395 – 96:	Four buildings — engineering administration, examinations administration, statistics and research, and curriculum and research.
1396 – 97:	Three buildings — technical education administration, supplies and equipment, and teaching materials administration.
1397 – 98:	Two buildings — supreme council for sciences, mosque, and library.

3.15.6 Start construction of 20 new buildings for district administration according to the following schedule:

1395 - 96:	3 large, 3 medium, 2 small buildings.
1396 - 97:	2 large, 2 medium, 2 small buildings.
1397 - 98:	2 large, 2 medium, 2 small buildings.

3.15.7 Beginning in 1395-96, initiate construction projects for school health services which will be phased over the plan period to achieve the following results:

Health units:	23 main health units and 47 branch units.
Hospitals:	6 student hospitals.
Clinics:	31 eye clinics in the health units.
Medical centers:	17 X-ray centers in the health units. 34 dental centers in the health units.

3.15.8 Acquire land and initiate study and design in 1395-96 for the National Center for Educational Technology and the Educational Television Center, with construction to be completed by the end of 1396-97.

3.15.9 Begin a comprehensive construction program in 1395-96 to provide in coordination with the General Presidency for Youth Welfare the following youth development facilities by the end of the Plan:

21	compound stadiums
24	scout centers
14	student hostels
387	game courts.

3.15.10 Beginning in 1395-96, schedule annually the renovation, remodelling, and major maintenance of 10 administration buildings, 200 government-owned schools, and 250 rented school buildings.

4. Finance

The Ministry of Education's annual requirements, including most Cultural Affairs and Antiquities programs, are estimated as follows (SR millions):

	Budgeted 1394-95	*1395 -96*	*1396 -97*	*1397 -98*	*1398 -99*	*1399-1400*	*Plan Total*
Recurrent	1,310.7	4,116.6	4,775.1	5,570.0	6,668.1	7,581.0	28,710.8
Project	757.7	7,380.5	7,278.2	7,962.3	401.6	158.6	23,181.2
Total	2,068.4	11,497.1	12,053.3	13,532.3	7,069.7	7,739.6	51,892.0

V.D.1. 2. MODEL SCHOOLS

1. Present Conditions

1.1 Al Asma school in Riyadh and Thaghr school in Jiddah continue to operate as model schools with enrollment restricted at all levels to highly qualified students. The numbers enrolled in academic year 1394-95 are as follows:

	Al Asma	*Thaghr*
Kindergarten	250	-
Pre-elementary	400	-
Elementary	662	921
Intermediate	353	455
Secondary	430	303
Total	2,095	1,679

1.2 Thaghr school, designed to accommodate classes of 35 students, suffers from over-enrollment in almost all classes at every level. However, al Asma school, which follows a limit of 25 students per class and has more expansive facilities, has not experienced this problem.

1.3 The two-stage program of kindergarten and pre-elementary classes at al Asma school is meeting with favorable response, indicated by an increase in enrollment of over 50 percent in the past four years.

1.4 Thaghr school is making its facilities available to children of the Saudi diplomatic corps as well as selected regularly-enrolled students.

1.5 Thaghr school maintains a ratio of 2 teachers per class at all levels. At al Asma, this ratio is prescribed for intermediate and secondary levels, with a ratio of 1.4 teacher per class for the elementary level. However, the 1394-95 staffing at al Asma is below the desired levels for elementary and secondary classes.

2. Objectives and Policies

Both the model schools are expected to continue to provide high-quality general education to students who meet the entry requirements and who maintain the level of classroom performance required. The following objectives and policies will support this mission in the second plan period.

2.1 Continue the policy of retaining only those students who successfully complete their academic programs.

2.2 Increase the size of the kindergarten and pre-elementary programs at al Asma school.

2.3 Raise the enrollment in elementary, intermediate, and secondary levels to 1,875 students at al Asma school, limiting classes to 25 students at all levels.

2.4 Continue at Thaghr school with 24 elementary, 12 intermediate, and 10 secondary level classes, and hold enrollment to an average of 35 students per class.

2.5 Maintain the existing teacher: class ratios at Thaghr school and set ratios of 1.4:1 for elementary and 2:1 for the intermediate and secondary levels at al Asma school.
2.6 Arrange boarding facilities in both schools for students, as required.
2.7 Improve classroom, athletic and recreation, and administrative facilities at both schools in keeping with their high-quality educational programs.

3. Programs and Projects

3.1 Achieve the following graduation rates at both schools by the end of the plan period:

	Al Asma	*Thaghr*
Elementary	94%	97%
Intermediate	94	95
Secondary	94	95

3.2 At al Asma school increase kindergarten enrollment to 700 pupils and pre-elementary to 800 pupils by 1399-1400.
3.3 Increase the number of classes at al-Asma school as follows:

	1394-95	*1399-1400*
Elementary	27	30
Intermediate	14	24
Secondary	18	21

3.4 Eliminate overcrowding at Thaghr school by reducing enrollment from 1,679 students in 36 classes as of 1394-95 to 1,617 students by 1399-1400.
3.5 Increase the teaching staff at al Asma school from the 1394-95 level of 120 to 222 by the end of the plan period. (The number of teachers at Thaghr school will remain at 98.)
3.6 Initiate construction of dormitories in 1395-96 at al Asma and Thaghr schools. The Thaghr school buildings will include classrooms and housing of female students in support of the program for children of the Saudi diplomatic corps.
3.7 In addition to dormitories, accomplish the following planned construction at al Asma school:

- ☆ Initiate construction of additional classrooms for the pre-school, elementary, and intermediate levels (1395-96).
- ☆ Start constructing the school health-unit building (1395-96).
- ☆ Start installation of the closed-circuit instructional television system (1395-96).
- ☆ Continue work on the recreation and athletic center (1395-1400).
- ☆ Provide necessary utilities, landscaping, and executive offices (1395-1400).

3.8 In addition to dormitories, accomplish the following planned construction at Thaghr school:

- ☆ Initiate development of a school complex on the Medina Road, including a boys' elementary school, housing, mosque, library, recreation area, and utilities.
- ☆ Complete the new model elementary section on the Mecca Road (1395-96).
- ☆ Provide vehicle shelters, maintenance shops, and necessary alterations and improvements (1395-97).

4. Finance

The financial requirements of the model schools are estimated below (SR millions):

Al Asma school

	Budgeted 1394-95	*1395 -96*	*1396 -97*	*1397 -98*	*1398 -99*	*1399-1400*	*Plan Total*
Recurrent	3.8	8.7	13.1	16.2	20.6	26.7	85.3
Project	14.3	22.1	29.8	16.1	5.0	1.0	74.0
Total	18.1	30.8	42.9	32.3	25.6	27.7	159.3

Thaghr school

Recurrent	5.6	8.2	8.9	9.3	9.4	9.9	45.7
Project	9.2	18.2	11.0	4.0	5.0	5.0	43.2
Total	14.8	26.4	19.9	13.3	14.4	14.9	88.9

V.D. 2 GIRLS' EDUCATION

1. Present Conditions

1.1 The substantial expansion program for elementary education that was proposed five years ago has been realized. Enrollment as of 1394-95 is within 5 percent of the target of 224,500 pupils, and the number of elementary classes has doubled in five years.

1.2 Opportunities for elementary education have been expanded far beyond plan expectations; there are now 500 communities with schools for girls, well over the target of 300.

1.3 The proportion of Saudi personnel holding elementary school staff positions has increased from 29 percent at the beginning of the plan to 56 percent in 1394-95, surpassing the target of 48 percent.

1.4 The shift of emphasis at the intermediate level from teacher training to general education has been greatly accelerated. General education now accounts for over 97 percent of intermediate level enrollment as teacher training programs at this level are being phased out.

1.5 The availability of Saudi teachers for intermediate schools has not kept pace with expectations and only 12 percent of the 1394-95 staff was Saudi, compared with the target of 20 percent.

1.6 General secondary education has expanded in keeping with the growth of general intermediate enrollment. Although the plan projected an enrollment of 4,900, more than 7,600 students were in school in 1394-95.

1.7 It was anticipated that almost all of the secondary teaching staff would be contract personnel; however, Saudi teachers for this level of education are now becoming available and at present hold 54 of the 480 teaching posts.

1.8 The program for secondary-level teacher training institutes is now intended to be the principal source of elementary school teachers. Enrollment in the two-year course has reached a total of almost 3,600 students, about 1,000 more than projected for 1394-95. Planning for the modification of the course of study is now in its final stage.

1.9 Classroom overcrowding has been relieved at all levels. School construction projects currently underway will, at their completion, provide the government school system with 129 elementary schools with 2,489 classrooms, 30 intermediate schools with 600 classrooms, and 10 secondary schools with 198 classrooms. These will both expand the system and replace rented facilities.

1.10 Adult literacy programs for women, initiated in 1392-93 with 1,400 participants at 5 schools, have expanded to a registration of almost 29,000 women in 99 schools.

2. Objectives and Policies

From the sound foundation laid in the 1390-95 period, the plan for girls' education in the years 1395-1400 aims to bring diversity and qualitative advances to continually

expanding programs at all levels. The specific objectives of the Plan are summarized below.

2.1 Elementary Education

2.1.1 Increase present (1394-95) elementary school enrollment by 64 percent by the end of the plan period.

2.1.2 Provide school places for at least 50 percent of the Saudi girls aged between 6 and 12.

2.1.3 Increase the number of communities with elementary schools for girls, putting emphasis on the rural areas.

2.1.4 Improve the promotion rates by reducing the incidence of repeating and drop-out in all grades.

2.1.5 Eliminate overcrowding in all classes.

2.2 Intermediate Education

2.2.1 Continue to enroll at least 80 percent of the elementary school graduates.

2.2.2 Provide more opportunities for intermediate education in small communities and rural areas.

2.2.3 Improve the promotion rates by reducing the incidence of repeating and drop-out in all grades.

2.2.4 Reduce the average number of students per class to 27 by the end of the Plan.

2.3 Secondary Education

2.3.1 Continue to enroll at least 50 percent of the intermediate school graduates.

2.3.2 Continue the program of opening schools at new locations (as well as in communities with schools) to expand the availability of secondary education.

2.3.3 Achieve passing rates of 90 percent in grade one and over 95 percent in higher grades by the end of the Plan.

2.3.4 Reduce the average number of students per class to 23 by the end of the Plan.

2.4 Teacher Training

2.4.1 Expand the teacher training program at the secondary level to meet annual requirements for additional elementary teachers and also to begin replacing non-Saudi teachers by the end of the Plan.

2.4.2 Extend the course of study in the secondary-level teacher training institute program from two to three years.

2.4.3 Complete the phasing-out of the intermediate-level teacher training institute program.

2.4.4 Encourage participation in teacher training programs by students from rural areas

through the provision of housing and special financial incentives.
2.4.5 Develop a post-secondary school program for the training of intermediate school teachers.

2.5 Technical Education
2.5.1 Continue the operation of the technical training centers at the four present locations.
2.5.2 Introduce new courses related to occupations appropriate for Saudi women.
2.5.3 Extend the course of study from two to three years.

2.6 Literacy Program
2.6.1 Expand the ongoing literacy program to reach uneducated adults and elementary school dropouts in all areas of the Kingdom.
2.6.2 Make the syllabus more relevant to women.
2.6.3 Utilize public information media to reinforce the program.
2.6.4 Develop training programs to prepare teachers for adult literacy assignments.

2.7 Facilities
2.7.1 Complete with minimum delay school building projects already authorized.
2.7.2 Initiate a comprehensive building program for additional schools at all levels to increase the proportion of government-owned school buildings to 42 percent by the end of the Plan.
2.7.3 Construct student housing units at selected teacher training institutions.
2.7.4 Construct office buildings for the general and regional administrative headquarters to replace existing make-shift facilities in modified villas.
2.7.5 Build a system of health units to serve all educational districts.

2.8 Educational Quality
2.8.1 Provide regional and branch offices with sufficent support staff for continuing supervision of educational programs.
2.8.2 Expand the educational guidance program to ensure comprehensive coverage of all instruction by qualified inspectors.
2.8.3 Develop an upgrading program for elementary teachers who do not hold secondary-level certificates.
2.8.4 Insure that all schools have the necessary classroom equipment, instructional aids, texts, and student supplies, and that buildings include all required utility services.

2.9 Services
2.9.1 Initiate on a pilot basis a school-meals program in selected areas.

2.9.2 Expand the health service program for students and school staff.
2.9.3 Make housing available for students and staff at schools in isolated locations.
2.9.4 Improve and expand the school transportation system.

2.10 Staffing

2.10.1 Increase the number of teachers to achieve lower teacher-pupil ratios at all levels by the end of the Plan.
2.10.2 Increase the proportion of Saudi women teachers and administrators in schools to 59 percent of the total by the end of the Plan.
2.10.3 Emphasize supervisory, technical, and educational posts in the expansion of the staff sections of the General Presidency for Girls' Education.
2.10.4 Enlarge the school health service staff, both general and specialist.

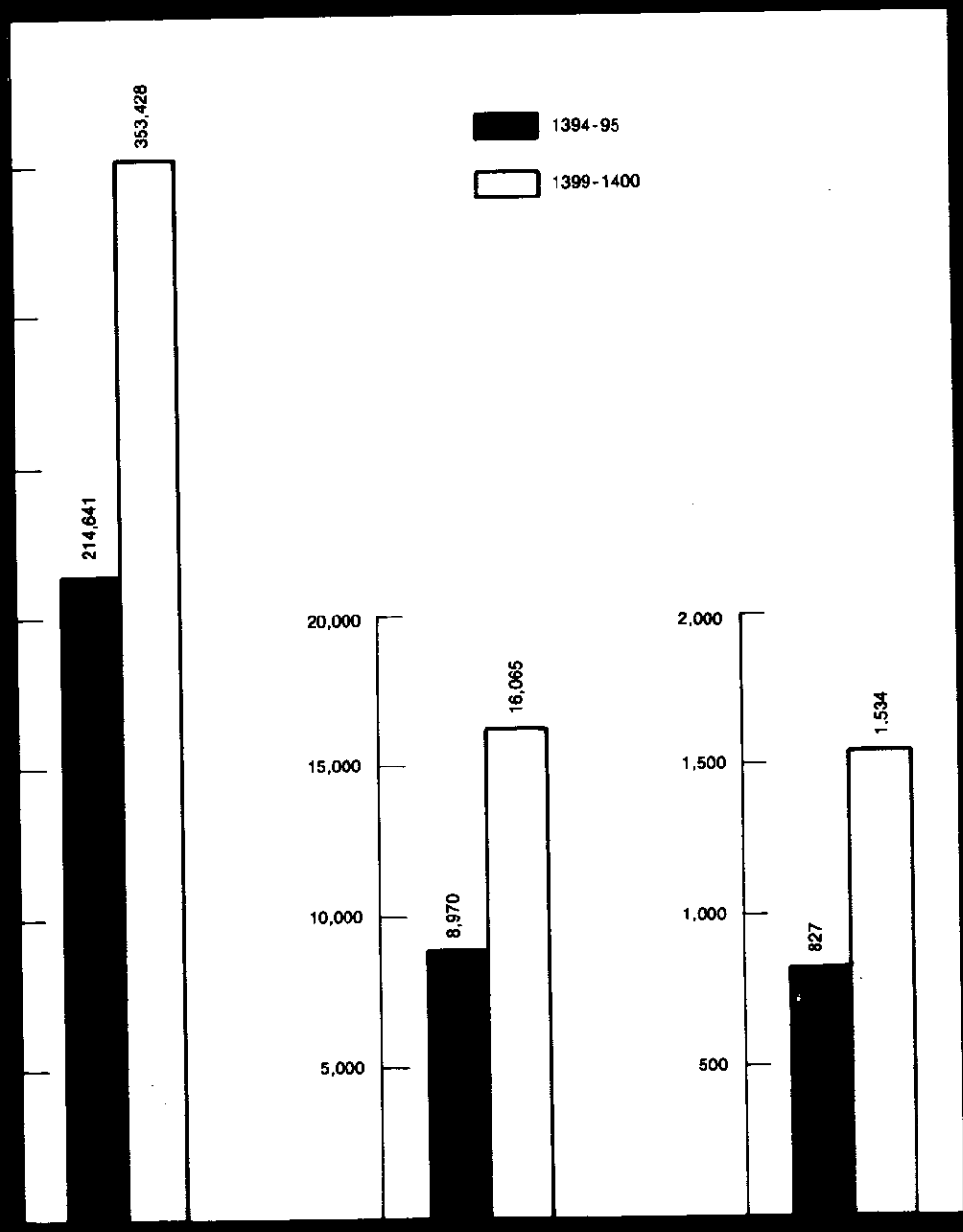
3. Programs and Projects

3.1 Elementary Education

3.1.1 Expand total enrollment from 214,641 pupils in 1394-95 to 353,428 in 1399-1400 (see Figure V-11).
3.1.2 Increase the annual intake of new pupils from 44,184 in 1394-95 to 72,361 in 1399-1400.
3.1.3 Open 707 new schools throughout the plan period to increase the number of towns and villages with elementary schools from 500 in 1394-95 to 1,000 in 1399-1400.
3.1.4 Study factors influencing repeating and drop-out rates and take corrective action to achieve the following improvement in promotion rates by 1399-1400:

	Grade 1	*Grade 2*	*Grade 3*	*Grade 4*	*Grade 5*	*Grade 6*
1394-95	83.4%	86.2%	86.7%	77.9%	83.8%	88.7%
1399-1400	91.9%	92.9%	93.3%	88.4%	92.2%	91.4%

3.1.5 Increase the number of classes from 6,646 in 1394-95 to 11,761 in 1399-1400 to reduce the average enrollment from over 32 to 30 students per class.


1394-95
1399-1400
214,641
353,428
20,000
15,000
10,000
5,000
8,970
16,065
2,000
1,500
1,000
500
827
1,534

3.2 Intermediate Education

3.2.1 Increase new student admissions from 12,359 in 1394-95 to 26,480 in 1399-1400, equal to approximately 80 percent of the total number of graduates of public elementary schools. Achievement will require that intermediate schools be capable of enrolling all graduates from the local elementary schools plus 20 percent of the graduates from elementary schools in locations that lack an intermediate school. The total number of students in intermediate schools will increase from 34,061 in 1394-95 to 70,200 in 1399-1400 (see Figure V-12).

3.2.2 Open 140 additional intermediate schools during the plan period including schools in rural locations where there is no intermediate school within 25 kilometers and the elementary schools are graduating at least 30 pupils per year. This will increase the number of intermediate schools from 93 in 1394-95 to 233 by the end of the Plan.

3.2.3 Improve methods of instruction, raise standards of teachers, and take other appropriate action to achieve the following improvement in promotion rates by 1399-1400:

	Grade 1	*Grade 2*	*Grade 3*
1394-95	88.2%	90.4%	85.8%
1399-1400	91.7%	93.6%	90.3%

3.2.4 Increase the number of classes from 1,106 in 1394-95 to 2,600 by 1399-1400 to reduce the average class from 31 students to 27.

3.3 General Secondary Education

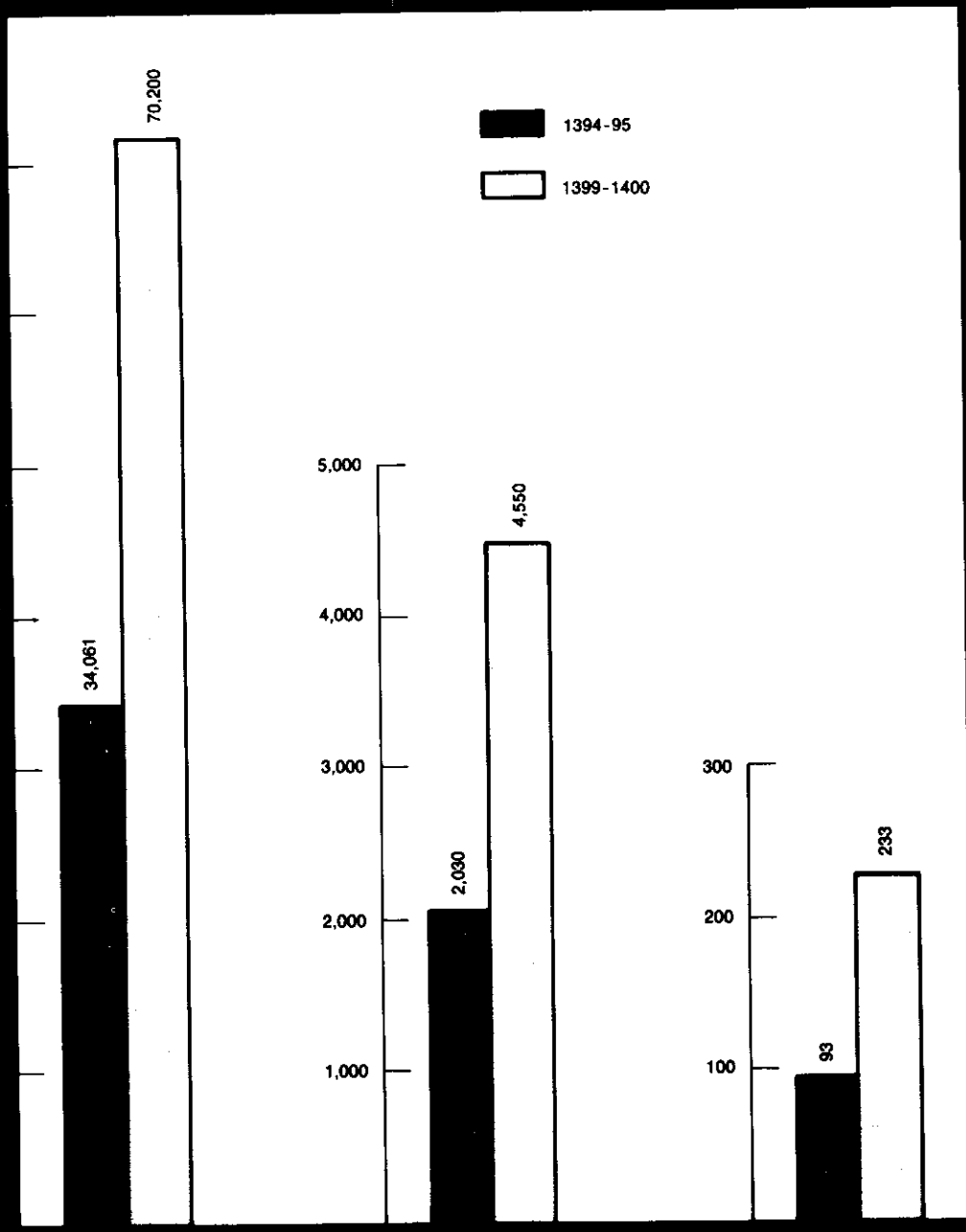
3.3.1 Increase new student admissions from 3,115 in 1394-95 to 7,000 in 1399-1400 to accommodate at least 50 percent of the intermediate school graduates every year of the plan period. This program will raise total enrollment from 7,616 students in 1394-95 to 17,571 by the end of the Plan (see Figure V-13).

3.3.2 Increase the number of secondary schools from 18 in 1394-95 to 50 in 1399-1400. Of the 32 additional schools, 20 are to be opened in locations now without secondary schools, 13 in 1395-96 and 7 during the remaining years of the Plan. The remaining 12 schools are scheduled for Riyadh (3), Mecca (3), Jiddah (3), and one each in Dammam, al-Hasa, and Tayif.

3.3.3 Improve methods of instruction, teachers' standards, and other related educational activities to achieve the following improvement in promotion rates:

	Grade 1	*Grade 2*	*Grade 3*
1394-95	86.5%	91.9%	92.0%
1399-1400	90.0%	95.4%	96.0%

3.3.4 Increase the number of classes from 283 in 1394-95 to 764 in 1399-1400 to reduce the average class from 27 students to 23.


1394-95
1399-1400
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5,000
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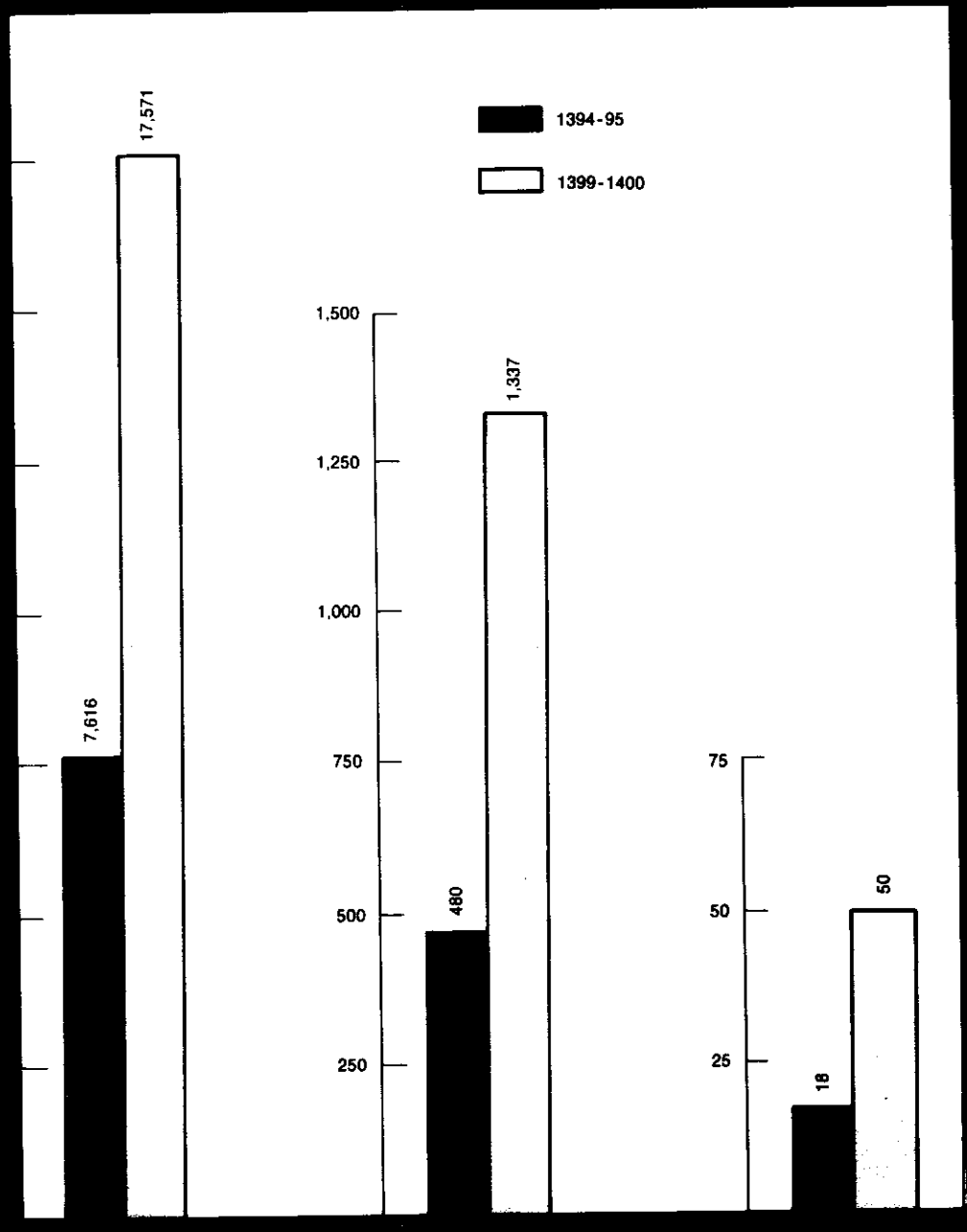
3,000
2,000
1,000
4,550
2,030
300
200
100
233
93


1394-95
1399-1400
17,571
7,616
1,500
1,250
1,000
750
500
250
1,337
480
75
50
25
50
18

3.4 Teacher Training

3.4.1 Increase the enrollment in teacher training at the secondary level from 4,561 students in 1394-95 to 12,961 students in 1399-1400 — see Figure V-14 — to provide a total of 11,090 graduates during the plan period. This will require raising the intake of new students from 2,123 in 1394-95 to 4,756 in 1399-1400 and improving the graduation rate from 91.9 percent to 96 percent during the same period.

3.4.2 Change the present two-year secondary-level program for teacher training to three years, beginning in 1396-97, with first graduates of the new program scheduled at the completion of the 1397-98 school year.

3.4.3 Complete the phasing-out of the intermediate-level program for teacher training at the end of the 1395-96 school year, and transfer the graduates (approximately 100) to the first year of the new secondary-level program at the beginning of the 1396-97 school year.

3.4.4 Establish 5 teacher training institutes, each with housing accommodation for 200 students and 20 teachers and administrators, in selected areas to serve widely-dispersed villages. Provide additional supplements to the standard stipend for students from villages who participate in teacher training programs.

3.4.5 Introduce a two-year post-secondary program to train teachers for intermediate-level assignments, beginning with institutions at Mecca and Qasim in 1397-98, at Medina and Dammam in 1398-99, and at al-Hasa and Abha in 1399-1400. New enrollment at each school is set at 200 secondary graduates, either general or teacher training, per year.

3.5 Technical Education

3.5.1 Increase total enrollment at the four technical training institutes at Riyadh, Mecca, Jiddah, and al-Hasa from 550 students in 1394-95 to 1,200 in 1399-1400, providing a total of 1,585 graduates during the plan period.

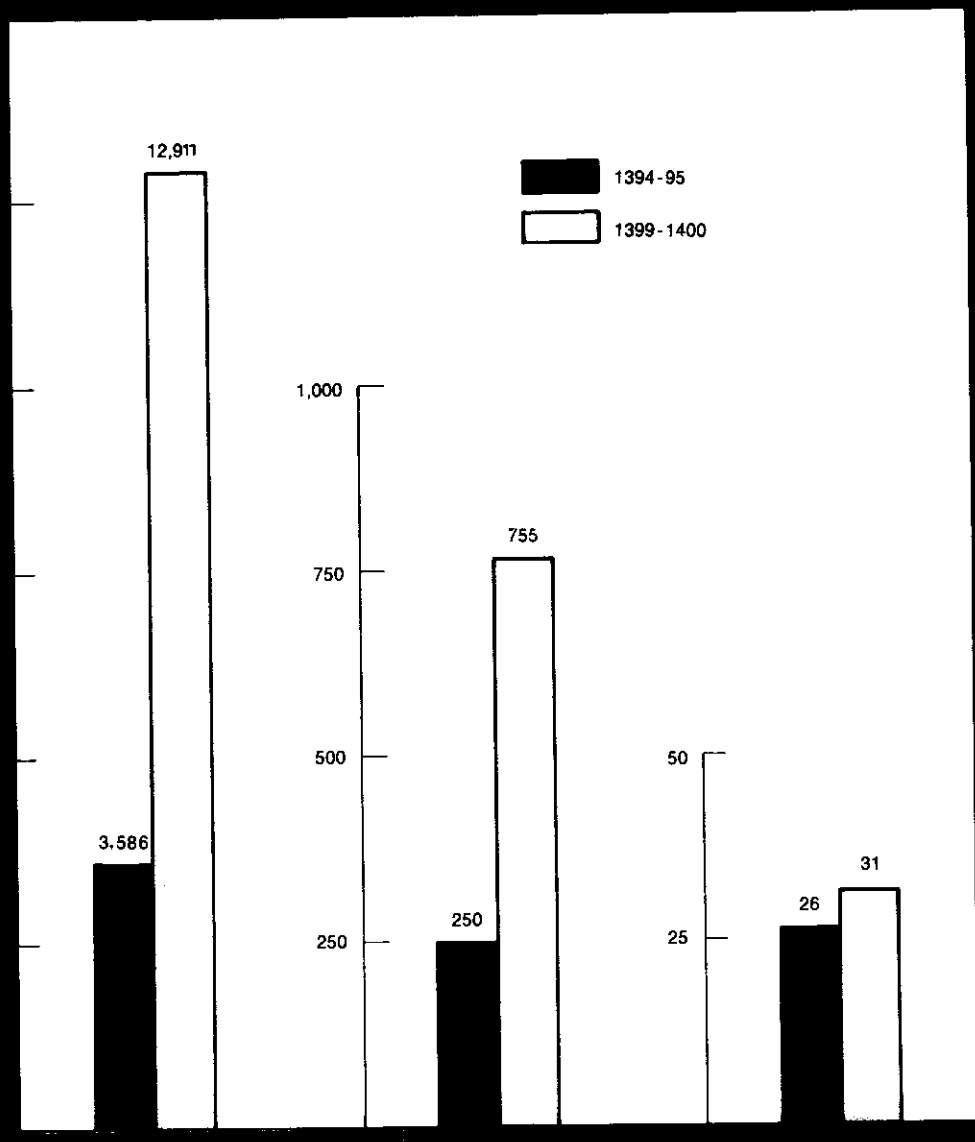
3.5.2 Reorganize current courses into a home economics department and add three new departments — secretarial, clerical and book-keeping, and laboratory technician — in each institute.

3.5.3 Change the present two-year program to three years, beginning in 1396-97, with admission restricted to holders of the intermediate school certificate. Graduates of these institutes will be awarded the Technical Training Diploma which will be equivalent to the academic secondary school certificate.

3.6 Literacy Program

3.6.1 Increase total enrollment in the present literacy program from 28,893 in 1394-95 to 393,751 in 1399-1400, providing a total of over 89,000 graduates during the plan period. The number of schools utilized for this program will increase from 99 in 1394-95 to 1,312 in 1399-1400, and 19,687 teachers and 3,936 administrators will be engaged in the program in 1399-1400 : see Figure V-15.

3.6.2 Review the current syllabus during 1395-96 and modify the basic subject material to make it more relevant to women.


1394-95
1399-1400
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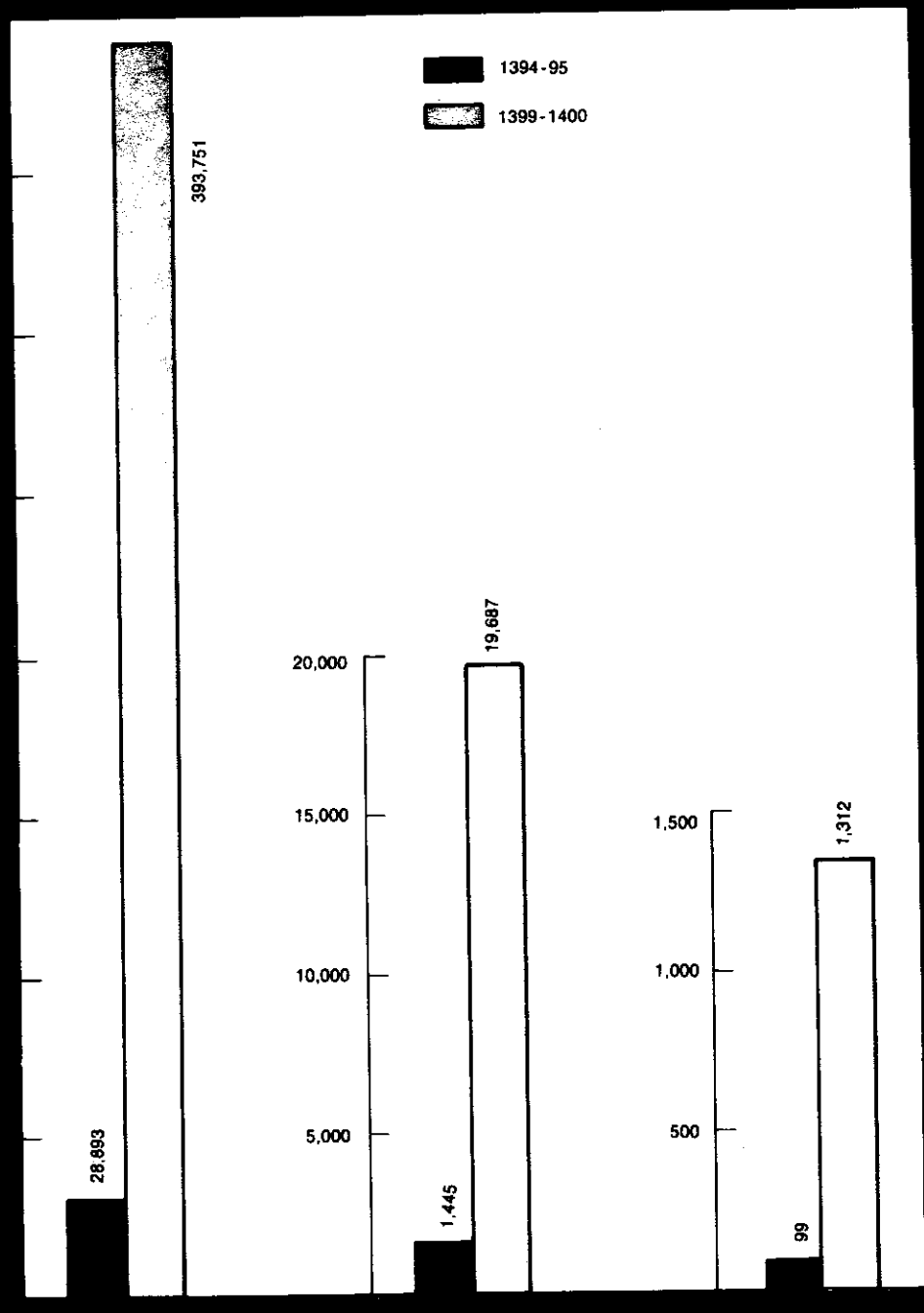
50
25
31
26


1394-95
1399-1400
393,751
28,893
20,000
15,000
10,000
5,000
19,687
1,445
1,500
1,000
500
1,312
99

3.6.3 Produce in cooperation with the Ministry of Information program material for radio and television which will supplement and reinforce the classroom work of the literacy program.

3.6.4 Organize intensive short-term training courses for literacy teachers and supervisors on an annual basis to improve the effectiveness of the ongoing literacy program.

3.7 Facilities

3.7.1 Complete the following authorized projects:

- ☆ 25 elementary schools, 9 classes each (1395-96).
- ☆ 16 elementary schools, 15 classes each (1395-96).
- ☆ 22 intermediate schools, 15 classes each (1395-96).
- ☆ 88 elementary schools, 23 classes each (1396-97).
- ☆ 18 intermediate schools, 15 classes each (1396-97).
- ☆ 4 secondary schools, 15 classes each (1396-97).
- ☆ 6 secondary schools, 23 classes each (1396-97).
- ☆ General Presidency building (1398-99).

3.7.2 Initiate the following new projects:

- ☆ 300 elementary schools at the rate of 60 per year; equal numbers of 9-class, 15-class, and 23-class schools (1395-1400).
- ☆ 132 intermediate schools at the rate of 26-27 per year; 52 of 9 classes and 40 each of 15 and 23 classes (1395-1400).
- ☆ 50 secondary schools of 15 classes each at the rate of 10 per year (1395-1400).
- ☆ 5 secondary teacher training institutes of 15 classes each (1395-96).
- ☆ Technical training institutes to replace the four existing centers (1395-96).
- ☆ 6 post-secondary teacher training colleges to be opened at the rate of two per year beginning in 1397-98 (1396-1400).

3.7.3 Include a hostel for 200 students and 20 teachers and administrators in the construction of the 5 secondary teacher training institutes listed above.

3.7.4 Construct the following administrative facilities:

- ☆ Buildings for ten regional education departments, beginning in 1395-96 with completion by the end of 1405.
- ☆ General stores and warehouse buildings at the Riyadh headquarters, beginning in 1395-96 with completion by the end of 1397-98.

3.7.5 Construct 14 school health units beginning in 1395-96 with completion by the end of 1398-99.

3.8 Educational Quality

3.8.1 Increase staffing in the regional educational offices as required for educational supervision. In addition, cover all towns not served by the regional offices through the representative system.

3.8.2 Increase the instructional inspectorate from the 196 posts authorized in 1394-95 to 502 posts in 1399-1400, the number of social inspectors from 122 in 1394-95 to 304 in 1399-1400, and the subject inspectors from 48 in 1394-95 to 143 in 1399-1400. Provide appropriate administrative support to help in implementation.

3.8.3 Design a program by the end of 1395-96 for the upgrading of elementary teachers who hold the intermediate certificate, and begin this in 1396-97.

3.8.4 Develop procedures for periodic reporting of the status of school facilities and equipment and streamline administrative processing of requests for supplies to reduce delays in deliveries.

3.9 Services

3.9.1 Initiate in 1395-96 a school-meals program in selected elementary schools in rural locations and extend the program in succeeding years as dictated by experience and need.

3.9.2 Increase the number of school health units from 23 in 1394-95 to 30 in 1399-1400; provide all remote schools with visiting medical service, and establish medical laboratories and dental and ophthalmological clinics in school health units at Dammam, Jiddah, and Riyadh.

3.9.3 Incorporate student and staff housing in intermediate and secondary schools and institutes that serve rural areas.

3.9.4 Enlarge the school bus fleet and replace outdated vehicles; strengthen contracts for school transport to insure adherence to schedules and provision of appropriate vehicles in good condition.

3.10 Teaching Staff

3.10.1 Increase teaching staffs as follows:

	1394 – 95		1399 – 1400	
	Teachers	*Ratio to Students*	*Teachers*	*Ratio to Students*
Elementary	8,970	1:24	16,065	1:22
Intermediate	2,030	1:17	4,550	1:15
Secondary	480	1:16	1,337	1:13
Teacher Training	250	1:18	755	1:17
Technical	45	1:12	120	1:10
Intermediate College	–	–	260	1: 8
Total	11,775		23,087	

3.10.2 Increase the overall proportion of Saudis in the teaching staffs from the present 42 percent to 53 percent in 1399-1400.

3.11 Health Staff

Increase the number of doctors and medical specialists from the present 44 to 66 in 1399-1400.

4. Finance

The annual requirements of girls' education, excluding the women's colleges, are estimated below (SR millions):

	Budgetea 1394-95	*1395-96*	*1396-97*	*1397-98*	*1398-99*	*1399-1400*	*Plan Total*
Recurrent	445.0	900.0	1,027.4	1,230.3	1,418.2	1,626.8	6,202.7
Project	433.3	509.0	546.0	621.0	643.0	674.0	2,993.0
Total	878.2	1,409.0	1,573.4	1,851.3	2,061.2	2,300.8	9,195.7

V.D.3. HIGHER EDUCATION

Figure V–16, showing increases in student enrollment, is indicative of the overall scope of development anticipated by the separate plans for the institutions of higher education presented below. Plans are being prepared for a new university in the Eastern Region.

V.D.3.1. UNIVERSITY OF RIYADH

1. Present Conditions

1.1 The University of Riyadh is now firmly established as a comprehensive higher education institution, with eight colleges that cover all major fields of study at the undergraduate level.

1.2 The number of full-time students enrolled at the University more than doubled during the first plan, the enrollment for the 1394–95 academic year is estimated at approximately 5,600 students, compared with the total of 2,665 in 1390–91. In addition, the University has increased its part-time student enrollment, from 942 in 1390–91 to over 1,200 in 1394–95.

1.3 The system for student advancement has been revised to require repetition only of courses failed rather than all courses when one was failed. A further modification is the credit-hour system introduced in the College of Education.

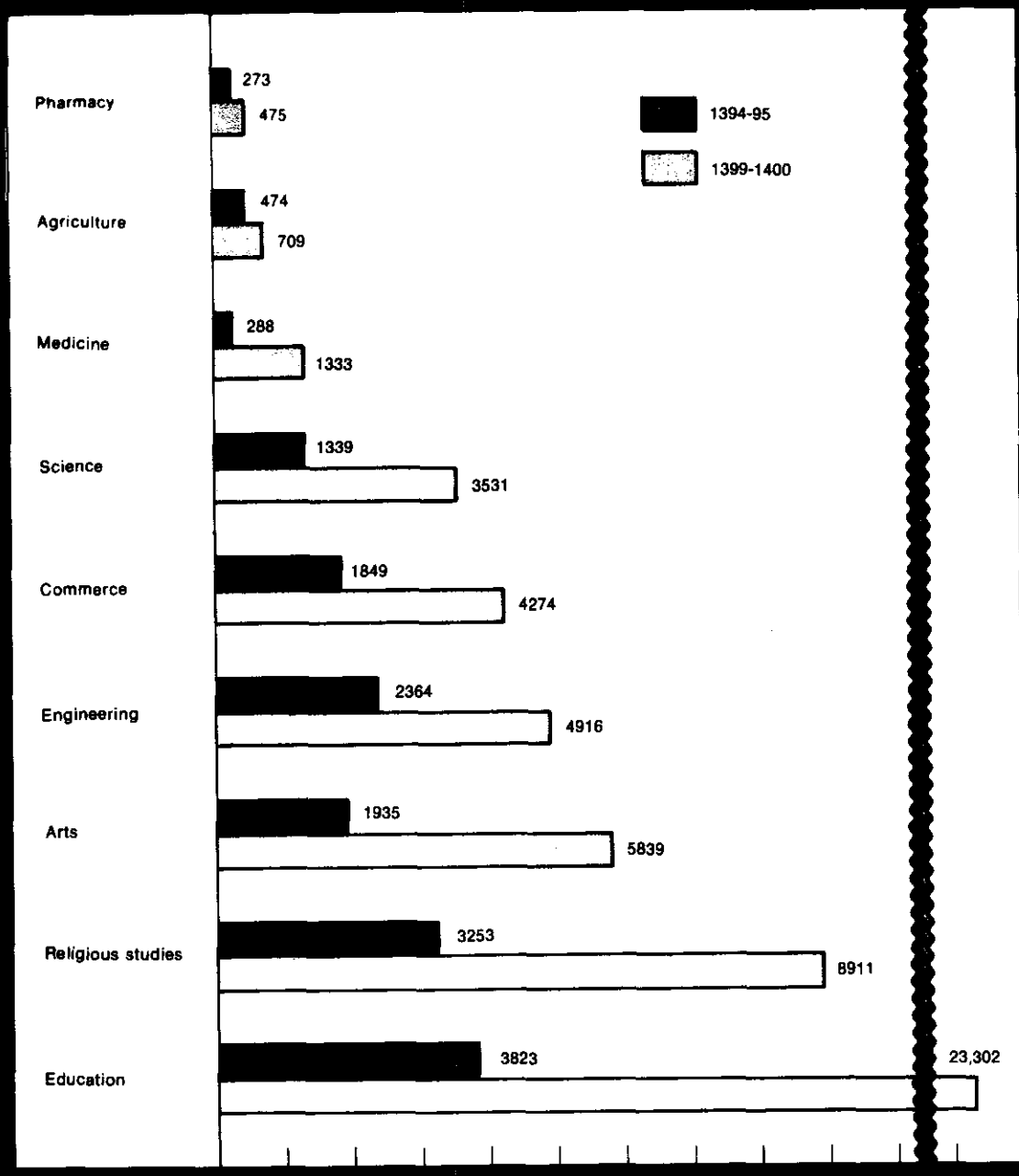
1.4 By the end of the 1394–95 academic year, the number of graduates is expected to exceed the first plan's target by almost 500, with particularly strong gains from the Colleges of Education and Science.

1.5 Planning the development of the ad-Dir'iyah campus has required more time than was anticipated; however, work is progressing, with ground-breaking for construction of the College of Medicine buildings scheduled for early 1395.

1.6 In view of the eventual relocation of the University near ad-Dir'iyah development of facilities in Riyadh has, for the most part, been restricted to remodeling and renovation, and new construction has been held to a minimum. As a result, the University colleges are crowded; classroom, laboratory, library, and office space is generally inadequate for the increased enrollment and instructional staff.

1.7 The faculty has not expanded in keeping with enrollment growth, and the 1:10 ratio of faculty to students in 1389–90 has increased to more than 1:13 as of 1393–94. While it is unlikely that the target of 1:10 will be reached in 1394–95, the situation is expected to improve as Saudis studying abroad begin to return to take up instructional staff positions.

1.8 Shortages of administrative and technical support personnel continue to constrain the operation of such programs as student registration, purchasing, inventory control, and others designed to improve the effectiveness of the University's operation. Staffing as of 1393–94 was 36 percent below the first plan's estimate.


Pharmacy
273
475
Agriculture
474
709
Medicine
288
1333
Science
1339
3531
Commerce
1849
4274
Engineering
2364
4916
Arts
1935
5839
Religious studies
3253
8911
Education
3823
23,302
1394-95
1399-1400

1.9 Research programs have been initiated by several colleges of the University, concentrating on studies designed to extend the knowledge of the Saudi physical and social environment. Concurrently, studies that focus on various aspects of the University's operation have been commissioned as preliminary stages to administrative decisions.

2. **Objectives and Policies**

2.1 The following objectives are in keeping with the announced intention to further develop the University into a unified and integrated higher education institution.

2.1.1 Initiate and complete construction work at the ad-Dir'iyah campus scheduled in the long-term master development plan of the University.

2.1.2 Improve and augment facilities in Riyadh to meet requirements of increased enrollment.

2.1.3 Develop a highly qualified instructional and administrative staff with increasing Saudi participation at all levels.

2.1.4 Ensure that support personnel are provided to meet the instructional, administrative, and service needs of the University staff, students, and facilities.

2.1.5 Strengthen the planning department in keeping with its responsibilities for plan formulation and budget preparation.

2.1.6 Increase the size of the student body while strengthening selection procedures and prerequisites for admission.

2.1.7 Expand all component colleges with particular emphasis on those offering programs in critical fields of professional manpower development.

2.1.8 Reorganize the departmental system in the colleges.

2.1.9 Provide the organizational structure for the coordination of graduate studies.

2.1.10 Implement the credit-hour system in all colleges and modify examination procedures.

2.1.11 Complete arrangements for the eventual establishment of a College of Veterinary medicine.

2.1.12 Provide housing for non-local students in lower division standing.

2.1.13 Broaden the program of student services.

2.2 Prepare students for participation in the social, economic, and cultural growth of the Kingdom.

2.2.1 Offer post-graduate programs leading to a graduate diploma or the master's degree in selected major departments.

2.2.2 Expand departmental offerings in all colleges that now grant undergraduate degrees.

2.2.3 Introduce new majors in astronomy and statistics and expand existing majors in other departments of the College of Science.

2.2.4 Introduce new majors in archeology, Eastern languages, and linguistics and expand existing majors in other departments of the College of Arts.
2.2.5 Introduce a major in chemical engineering in the College of Engineering.
2.2.6 Expand the women's section of the College of Medicine.
2.2.7 Increase the scholarship program for graduate studies abroad in selected specialties.
2.3 Promote the advancement of knowledge through research in social, economic, and cultural areas of investigation.
2.3.1 Expand ongoing research programs in the Colleges of Agriculture, Education, and Engineering.
2.3.2 Establish research centers in the Colleges of Arts, Commerce, and Pharmacy.
2.4 Expand the continuing program of public service.
2.4.1 Organize training courses to upgrade professionals in Government and the private sector.
2.4.2 Sponsor conferences, seminars, and exhibits on subjects of regional, national, and international interest.
2.4.3 Continue to provide part-time study opportunities for external students.
2.4.4 Initiate study programs and courses in cooperation with other government agencies to meet special requirements.
2.4.5 Continue to encourage external consulting services by faculty or staff under the standing regulations of the University.

3. Programs and Projects

3.1 University Development

3.1.1 Ad-Dir'iyah campus
3.1.1.1 Undertake the construction projects shown in Table V–12.
3.1.1.2 Provide a bus and motor car transportation system beginning in 1397–98 to bring College of Medicine and College of Pharmacy students and faculty from ad-Dir'iyah to the Riyadh campus for class and laboratory work.
3.1.2 Riyadh Campus
3.1.2.1 Undertake the construction projects shown in Table V–13.
3.1.2.2 Arrange for utilization of facilities in Riyadh released by the Colleges of Medicine and Pharmacy upon their move to ad-Dir'iyah. Give consideration to requirements of the Colleges of Science and Arts as well as other university needs for instructional and administrative space.
3.1.3 Faculty and Staff Development
3.1.3.1 Increase instructional faculty from 1,406 in 1395-96 to 2,308 in 1399-1400, equally divided between professorial ranks and lecturers and demonstrators.
3.1.3.2 Insofar as possible, organize academic rank distribution of professors, associate professors, and assistant professors and instructors in the ratio of 1:2:3.

Table V-12
PLANNED AD-DIR'IYAH FACILITIES OF THE UNIVERSITY OF RIYADH

Year	*College or Function and Facility*
1395-96	On-campus housing: start[a]
	Utilities: start
1396-97	(no new construction programs)
1397-98	College of Medicine: complete first phase
	College of Pharmacy: complete
	College of Science: start
	Dining halls: start
	Utilities: complete first phase
1398-99	College of Arts: start[b]
	Mosque: complete
1399-1400	College of Commerce: complete[c]
	College of Education: complete[c]
	College of Medicine: complete all phases
	College of Science: complete first phase[b]
	Central Library: complete[c]
	Dining halls; complete first-phase
	Administration: complete administration center (first phase), auditorium, and computer center.

a On-campus housing construction will continue throughout the campus development period.
b Complete all College of Arts construction in 1401 and all College of Science by end of 1403.
c Complete the Colleges of Commerce and Education, and the Central Library, by the end of 1400 (academic year 1400-01).

3.1.3.3 Allocate instructional staff according to teaching loads to provide an overall student-faculty ratio of 1 staff member per 9.68 students, with ratios for component colleges as follows:

Agriculture	10.57	Engineering	6.72
Arts	4.76	Medicine	5.62
Commerce	19.04	Pharmacy	11.71
Education	20.76	Science	7.73

3.1.3.4 Assign scholarship students who have completed graduate studies abroad to instructional positions, thus increasing the proportion of Saudis in professorial ranks — full, associate, and assistant professors — to 40 percent by the end of the Plan.
3.1.3.5 Recruit foreign contract faculty from countries with advanced and established higher education systems, and concentrate on attracting Arabs of professional standing who now reside in Europe or the United States.

Table V -13
PLANNED RIYADH FACILITIES OF THE UNIVERSITY OF RIYADH

Year of Undertaking	*College and Facility*
1395-96	College of Agriculture: Land for experimental farm, sheds etc. for plant production, dual-purpose swimming pool/irrigation reservoir, seminar/reading rooms, dining/social halls.
	College of Arts: Language lab, monuments office (rent and furnish), classrooms and equipment for part-time female students.
	College of Commerce: Lecture halls (5), classrooms (15), offices (15), social center, gymnasium, library, storage building.
	College of Education: Research center, school for applied studies, short-term courses center, chemistry/biology lab, storage for chemicals, etc.
	College of Engineering: Electrical engineering building.
	College of Medicine: For female students—lecture halls (2), labs (3), offices (10).
	College of Pharmacy: Lecture hall, classrooms (5), offices (6), pharmacy lab(1), research labs (2), medicinal plants research center, model pharmacy, experimental animal housing.
	College of Science: Labs (4)–astronomy, maths/statistics, physics, desert sciences; lecture halls (8); offices; department libraries (5); science museum; storage.
	Administration: Annex office building (2), library annex, admissions office (furnish and equip).
1396 – 97	College of Agriculture: Lecture halls (5), classrooms (9).
	College of Education: Lecture hall, physics lab.
	College of Engineering: Drafting rooms (10), classrooms (9), administrative offices (15), instructional staff offices (50).
	College of Pharmacy: Classrooms (5), offices (3), microbiology lab.
	College of Science: Labs (5)—botany, chemistry, explosives, spectrum, insects; electronic microscope.
1397 – 98	College of Arts: Lecture halls (2), classrooms (8), offices (8).
	College of Engineering: Labs (2) – mechanical engineering, general engineering science; electronic nuclear reactor; reproduction center; library expansion; storage; maintenance shop; garages.
	College of Pharmacy: Labs (3)—toxicology, biochemistry, drug chemistry; medicine analysis control center; offices (3).
	College of Science: Lecture halls (6), seminar hall, adminstration offices, social hall.
1398 – 99	College of Arts: Lecture halls (2), classrooms (6), offices (6).
	College of Pharmacy: Calibration lab, offices (3).
1399 – 1400	College of Arts: Classrooms (6), offices (6).
	College of Pharmacy: Offices (3).

3.1.4 Support Personnel

Increase the number of laboratory technicians as required, with the following distribution among colleges:

- ☆ 100 percent of professorial staff in the Colleges of Agriculture, Engineering, Medicine, Pharmacy, and Science.
- ☆ 60 percent of professorial staff in the College of Education.
- ☆ 40 percent of professorial staff in the College of Arts.
- ☆ 30 percent of professorial staff in the College of Commerce.

3.1.5 Planning Department

3.1.5.1 Complete the staffing of the Planning Department as authorized in the current pudget.

3.1.5.2 Review administrative procedures to ensure full coordination between the Planning Department and the Department of Studies and Information.

3.1.6 Enrollment Expansion

3.1.6.1 Expand total enrollment from 5,638 students in 1394-95 to 10,496 students in 1399-1400.

3.1.6.2 Increase intake of new students from 1,978 in 1395-96 to 2,715 in 1399-1400.

3.1.6.3 Continue to use the secondary-school certificate grades as a criterion for admission.

3.1.6.4 Develop a system of objective tests to screen applicants for admission.

3.1.7 Growth of Colleges

3.1.7.1 Allocate approximately 25 percent of the incoming students to the College of Education, 17 percent to Commerce, 15 percent to Engineering, and 13 percent to Science.

3.1.7.2 Increase the share of the Colleges of Medicine and Pharmacy to approximately 10 percent of the incoming students by the end of the Plan.

3.1.7.3 Increase the proportion of new students enrolling in the College of Agriculture to 8 percent and maintain new student enrollment in the College of Arts at approximately 12 percent.

3.1.8 College Department Reorganization

Replace in 1395-96 the existing structure of principal departments and related study fields with a new structure of primary departments and secondary or sub-departments.

3.1.9 Graduate Studies Coordination

Establish a graduate studies directorate with responsibility for proposing regulations governing graduate work, assisting in selection of instructional staff, and ensuring balance between research requirements and study.

3.1.10 Credit-Hour System

3.1.10.1 Continue phasing in the credit-hour system in the Colleges of Agriculture, Education, Engineering, and Pharmacy.

3.1.10.2 Initiate the credit-hour system in all remaining colleges beginning in 1395-96 so that the University will be operating on this system by the end of the plan period.

3.1.10.3 Review the experimental results of the new examination system in the introductory and first years of college study, and make amendments as necessary prior to extending the system to all college years.

3.1.11 Department of Veterinary Medicine

Establish a veterinary medicine program at department level in the College of Agriculture, initially of two years duration, with ultimate expansion to major status as a new college of the University.

3.1.12 Student Housing in Riyadh

3.1.12.1 Provide housing through rental agreements for first- and second-year male students from outside Riyadh (estimated at approximately 70 percent of the enrollment in these two years).

3.1.12.2 Provide housing for all female students from outside Riyadh who are enrolled in the female section of the College of Medicine.

3.1.13 Student Services

3.1.13.1 Strengthen the Department of Student Affairs through additions of qualified staff and allocations of finances adequate for operations.

3.1.13.2 Construct two student-activity complexes in 1395-96, one in Ulaysha for the Colleges of Agriculture, Commerce, Education, and Engineering, and one in Malaz for the remaining colleges in Riyadh.

3.1.13.3 Expand the two existing student-health units and establish additional units on a one-per-college basis.

3.1.13.4 Establish a psychological and social unit with staff specialists in student problems, guidance, and personal adjustment.

3.1.13.5 Establish procedures for receipt and distribution of contributions and funding to improve the operation of the student assistance fund.

3.2 Academic Development

3.2.1 Post-Graduate Programs

3.2.1.1 Expand the ongoing master's degree programs in the Colleges of Arts and Education.

3.2.1.2 Introduce a post-graduate diploma program in the College of Agriculture in 1395-96.

3.2.1.3 Establish a two-year diploma program in administration in the College of Commerce.

3.2.1.4 Initiate graduate studies in the College of Science in 1395-96.

3.2.2 New Departmental Offerings

Establish new primary and sub-departments in the colleges as shown in Table V-14.

3.2.3 New Majors — College of Science

3.2.3.1 Offer a major in statistics beginning in 1395-96.

3.2.3.2 Offer majors, beginning in 1396-97, in the following fields:

- ☆ Astronomy.
- ☆ Botany — ecology and physiology
- ☆ Chemistry — organic, inorganic, physical, analytical.
- ☆ Geology — hard rock, soft rock.
- ☆ Zoology.

3.2.3.3 Offer a major in Theoretical Physics beginning in 1397-98.

3.2.3.4 Offer a major in Applied Physics beginning in 1399-1400.

Table V -14
PLANNED NEW DEPARTMENTS OF THE UNIVERSITY OF RIYADH

Year of Establishment	*College and Departments*
1395 - 96	College of Agriculture Sub-departments: Agricultural Engineering, Dairy Products, Food Products, Horticulture, Insects, Insecticides, Plant Diseases. College of Arts Primary departments: Library Science, Eastern and African Languages. Sub-departments: Arabic Language for Foreigners, Library Science, Eastern Languages, African Languages. College of Engineering Primary department: Chemical Engineering Sub-departments: Chemical Engineering, Communications, Construction, Power and Machinery, Transportation.
1396 - 97	College of Commerce Primary and sub-departments: Statistical Analysis. College of Education Primary departments: Vocational Education, Special Education. Sub-departments: Agricultural Voc. Ed., Commercial Voc. Ed., Industrial Voc. Ed., Exceptional Students Spec. Ed., Retarded Children Spec. Ed., Handicapped Students Spec. Ed.
1396 - 97	College of Science Primary Department: Astronomy Sub-departments: Astronomy, Botany[a], Chemistry[b], Geology[c], Mathematics (applied and pure), Zoology[d].
1397 - 98	College of Arts Primary Departments: Linguistics and Phonetics, Modern European Languages. Sub-departments: Linguistics and Phonetics, Arabic Literature and Criticism, Arabic Literature and Dialogues, French Language, German Language, English Language, English Literature, Geography, Cartography, Drama Techniques. College of Education Primary Departments: Experimental Psychology, Clinical Psychology, Adult Education. Sub-departments: Applied Psychology, Clinical Psychology, Adult Education, Statistics and Research Technology, Mental Tests and Testing, Higher Education. College of Science Sub-department: Theoretical Physics
1398 - 99	College of Pharmacy Primary Department: Biological Pharmacy Sub-departments: Micro-organic Pharmacy, Biochemistry, Drug Properties, Bio-Experiments, Toxicology.
1399 - 1400	College of Agriculture Primary Departments: Agronomy, Rural Community Studies.

a Including physiology of plants, microscopic biology, and environment.
b Including anlytical, organic, inorganic, and physical chemistry.
c Including earth chemistry, fossils, metallurgy, precipitation, and rocks.
d Including comparative anatomy, biochemistry, tissues, vertebrata, environment, and radiobiology.

3.2.4 New Majors — College of Arts.

3.2.4.1 Offer majors, beginning in 1397-98, in the following fields:

- ☆ Arabic language
- ☆ Arabic literature
- ☆ Cartography
- ☆ Eastern languages
- ☆ English language
- ☆ English literature

3.2.4.2 Offer a major in Archeology, beginning in 1399-1400.

3.2.5 New Major — College of Engineering

Offer a major in Chemical Engineering, beginning in 1395-96.

3.2.6 Women's Section — College of Medicine

3.2.6.1 Increase the intake of new female students in the women's section of the College of Medicine from 30 in 1395-96 to 50 per year beginning in 1396-97.

3.2.6.2 Expand total enrollment from 56 students in 1395-96 to 214 in 1399-1400.

3.2.7 Graduate Studies Abroad

Provide 500 scholarships during the plan period to lecturers and demonstrators for advanced study abroad in selected fields.

3.3 Research

3.3.1 Ongoing Programs

3.3.1.1 College of Agriculture:

- ☆ Complete study of plant oils and processing in 1395-96.
- ☆ Complete studies of soil and salinity problems in the al-Hasa area in 1395-96.
- ☆ Conduct research during the period 1395-96 to 1396-97 on the effects of fertilizers on growth and quality of selected crops.

3.3.1.2 College of Education:

- ☆ Complete work on the formulation and standardization of I.Q. tests for Saudi children.
- ☆ Implement the program of studies on educational subjects being developed in coordination with the Ministry of Education.

3.3.1.3 College of Engineering:

- ☆ Establish research units in heat and solar energy transmission, and hydraulic engineering in the College research center.

3.3.2 Additional Research Centers

3.3.2.1 Establish a social research center with computer capability in the College of Arts.

3.3.2.2. Establish a research and advisory center for economics and management in the College of Commerce.

3.3.2.3 Establish a research center in the College of Pharmacy to concentrate initially on medicinal plants and later expand to include drug analysis and control.

3.4 Public Service

3.4.1 Training Courses

3.4.1.1 Present at the College of Agriculture a six-month course in 1395-96 on modern techniques of agricultural marketing for personnel of the Saudi Agricultural Bank.

3.4.1.2 Develop a multi-purpose technical course in coordination with the Ministry of Agriculture and Water for presentation by the College of Agriculture.

3.4.1.3 Initiate a two-year program in the College of Agriculture for agricultural technicians, beginning in 1395-96.

3.4.1.4 Establish a center in the College of Education for the presentation of short courses (similar to the headmasters and modern mathematics courses) in coordination with the Ministry of Education.

3.4.1.5 Provide special courses on pharmaceuticals and pharmacy operations in the College of Pharmacy.

3.4.2 Conferences, Meetings, Exhibits

3.4.2.1 Continue the program of special meetings, conferences, and exhibits on both a university-wide and an individual college basis.

3.4.2.2 Continue to take advantage of cooperative proposals by foreign governments for presentations and conferences on subjects relevant to the role of the University in public service.

3.4.3 Services

Increase consulting activity, and field and applied research in response to specific requirements from government agencies.

4. Finance

The University of Riyadh's annual financial requirements are estimated below (SR millions):

	1394 -95	*1395 -96*	*1396 -97*	*1397 -98*	*1398 -99*	*1399- 1400*	*Plan Total*
Recurrent	148.6	231.5	272.9	329.0	388.5	471.9	1,693.8
Project	223.1	575.6	359.9	538.1	611.2	505.5	2,590.2
Total	371.7	807.1	632.7	867.1	999.6	977.4	4,284.0

V.D.3.2 KING ABDUL AZIZ UNIVERSITY

1. Present Conditions

1.1 King Abdul Aziz University is completing its transition from a small private college in Jiddah with two faculties, to a comprehensive higher education institution with three colleges in Jiddah and two colleges in Mecca. Plans are completed for the opening next year of two additional colleges — Engineering and Medicine — in Jiddah.

1.2 Students enrolled in the 1394-95 academic year number 3,737, almost double the total in 1391-92, the first year of operation as a public university.

1.3 Rapid growth has made the University heavily dependent on foreigners for instructional staff; Saudis account for only about 20 percent of this staff.

1.4 Construction of new facilities has been limited to a multi-story building for administration and classes, and an adjacent education complex for female students; other needs are being met temporarily by portable buildings and modification of old structures.

1.5 The University's organization is being modified; departments for Planning and for Organization and Management were established in 1393-94 and 1394-95, respectively, but have yet to be fully staffed.

1.6 The Library has yet to be developed to university standards, having only some 25,000 books and a variety of periodicals.

1.7 The Mecca campus, which accounts for almost half of the 1394-95 enrollment, is reaching the physical limit of its expansion capability.

1.8 The preliminary master development plan for the University has been completed and work is underway on the design stage for the 15-year expansion program.

2. Objectives and Policies

The following objectives and policies for the 1395-1400 period provide the framework of the first phase in the long-range development of King Abdul Aziz University into a comprehensive general education university of excellent quality.

2.1 Guide the growth of the University as an integral element of the higher education system of the Kingdom.

2.1.1 Develop a highly-qualified instructional and administrative staff with increasing Saudi representation at all levels.

2.1.2 Provide support capability to meet the instructional, administrative, and service needs of the university staff, students, and facilities.

2.1.3 Modify the organizational structure where necessary to assure effective operation both within and between the Jiddah and Mecca campuses.

2.1.4 Provide for the orderly growth of component colleges to assure balanced contributions to the nation's professional manpower.

2.1.5 Implement the phased campus-construction programs at Jiddah and Mecca.

2.1.6 Unify all curricula through adoption of the credit-hour system.

2.1.7 Increase the size of the student body while continuing the policy of selective admission.

2.1.8 Phase out the present female student division in Jiddah following the establishment of the Women's College of Education in Jiddah under the General Administration for Girls' Colleges.

2.1.9 Expand the library system and extend its capabilities.

2.1.10 Coordinate and extend the program of student services.

2.1.11 Provide housing and support facilities where necessary for students and staff.

2.2 Prepare students for participation in the social, economic, and cultural growth of the Kingdom.

2.2.1 Offer programs leading to the master's degree in selected major departments.

2.2.2 Expand the College of Education program in keeping with the growing general and specialized requirements of the Kingdom's educational system.

2.2.3 Establish a College of Medicine.

2.2.4 Establish a College of Engineering.

2.2.5 Develop a Journalism and Information program, eventually expanding it to undergraduate degree status.

2.2.6 Develop a European Languages program with eventual expansion to undergraduate degree status.

2.2.7 Develop a Library Sciences program at the post-graduate level.

2.2.8 Expand the College of Sharia program to meet changing judiciary requirements associated with economic development.

2.2.9 Expand the scholarship program for graduate studies abroad in selected specialties.

2.3 Promote the advancement of knowledge in social, economic, and cultural areas through research.

2.3.1 Establish a Marine Sciences Institute with research capabilities in the economic potential of marine resources, implications of sea water population, fisheries, and related subjects.

2.3.2 Establish pilot schools at the secondary and elementary-intermediate levels as educational laboratories for the study of curricula, teaching methods, educational aids, and administration.

2.3.3 Establish a schedule of academic research programs for all the present colleges of the University.

2.4 Expand the program of public service toward optimum utilization of the University's resources.

2.4.1 Provide short practical training courses in various subjects for participants from the public and private sectors.
2.4.2 Increase participation in the programs of part-time study for external students.
2.4.3 Study the potential of public television for educational programs and courses.
2.4.4 Sponsor conferences and seminars on subjects of regional, national, and international interest.
2.4.5 Continue to encourage external consulting services by faculty or staff under the standing regulations of the University.

3. Programs and Projects

3.1 University Development

3.1.1 Instructional Faculty

3.1.1.1 Increase instructional faculty from 800 in 1395-96 to 1,832 in 1399-1400, with approximately 57 percent of these personnel assigned as professors, associate professors, assistant professors and teachers and the remaining 43 percent as lecturers and demonstrators.

3.1.1.2 Insofar as possible, organize academic rank distribution according to the following proportions: professors — 20 percent; associate professors — 30 percent; and assistant professors and teachers — 50 percent.

3.1.1.3 Increase the proportion of Saudis in the professorial ranks from 18 percent in 1395-96 to approximately 25 percent by the end of the Plan.

3.1.1.4 To achieve this Saudi faculty target, initiate an annual program of foreign scholarships for graduate studies, beginning with 107 scholarships in 1395-96 and totalling 650 scholarships during the plan period.

3.1.2 Support Capability

3.1.2.1 Provide component colleges of the University with the necessary administrative, technical, and clerical staff.

3.1.3 Growth of Colleges

3.1.3.1 Through a program of guided admissions, increase the size of the Colleges of Education, Engineering, and Science from 45.8 percent of the total university enrollment in 1395-96 to 55.8 percent in 1399-1400.

3.1.3.2 Control the growth of the Colleges of Arts and Sharia through selective admissions, changing the proportion of students enrolled in these two colleges from 25.4 percent of total enrollment in 1395-96 to 16.9 percent in 1399-1400.

3.1.3.3 Maintain the relative size of the College of Economics and Administration at between 26 and 27 percent of the total enrollment.

3.1.3.4 Increase new student admissions annually to the College of Medicine, from 60 male and 20 female students in 1395-96 to 135 male and 42 female students in 1399-1400.

3.1.4 Construction

3.1.4.1 Complete Phase I of the construction program for the Jiddah campus by the end of 1398, with beneficial occupancy at the beginning of the 1398-99 academic year.

3.1.4.2 Complete Phase I of the construction program for College of Medicine at Jiddah by the end of 1399, with beneficial occupancy at the beginning of 1399-1400 academic year.

3.1.4.3 Complete construction of the new Mecca campus by the end of Ramadhan 1400, with phased beneficial occupancy during the 1399-1400 academic year.

3.1.5 Credit-hour System

Complete phasing in the credit-hour system for all colleges by the 1397-98 academic year.

3.1.6 Enrollment Expansion

3.1.6.1 Expand total enrollment from 3,737 students in 1394-95 to 11,610 students in 1399-1400.

3.1.6.2 Increase new student admissions from 1,842 in 1395-96 to 3,904 in 1399-1400 — approximately 30 percent of the graduates of all boys' public secondary schools.

3.1.7 Female Students

3.1.7.1 Admit female students to the College of Medicine, beginning in 1395-96.

3.1.7.2 Suspend admission of new female students to other colleges of the Jiddah campus, beginning in 1395-96 when the Women's College of Education will open in Jiddah under the supervision of the General Administration for Girls' Colleges.

3.1.7.3 Continue ongoing programs for currently-enrolled female students at the Jiddah campus, phasing out lower classes as students progress so that by 1399-1400 only the fourth year of Arts and the third and fourth year of Economics and Business Administration will have female students.

3.1.7.4 Continue female student admissions at colleges in Mecca.

3.1.8 Library Systems

3.1.8.1 Expand the program of library acquisitions, adding 500,000 reference, non-technical, and related books during the plan period.

3.1.8.2 Establish a system of sub-libraries in 1395-96 for the component colleges of the University, with emphasis on relevant technical books and publications appropriate to each college.

3.1.8.3 Establish two documentation centers, one in Jiddah and one in Mecca, in 1395-96.

3.1.8.4 Expand the university's library system through the development of library services in cooperation and coordination with other universities.

3.1.9 Student Services

3.1.9.1 Strengthen provisions for academic and personal counselling to keep pace with enrollment growth.

3.1.9.2 Provide the necessary staff, facilities, and equipment to support a comprehensive program of formal and informal athletic activity for students.
3.1.9.3 Provide the necessary staff, facilities, equipment, and supplies for both routine and emergency medical treatment and care of students.
3.1.10 Housing and Support Facilities

Complete construction of the first increment of student and faculty housing at Jiddah by the end of 1398 — totalling 33,600 square meters floor space — as an element of the Phase I construction program.

3.2 Academic Development

3.2.1 Master's degree programs
3.2.1.1 Establish master's degree programs in the Colleges of Education and Economics and Administration, beginning in 1395-96.
3.2.1.2 Introduce a master's degree program in English Language in the College of Arts in 1398-99.
3.2.2 College of Education
3.2.2.1 Initiate a one-year special diploma program of post-graduate studies for graduates of the college, beginning in 1395-96.
3.2.2.2 Initiate a one-year general diploma program of studies for headmasters and teachers in Ministry of Education schools, beginning in 1395-96.
3.2.2.3 Initiate a master's degree program, beginning in 1395-96.
3.2.2.4 In coordination with the Ministry of Education, open one junior college per year during the period 1396-97 through 1398-99 at different locations, to provide training for specialized teachers in intermediate and elementary schools.
3.2.3 College of Medicine

Open a College of Medicine in 1395-96, with the initial enrollment of 60 male and 20 female students growing to a total of 397 male and 125 female students by 1399-1400.
3.2.4 College of Engineering
3.2.4.1 Open a College of Engineering in 1395-96 with initial enrollment of 100 students in the preparatory year, expanding to a total enrollment of 592 students in 1399-1400 when the first class of 22 students will graduate.
3.2.4.2 During 1395, review the potential for increasing the intake of new students and, if necessary, modify the above projection of enrollment and graduates.
3.2.5 Journalism and Information

Open a Journalism and Information section in the College of Arts in 1397-98.
3.2.6 Open a European Languages and Arts section in the College of Arts in 1397-98.
3.2.7 Library Sciences

Introduce a diploma program in Library Sciences at the post-graduate level in the College of Arts in 1399-1400.

3.2.8 College of Sharia

3.2.8.1 Open a Justice section in 1395-96, with initial enrollment of 20 students.

3.2.8.2 Open an Invocation and Guidance section in 1396-97, with an initial enrollment of 20 students.

3.2.9 Graduate studies abroad

3.2.9.1 Sponsor a total of 650 scholarships for graduate studies abroad, scheduled as follows: 107 in 1395-96; 137 in 1396-97; 157 in 1397-98; 127 in 1398-99; and 122 in 1399-1400.

3.2.9.2 Distribute graduate studies scholarships as follows: 75 in medicine; 75 in engineering; 160 in science; 120 in economics; 150 in education; 60 in arts; and 10 in Sharia.

3.3 Research

3.3.1 Marine Sciences Institute

3.3.1.1 Complete plans for the Marine Sciences Institute, with operations beginning in 1396-97, initially under the College of Science.

3.3.1.2 Complete the feasibility studies scheduled for 1395 for the Marine Sciences Institute as a separate entity.

3.3.2 Pilot Schools

3.3.2.1 Open a secondary school in 1396-97 (with an initial enrollment of 100 students increasing to 450 students by 1399-1400) to provide opportunities for applied educational research in teaching and administration at the secondary level.

3.3.2.2 Open an elementary-intermediate school in 1398-99 (with an initial enrollment of 300 elementary and 100 intermediate students, increasing to 450 elementary and 250 intermediate students by 1399-1400) to provide opportunities for applied educational research in teaching and administration at the pre-secondary levels.

3.3.3 Academic Research and Study

3.3.3.1 Conduct studies in the College of Science during 1395-96 on water pollution; during 1396-97 on fishery development; during 1397-98 on water resource development; and during 1399-1400 on solar power and meteorology.

3.3.3.2 Conduct studies during the plan period in the College of Education on nursery schools and kindergartens; elementary, intermediate, and secondary education; adult education; examination systems; student guidance programs; and vocational education.

3.3.3.3 Initiate a program in 1395-96 of physical environment studies by the Geography Division of the College of Arts.

3.3.3.4 Initiate a program in 1396-97 of studies concerning Saudi society by the Social Studies Division of the College of Arts.

3.3.3.5 Initiate an archeological research program in 1397-98 by the History Division of the College of Arts, with particular attention to Madayn Salih and similar areas.

3.3.3.6 Conduct studies during the plan period in the College of Sharia on the archeology at Haram al-Macci, the religious curriculum requirements at the secondary-school level, and Hajj principles and performance.

3.4 Public Service

3.4.1 Special Courses

3.4.1.1 Introduce in 1395-96 in the College of Science an annual evening training program of two months in modern mathematics for secondary school teachers, enrolling 20 participants for each program.

3.4.1.2 Establish a two-month training program in 1395-96, to be held every two years in the College of Science for managers and businessmen on the use of mathematics and statistics in decision-making.

3.4.1.3 Provide, annually, short courses in the College of Economics and Administration for businessmen in business administration, banking, and transportation.

3.4.1.4 Present a course for marketing and manpower specialists in the College of Economics and Administration in 1395-96 and 1397-98.

3.4.1.5 Provide, annually, courses in the College of Economics and Administration for university staff in administration, accounting, financial management, personnel management, purchasing, and public relations.

3.4.1.6 Provide, annually, a four-month course in English Language and another in Library Sciences in the College of Arts.

3.4.1.7 Conduct short courses annually in Arabic Language for non-Arabic speaking foreigners.

3.4.1.8 Present training courses in the College of Sharia on recitation, memorization, and interpretation of the Qur'an for university students in Jiddah and Mecca.

3.4.1.9 Present a training course in application of Sharia principles at the College of Sharia in 1396-97 for 10 members of the judiciary.

3.4.1.10 Initiate a program of courses to be held annually at the College of Sharia in spoken classical Arabic, beginning in 1395-96.

3.4.1.11 Arrange through the University for summer work-experience programs for students in both the public and private sectors.

3.4.2 Programs for Part-Time Students

Continue to expand the acceptance of part-time students for university study up to a maximum of 50 percent of total full-time enrollment.

3.4.3 Public Television

Continue discussions with the Ministry of Information on the development of a cooperative arrangement for the presentation of university courses or study programs to the public over the national television system.

3.4.4 Conferences and Seminars

3.4.4.1 Under College of Education sponsorship, organize:

- ☆ A conference on secondary-school examinations in 1395-96.
- ☆ A conference on kindergarten and elementary education in 1397-98.
- ☆ A conference on the role of the teacher training college in 1399-1400.

3.4.4.2 Under College of Arts sponsorship, organize:

- ☆ An Islamic historians' conference in 1398-99.
- ☆ An Islamic social scientists' conference in 1399-1400.

4. Finance

The annual requirements for financing of King Abdul Aziz University are estimated as follows (SR millions):

	Budgeted 1394-95	*1395 -96*	*1396 -97*	*1397 -98*	*1398 -99*	*1399- 1400*	*Plan Total*
Recurrent	78.2	126.4	173.3	228.6	294.5	376.3	1,199.2
Project	93.7	96.8	219.2	453.7	776.9	482.6	2,029.2
Total	171.9	223.3	392.5	682.3	1,071.4	858.9	3,228.4

V.D.3.3. UNIVERSITY OF PETROLEUM AND MINERALS

1. Present Conditions

1.1 The University of Petroleum and Minerals has met or surpassed all targets set in the first development plan and is firmly established as an undergraduate institution preparing professional manpower for the petroleum and minerals industry of the Kingdom.

1.2 Students enrolled in the 1394-95 academic year number 1,497 — well over the plan target of 1,150.

1.3 The University graduated 123 students with the Bachelor of Science degree in 1394 and expects to graduate 155 in 1395: the plan estimated 103 graduates.

1.4 The master's degree program has 54 students in the 1394-95 school year, over twice the 22 student total projected in the first plan. Some 15 students are expected to receive the Master of Science degree at the end of this year: the plan called for 8 advanced degree graduates.

1.5 The new academic complex was completed and fully operational at the beginning of the 1394-95 school year.

1.6 The curriculum has been expanded beyond that planned, with the introduction of majors in petroleum engineering, systems engineering, and industrial management.

1.7 Although the instructional faculty total of 166 persons as of 1394-95 (104 of whom hold professorial rank) exceeds the plan estimate of 133, the tabulation below shows that the University is understaffed for the growth in enrollment and programs now being experienced.

	Required	*Actual*	*Deficit*
Instructional faculty	235	166	69
Support staff	383	250	133
Library/Data Processing/Geology Center	76	64	12
Faculty and staff in training	166	120	46
Skilled labor	83	42	41
Total	943	642	301

2. Objectives and Policies

Future needs of the Kingdom for professional manpower dictate that the University maintain its development momentum, correct its staffing deficiencies and, where appropriate, shift its educational emphasis. The following objectives and policies are responsive to these requirements.

2.1 Continue the development of the University of Petroleum and Minerals into a technical university of excellent international standard.

2.1.1 Develop a highly-qualified, balanced, multi-national faculty and staff, fully competitive by international standards.
2.1.2 Complete the planning, design, construction, and equipping of academic facilities in accordance with the current campus master development plan.
2.1.3 Increase the size of the student body and raise its quality through a selective admissions system.
2.1.4 Expand the base of incoming students through admission of a percentage of tuition-paying and foreign scholarship students.
2.1.5 Initiate a phased program of library acquisitions.
2.1.6 Maintain and expand international cooperative agreements with academic institutions and organizations.
2.1.7 Continue operations of the University as essentially a resident institution, providing necessary housing and support facilities for students and eligible staff members.
2.1.8 Unify the utilities systems to support the operation of the University.
2.1.9 Establish a University Press to provide internal publication services.
2.2 Prepare personnel to high degrees of expertise so they may meet the professional and managerial needs of the Government and the Petroleum and Minerals Industry in the economic and social development of the Kingdom.
2.2.1 Offer programs leading to both the M.Sc. and Ph.D. degree in selected major departments, with additional offerings when indicated by need.
2.2.2 Expand the Industrial Management program to an academic degrees major, and consider the establishment of a College of Industrial Management.
2.2.3 Develop a Petroleum Engineering program, with eventual expansion to undergraduate and graduate degree status.
2.2.4 Review and modify, as necessary, curricula in existing major study fields in consonance with current academic and professional developments.
2.2.5 Initiate a one-year foreign study program in counterpart institutions for selected students.
2.2.6 Expand the Saudi graduate-assistant program.
2.3 Promote knowledge of energy, petroleum, and minerals, and encourage scientific research in these fields.
2.3.1 Establish, plan, staff, construct, and equip a Research Institute that will ultimately become the primary source of research and development for the Saudi petroleum industry.
2.3.2 Initiate a program of training and research in atomic energy.
2.3.3 Incorporate academic research facilities in future construction where necessary to augment the Research Institute.

2.3.4 Develop facilities at the Half Moon Bay property to support research in water distillation, pollution control, marine biology, and oceanography.
2.4 Maintain and expand the program of public service.
2.4.1 Increase the size and scope of the extension program of continuing education at the post-secondary level, with major emphasis on technology and engineering subjects.
2.4.2 Continue to encourage faculty and staff to undertake external consulting under cost-plus-fee arrangements between the University and clients.
2.4.3 Through the Research Institute, perform technical and consulting services for government and industrial clients.
2.4.4 Continue to provide data processing service on a fee basis to government and industrial organizations, but retaining first priority for the University.
2.4.5 Sponsor lecture series and scientific and technical conferences, using both university faculty and invited participants of international stature.

3. Programs and Projects

3.1 Instructional Faculty Development

3.1.1 Increase instructional faculty from 166 in 1394-95 to 357 in 1399-1400; approximately two-thirds of the faculty will hold professorial rank, the remainder being lecturers, instructors, or teachers.
3.1.2 Increase the proportion of Saudis holding professorial ranks from approximately 21 percent (36 of 180) in 1395-96 to over 37 percent (91 of 242) by 1399-1400, with a target of 50 percent by 1402-03.
3.1.3 At the undergraduate level, seek the following proportions of academic rank: professors — 25 percent; associate professors — 25 percent; assistant professors — 35 percent; and lecturers, instructors, teachers — 15 percent. Distribution at the graduate level should be: professors — 25 percent; associate professors — 25 percent; and assistant professors — 50 percent.
3.1.4 While not setting a formal quota, aim at the following proportions of academic staff holding the Ph.D. degree or its equivalent: 20 percent of the Applied Engineering faculty, 60 percent of the Engineering faculty, and 70 percent of the Science faculty.
3.1.5 Contract for foreign faculty from technologically advanced areas and from the 75 percentile or higher of the earned compensation range in their instructional field in their country. It is planned that in 1395-96, 43.3 percent would come from the United States or Canada; 43.9 percent from the United Kingdom or elsewhere in Europe; and 12.8 percent from the Middle East, Asia, or Africa. By 1399-1400, these proportions would change to 44.3, 41.7, and 14 percent, respectively. Foreign contract instructional staff will be divided approximately equally between short-term (two to four years) and longer-term (career) personnel.

3.1.6 Increase Saudi staff development through the assignment of exceptional students to the Faculty-in-Training program, increasing the number from the currently-authorized target of 74 positions to achieve the 50 percent Saudi faculty target noted above (allowing for a 20 percent attrition rate in the program).

3.1.7 In projecting the staff needed to allow employee upgrading programs at all levels, assume that 2.5 percent of instructional staff and 5.0 percent of administrative and support staff are on training assignments.

3.2 Academic Facilities Development

3.2.1 Complete construction by 1396-97 of Project A-1, which includes Building 14, to provide space for the expanded industrial management program as well as for enlarging the data processing center and the administration office for graduate studies and research.

3.2.2 Provide, as required, laboratory and shop equipment and major furniture items for academic facilities now nearing completion as well as the above project.

3.3 Enrollment Expansion

3.3.1 Expand total enrollment from 1,497 students in 1394-95 to 2,651 students in 1399-1400.

3.3.2 Project admission of Saudi new students on government scholarship at 450 for 1395-96, increasing at a rate of 25 students per year to 550 in 1399-1400.

3.3.3 Project placement of Saudi new students in advanced standing, bypassing the preparatory year, to increase from 5 percent of new admissions in 1395-96 to 8 percent in 1399-1400, with a target of 10 percent by 1402-03.

3.4 Student Base Expansion

3.4.1 Accept Saudi and foreign tuition-paying students, the number to approximate 10 percent of new Saudi students who are on government scholarships.

3.4.2 Accept about the same number of foreign scholarship students — approximately 10 percent of new Saudi admissions on government scholarship — with their total enrollment not to exceed 20 percent of the student body.

3.5 Library Acquisitions

Initiate a five-year program of library acquisitions, to include 20,000 basic technical books per year; 5,000 basic non-technical and supporting books per year; and annual additions to the current materials.

3.6 International Cooperative Agreements

Expand international cooperative agreements with the Consortium of American Universities, French Institute of Petroleum, and Austrian Academy of Science, emphasizing research and professional staff in particular.

3.7 Housing and Support Facilities

3.7.1 Initiate phased faculty/staff housing for a total of 310 new units, 269 of which are to be completed by 1399-1400, and construction of the remaining 41 to begin in 1398-99.

3.7.2 Initiate phased executive housing of 9 units to be completed by 1399-1400.

3.7.3 Initiate phased guest housing for a total of 18 units, 9 of which are to be completed by 1398-99 and construction initiated on the remaining 9 by 1399-1400.

3.7.4 Initiate phased support-staff housing for a total 454 units, with three stages completed by 1398-99 and the construction underway on the final stage by the end of the plan period.

3.7.5 Construct 110 faculty/staff housing units in the south compound area, beginning in 1395-96 and completing in 1399-1400; these will replace existing sub-standard units in the north compound.

3.7.6 Construct 112 housing units for married graduate students, including Saudi Faculty-in-Training participants, in two phases with final completion in 1400.

3.7.7 Construct 55 housing units for single graduate students, 33 to be completed in 1397-98 and 22 to be started in 1399-1400.

3.7.8 Initiate phased undergraduate student housing for a total of 819 units, 338 of which are to be completed during the plan period, with another 244 under construction by 1398-99. The remainder will be started after the plan period and completed by 1402-03.

3.7.9 Renovate 15 dormitories in the al-Salamah student housing area in 1395-96, and provide major maintenance work for the remaining dormitories in 1396-97 and 1397-98.

3.7.10 Repair or replace utilities, improve grounds, and provide recreational facilities in al-Salamah, beginning in 1395-96 and completing in 1397-98.

3.7.11 Initiate construction of soccer stadium and tennis court complex in 1395-96, with completion in 1397.

3.7.12 Initiate a program of renovation of existing student athletic facilities, beginning in 1395-96 and continuing to 1399-1400.

3.7.13 Develop the recreation center for faculty and staff, beginning in 1395-96 with completion by 1399-1400.

3.7.14 Renovate the preparatory-year shop at the old campus in 1395-96.

3.8 Unified Utilities System

3.8.1 Establish an independent sewage treatment plant and pipeline system.

3.8.2 Establish an electrical power plant to meet all University requirements with standby capacity provided by commercial sources.

3.8.3 Construct a transportation center for the security, control, dispatching, and garaging of university-owned vehicles, beginning in 1396 with completion by 1398.

3.8.4 Replace the existing sewer network in the north compound in 1397-98 and the existing gas network in the south compound in 1398-99.
3.8.5 Renovate storehouses and other support facilities in 1399-1400.
3.8.6 Initiate a continuing program of landscaping in the housing areas of the south compound, beginning in 1395-96 and continuing throughout the plan period.

3.9. University Press

Modify the current construction requirements for specialized space to provide for expanded editorial space and installation of printing and photo-engraving facilities; initiate this project in 1398-99 and complete the following year.

3.10 Graduate Programs

3.10.1 Offer programs leading to the Ph.D. beginning in 1395-96.
3.10.2 Provide graduate studies for the M.Sc. or Ph.D. degrees initially in the Chemical, Electrical, and Mechanical Engineering, and Mathematics Departments, adding Petroleum Engineering later.
3.10.3 Plan for approximately 5 percent of total student enrollment to the master's programs and 2.5 percent in doctoral programs by 1400.
3.10.4 Award a total of approximately 137 master's degrees and 29 doctoral degrees during the period 1395-96 through 1399-1400.

3.11 Industrial Management Program

Expand this program to academic college status, College of Industrial Management, by 1398-99.

3.12 Petroleum Engineering Program

Shift this program from an option within Chemical Engineering to a four-year major, adding a graduate program later.

3.13 Curriculum Review and Modification

3.13.1 Reduce the Engineering Science curriculum from five to four years.
3.13.2 Revise the Applied Engineering curriculum by reducing core subjects and emphasizing specialist courses.
3.13.3 Modify the Science College curriculum in light of this college's role of major support for the two engineering colleges.

3.14 Undergraduate Study Abroad

Arrange an undergraduate exchange program with overseas universities at the third-year level, with participation limited to students in the top 10 percent of their class.

3.15 Graduate-Assistant Program

Organize the graduate-assistant program to incorporate five years of academic graduate study, one year of work assignment, and one year internship abroad in a participating consortium university.

3.16 Research

3.16.1 Establish a Research Institute with divisions in petroleum, geology and minerals, environment and water resources, energy, and meteorology and standards research; start construction in 1396-97 and complete in 1398-99; provide minimum-level staffing to undertake consulting programs by 1396-97 and full-level by 1398-99.

3.16.2 Construct atomic energy training facilities beginning in 1396-97, and later acquire a research atomic reactor.

3.16.3 At Half Moon Bay, initiate in 1395-96 a phased five-year program for the construction of classrooms, workshops, aquarium, and laboratories.

3.17 Public Service

Continue the extension and other public service programs according to the policies noted earlier.

4. Finance

The annual funding requirements of the University of Petroleum and Minerals are estimated as shown below (SR millions):

	Budgeted 1394-95	*1395 -96*	*1396 -97*	*1397 -98*	*1398 -99*	*1399-1400*	*Plan Total*
Recurrent	84.6	121.4	138.1	143.6	148.3	152.7	704.1
Project	–	94.6	110.7	87.0	80.8	65.6	438.7
Total	84.6	216.0	248.8	230.6	229.1	218.3	1,142.8

V.D.3.4. WOMEN'S COLLEGES

1. Present Conditions

1.1 In less than ten years, the Kingdom's program of public education for females has progressed from the first provisions for elementary education of girls to the opening in 1390 of the Girls' College of Education in Riyadh with a four-year undergraduate curriculum.

1.2 The College has come within 80 percent of achieving the targets set in 1390 for new student admissions, total enrollment, and graduates — without the benefit of experience.

1.3 Although not anticipated when the first development plan was published, a second college of education has been opened in Jiddah with classes for 219 students beginning in 1394-95.

1.4 The General Administration for Girls' Colleges has been established as a major department of the General Presidency for Girls' Education, with responsibility for all matters pertaining to this level of education. A separate budget has been developed for the colleges to facilitate fiscal control and programming.

1.5 The Riyadh college program includes seven major fields of study and similar specialization is planned for Jiddah after its initial year of operation.

1.6 Facilities at Riyadh, although only recently constructed, will require expansion to meet projected enrollment growth. The Jiddah college is in temporary quarters, using two buildings that were constructed as intermediate and secondary schools.

1.7 Supervised housing is provided at Riyadh for students from outlying areas; they account for almost 25 percent of the total enrollment.

1.8 Staffing for both instruction and administration continues to present a serious problem. Dependence on contract personnel is even greater than had been anticipated. Non-Saudis fill almost all of the posts at both the Riyadh and Jiddah colleges; at the Riyadh college, 75 of the 79 instructional and 45 of the 50 administrative staff are contract personnel, and at Jiddah, 21 of the 22 instructors and 14 of the 15 administrators are non-Saudis. Yet both colleges are about 25 percent below required staff levels.

1.9 Thus, the nucleus of a higher education system for women is still not fully formed.

2. Objectives and Policies

2.1 To complete the basic system of higher education for women and assure its expansion, the primary goals in the second plan period are to gain academic excellence, prepare the students for participation in the Kingdom's growth, and extend the resources of the colleges into public life. These three objectives and their associated policies are summarized below.

2.2 The first objective is to develop the college system so that it will provide excellent quality in teacher preparation as well as in liberal arts education. The policies are to:
2.2.1 Plan, design, construct, and equip new academic and administrative facilities in Riyadh and Jiddah.
2.2.2 Increase the enrollment by actively encouraging graduates of secondary-level schools to continue their education.
2.2.3 Develop a highly-qualified instructional and administrative staff with a higher percentage of Saudis at all levels.
2.2.4 Provide the General Administration for Girls' Colleges with the necessary staff to discharge its responsibilities.
2.2.5 Provide housing and support facilities where necessary for students and staff.
2.2.6 Continue the development of the program of student services.
2.3 The second aim of the Plan is to provide female students with a sound education that will prepare them for participation in the social, economic, and cultural growth of the Kingdom.
2.3.1 Expand the undergraduate programs of the Colleges of Education in Riyadh and Jiddah.
2.3.2 Establish a College of Arts in Riyadh.
2.3.3 Initiate programs in the field of education leading to the master's degree.
2.3.4 Establish model schools at the kindergarten, elementary, intermediate, and secondary levels at the Riyadh and Jiddah campuses as educational laboratories for study and training in teaching methods, curricula, educational aids, and school administration.
2.3.5 Provide a system for follow-up of graduates.
2.4 Utilization of college resources will be extended through programs of public service.
2.4.1 Arrange training courses for girls' education personnel.
2.4.2 Provide short courses in various subjects related to the role of women in Saudi life.

3. Programs and Projects

3.1 Higher Education Development
3.1.1 Academic and Administrative Facilities
3.1.1.1 Purchase land for the Jiddah campus in 1395-96.
3.1.1.2 In 1395-96, initiate the study, design, and construction of the following projects:

- ☆ College of Education in Riyadh to include administration buildings, classrooms, lecture halls, a library, closed-circuit television system, laboratories, offices for instructional staff, and supporting utilities.

- ☆ Graduate studies buildings at the Riyadh campus to include lecture halls, laboratories, and offices for the administration and instructional staff.
- ☆ Pilot kindergarten, elementary, intermediate, and secondary schools at the Riyadh campus.

3.1.1.3 In 1396-97, initiate the study, design, and construction of the following projects:

- ☆ Office building in Riyadh for the General Administration for Girls' Colleges.
- ☆ Warehouse and supplies storage building in Riyadh for the whole girls' college system.
- ☆ Student housing at the Riyadh campus.
- ☆ College of Education at Jiddah to include administration buildings, classrooms, lecture halls, a library, closed-circuit television system, laboratories, offices for instructional staff, and supporting utilities.
- ☆ Pilot kindergarten, elementary, intermediate, and secondary schools at the Jiddah campus.
- ☆ College of Arts building at the Riyadh campus.

3.1.1.4 In 1397-98, initiate the study, design, and construction of the following project:

- ☆ Student housing for the Jiddah campus.

3.1.2 Enrollment Expansion

3.1.2.1 Anticipate enrolling approximately 46 percent of the girl graduates of secondary-level schools and institutes during the plan period.

3.1.2.2 Expand total undergraduate enrollment in the Riyadh College of Education from 1,147 students to 3,893 during the plan period.

3.1.2.3 Increase new student admissions at Riyadh from 447 students to 1,090 during the plan period.

3.1.2.4 Expand total enrollment in the Jiddah College of Education from 654 students to 2,895 during the plan period.

3.1.2.5 Increase new student admissions at Jiddah from 439 students to 799 during the plan period.

3.1.2.6 Enroll 200 new students a year in the College of Arts when it begins operations.

3.1.3 Instructional Faculty Development

3.1.3.1 Increase instructional staff at the College of Education in Riyadh from 115 to 364 during the Plan, with Saudi participation growing from approximately 8 percent to 20 percent. (The administrative staff will grow from 76 to 253, with Saudi participation increasing from 10 percent to 30 percent.)

3.1.3.2 Increase instructional staff at the College of Education in Jiddah from 65 to 289, with Saudi participation growing in the same proportion as in the Riyadh college.

3.1.3.3 Provide the new College of Arts with an initial staff of 20 instructional and 13 administrative personnel, increasing to 40 and 26 persons, respectively, at the end of the Plan. Saudis would hold 8 instructional and administrative posts by 1399-1400.

3.1.3.4 Open the post-graduate studies program with a faculty of five supported by administrative personnel. By the end of the Plan, there would be 36 on the instructional staff and 17 in the administrative group. Saudi participation will be limited to the administrative organization because qualified Saudi female professors are not expected to become available before the end of the Plan.

3.1.4 Housing

3.1.4.1 Continue to make available supervised housing for students and staff from areas outside Riyadh and Jiddah, renting until construction of housing units is completed.

3.1.5 Student Services

3.1.5.1 Encourage the expansion of the cooperative society at each college which provides student meals and refreshments.

3.1.5.2 Strengthen the staff of the college student supervision office to assure continuing social interest and activity among the students.

3.1.5.3 Provide transportation between students' residence halls and each college campus.

3.1.5.4 Maintain health units at each campus, to provide on-call treatment as well as examinations and preventive medical service.

3.2 Academic Programs

3.2.1 Expand the undergraduate program as follows.

3.2.1.1 Increase the number of major departments at the Riyadh College of Education from seven to ten by advancing existing minor divisions in history, mathematics, and biology to major status.

3.2.1.2 Introduce major departments at the Jiddah College of Education to provide a ten-department structure similar to the Riyadh College's.

3.2.2 Establish a College of Arts in Riyadh with enrollment beginning in the 1398-99 academic year.

3.2.3 Introduce a master's degree program of two years at the College of Education at Riyadh, beginning in 1395-96.

3.2.4 Establish a model school system, beginning in 1395-96, at both the Riyadh and Jiddah campuses. Eventually include all levels of general education from kindergarten through secondary. (This system will provide opportunities for practical application by college students of teaching methods, educational aids, administrative procedures, and curriculum changes.)

3.2.5 Establish offices at the Riyadh and Jiddah Colleges of Education for following up graduates on a periodic basis.

3.3 Public Service Programs

3.3.1 Arrange training courses at the Colleges of Education for the general-education teaching and administrative staff.

3.3.2 Organize short courses in female-oriented subjects, including religion and education.

3.3.3 Organize English language training to all who indicate interest.

4. Finance

The annual financial requirements of the women's colleges are estimated as follows (SR millions):

	1395 -96	*1396 -97*	*1397 -98*	*1398 -99*	*1399- 1400*	*Plan Total*
Recurrent	41.3	82.9	98.4	130.4	156.5	509.5
Project	8.3	18.9	26.6	35.2	37.0	126.0
Total	49.6	101.8	125.0	165.6	193.5	635.5

V.D.3.5. POLYTECHNIC INSTITUTES

1. Present Conditions

1.1 No formal provision for the development of middle-level manpower to support industry and commerce currently exists in the Kingdom. The Department of Technical Education operates the Higher Institute for Industrial Education, but it is directed primarily toward the preparation of instructors for the secondary-level institutes, and programs for expansion are in keeping with this requirement. While a Higher Commercial Institute for post-secondary courses in office practices is being planned, it will not begin operation until 1395-96.

1.2 Junior colleges are being planned by the Ministry of Education, the General Presidency for Girls' Education, and King Abdul Aziz University; however, all are concerned with teacher training in academic subjects for elementary and post-elementary positions.

1.3 Development plans for the Eastern, Western, and Central regions all concur in the immediate requirement for a polytechnic system to fill the gap in the existing education structure. Recommendations of the World Bank Manpower Development Study include provisions for a post-secondary polytechnic institute in Riyadh.

2. Objectives and Policies

There is a requirement for the post-secondary polytechnic institute or technical junior college to complete the educational structure of the Kingdom. The following policies address this objective.

2.1 Determine where the first polytechnic institutes should be located.

2.2 Identify which agency or agencies should be given responsibility for establishing and operating the proposed institutes.

2.3 Develop schedules for establishing these institutes.

2.4 Provide finance to support these institutes.

3. Programs and Projects

3.1 Arrange for a review of proposals for establishing polytechnic institutes to include types, size, programs, and locations (1395). Such a review could be accomplished under one of the international technical assistance agreements.

3.2 Conduct a study of jurisdictional options based on the findings of the above review. Consideration will be given to establishment of a separate National Institute for Polytechnic Education, assignment of responsibility to the Ministry of Education, assignment of responsibility to individual universities, or a combination of these possible choices.

3.3 Identify the agency or agencies to be responsible for polytechnic education programs and formalize this decision through publication of the necessary official decrees or resolutions.

3.4 Initiate a plan within the designated agency or agencies for the establishment of polytechnic institutes during the development plan period, to include objectives and policies, programs and projects, finance, and manpower requirements.

4. Finance

Estimates of finance will become available on completion of the above planning programs and projects.

V.D.4. RELIGIOUS EDUCATION

V.D.4.1. ISLAMIC UNIVERSITY

1. Present Conditions

1.1 Achievements at Islamic University during the first development plan are concentrated in student enrollment. College-level enrollment has increased from 494 students in 1389-90 to 890 in 1394-95, secondary enrollment is up from 258 to 1,532 students, and intermediate enrollment has grown from 163 to 466 students. However, this growth is below that projected in the first development plan by at least 20 percent.

1.2 The Sharia College is expected to meet its target of 440 graduates, but the estimated number of graduates — 260 — of the ad-Da'wa College will fall far short of its goal of 400 graduates.

1.3 The proposed Language and Literature Section did not become operational and the master's degree program has been delayed until 1395-96.

1.4 The new College of the Holy Qur'an, scheduled to open in the 1394-95 academic year, starts with an enrollment of 50 students.

1.5 The University is housed in converted military facilities which, despite some recent additions, are inadequate to the needs of a university and its subordinate institutes.

1.6 In addition to inadequate facilities, staff shortages and equipment deficiencies continue to frustrate Islamic University in its role as a center of Islamic education in the Muslim world. The following objectives and policies are designed to correct this situation.

2. Objectives and Policies

The three-fold aim of development of Islamic University in the period 1395-1400 is to make it into an international educational center, assure that it provides a sound religious education, and encourage the advancement of Islamic knowledge.

2.1 For developing the University into an international center for Islamic students from the Muslim world, the following policies have been formulated.

2.1.1 Plan, design, construct, and equip new academic and administrative facilities to provide the physical capability necessary to execute the mission of the University and its institutes.

2.1.2 Increase the size of the student body by raising foreign scholarship allocations.

2.1.3 Develop a highly-qualified instructional and administrative staff with increasing Saudi representation at all levels.

2.1.4 Expand the organizational structure of the University to meet operational requirements.

2.1.5 Modify the grade structure so that salaries are in keeping with the academic and administrative responsibilities of the faculty and staff.

2.1.6 Provide support services to meet the instructional, administrative, and other needs of the staff, students, and facilities.

2.1.7 Establish a University Press with full publication capability.

2.1.8 Provide on-campus housing and support facilities where necessary for students and staff.

2.2. To provide Muslim students with a sound religious education that includes all aspects of the Holy Qur'an, Precepts, and Islamic thought, Islamic University will follow several expansion policies in the second plan period, as noted below.

2.2.1 Expand the intermediate and secondary institute programs for pre-college preparation.

2.2.2 Enlarge the Arabic Language section for non-Arabic speaking foreign students.

2.2.3 Expand the programs of the existing three colleges.

2.2.4 Establish a College of Hadith.

2.2.5 Establish a College of Arabic Language and Literature.

2.2.6 Initiate graduate studies programs leading to the master's and doctoral degrees.

2.2.7 Provide a system for follow-up of graduates.

2.3 To promote the advancement of Islamic knowledge through research in social, religious, and cultural matters, Islamic University will be guided by the following policies.

2.3.1 Establish a Center for Muslim Call.

2.3.2 Undertake programs of public service focused on dissemination of information about Islamic subjects.

2.3.3 Sponsor conferences on subjects of national and international religious interest.

2.3.4 Identify Muslim problems and develop proposals for their solution.

3. Programs and Projects

3.1 University Development

3.1.1 Academic and Administrative Facilities

3.1.1.1 Initiate in 1395-96 study and design for new academic buildings for the Colleges of Sharia, ad-Da'wa, and Hadith; the Arabic Language Section; the Graduate Studies Section; and the Intermediate and Secondary Institutes.

3.1.1.2 Initiate in 1395-96 construction of new College of Holy Qur'an buildings, and complete by 1397-98.

3.1.1.3 Initiate in 1396-97 construction of new buildings for the Colleges of Sharia and Hadith, and the Intermediate and Secondary Institutes, with completion by 1398-99.

3.1.1.4 Initiate in 1397-98 construction of new buildings for the College of ad-Da'wa, the Arabic Language Section, and the Graduate Studies Section, with completion by 1399-1400.

3.1.1.5 Initiate in 1395-96 design and construction of the new administrative office building, and complete by 1397-98.

3.1.1.6 Initiate in 1395-96 design and construction of new planning and research office center, with completion by 1397-98.

3.1.2 Enrollment Expansion

3.1.2.1 Expand total enrollment from 2,888 students in 1394–95 to 8,130 students in 1399-1400.

3.1.2.2 Increase provisions for foreign scholarships to assure participation from all Muslim countries.

3.1.3 Instructional Faculty

3.1.3.1 Provide additional instructional faculty to achieve a faculty: student ratio of 1:10 in the colleges and 1:15 in the institutes.

3.1.3.2 Reclassify instructional faculty into professorial ranks. Seek a structure of professors, associate professors, assistant professors, and lecturers in a ratio of 1:2:3:4.

3.1.3.3 Establish a "chair-professor" position in each major subject area.

3.1.3.4 Increase the proportion of Saudis on the instructional staff from 48 percent to at least 60 percent by the end of the Plan.

3.1.3.5 Initiate an active recruiting program to fill existing vacancies, particularly the positions of Vice President and Deputy to the President.

3.1.4 Organizational Structure

3.1.4.1 Establish a Planning, Budgeting and Follow-up department.

3.1.4.2 Establish a Supervision and Social Orientation department.

3.1.4.3 Establish a Post-Graduate Studies department.

3.1.4.4 Modify the university organizational structure to accommodate these new departments, the three new colleges, and the Center for Muslim Call.

3.1.5 Grade-structure Modification

Upgrade administrative and technical support posts in keeping with assigned responsibilities.

3.1.6 Support Capability

Replace and acquire new maintenance facilities and equipment (including telephone equipment) as required.

3.1.7 University Press

Initiate in 1395-96 construction of facilities for a University Press, and acquire the equipment and staff needed to produce books and periodicals.

3.1.8 Student Services

3.1.8.1 Establish a Department of Supervision and Social Orientation with units for social and cultural activities, athletics, and resident-student affairs.

3.1.8.2 Provide indoor and outdoor facilities for athletics and recreation.

3.1.8.3 Construct a student reception and distribution center in Jiddah to replace the present rented facility.
3.1.8.4 Initiate in 1395-96 design and construction of a 40-room hospital capable of providing in- and out-patient services to students and staff, with completion by 1398-99.
3.1.9 Housing
3.1.9.1 Construct 7 student dormitory buildings of 160 rooms each, beginning in 1396-97 and completing by 1398-99.
3.1.9.2 Construct 20 five-room and 50 four-room houses during the plan period for the university employees who are responsible for supervision and service at student dormitories.
3.1.9.3 Construct 50 houses for instructional staff, beginning in 1395-96 and continuing over the plan period.

3.2 Academic Development
3.2.1 Intermediate and Secondary Institutes
3.2.1.1 Increase intermediate-student enrollment from 466 in 1394-95 to 1,358 in 1399-1400.
3.2.1.2 Increase secondary-student enrollment from 1,532 in 1394-95 to 2,785 in 1399-1400.
3.2.2 Existing Colleges
3.2.2.1 Increase enrollment in the College of Sharia from 581 students in 1394-95 to 1,327 students in 1399-1400.
3.2.2.2 Increase enrollment in the College of ad-Da'wa from 88 students in 1394-95 to 773 students in 1399-1400.
3.2.2.3 Increase enrollment in the College of Holy Qur'an from 21 students in 1394-95 to 682 students in 1399-1400.
3.2.3 College of Hadith
Establish the College of Hadith in 1395-96 with an initial enrollment of 50 students increasing to a total of 555 students by the end of the Plan.
3.2.4 College of Arabic Language and Literature
Establish the College of Arabic Language and Literature in 1395-96 with an initial enrollment of 50 students increasing to a total of 474 students by the end of the Plan.
3.2.5 Master's Degree
Initiate master's programs in selected subjects, beginning in 1395-96 with 40 candidates and increasing to 112 candidates by the end of the Plan.
3.2.6 Doctoral program
Initiate a graduate studies program leading to the Ph.D. degree in 1398-99 with 32 candidates, increasing to 64 in 1399-1400.

3.2.7 Student Follow-up

3.2.7.1 Develop a system of student follow-up through the Center for Muslim Call to exchange information between the University and its graduates.

3.2.7.2 Distribute University Press publications to university graduates in coordination with the Center for Muslim Call.

3.3 Center for Muslim Call

3.3.1 Design facilities for the Center for Muslim Call in 1395-96; initiate construction in 1397-98 for completion in 1399-1400.

3.3.2 Conduct studies of differing views of Islam and prepare responses to them.

3.3.3 Collect and analyze data on the social and religious situation of Muslims outside the Kingdom.

3.3.4 Publish research findings for international dissemination.

3.4 Public Service Conferences

3.4.1 Initiate design in 1395-96 of a conference hall with a capacity of 10,000 persons; schedule the start of construction for 1396-97 and completion, including furnishings and equipment, by 1398-99.

3.4.2 Organize a program of national and international conferences on subjects relevant to the role and objectives of the University.

4. Finance

The Islamic University's financial requirements during the plan period are estimated as follows (SR millions):

	Budgeted 1394-95	*1395 -96*	*1396 -97*	*1397 -98*	*1398 -99*	*1399- 1400*	*Plan Total*
Recurrent	20.8	41.1	54.6	72.2	94.3	126.7	388.9
Project	19.4	69.6	96.3	184.5	134.9	75.4	560.7
Total	40.2	110.7	150.9	256.7	229.2	202.1	949.6

V.D.4.2. IMAM MOHAMED IBN SAUD ISLAMIC UNIVERSITY

1. Present Conditions

1.1 The Imam Mohamed Ibn Saud University was established in 1394. It incorporates the Colleges of Sharia and Arabic Language, the Higher Judicial Institute, and 37 institues offering education at the intermediate and secondary level, all of which were formerly under the Presidency of Religious Colleges and Institutes.

1.2 The enrollments in 1394-95 of the above colleges and institutes were as follows:

Higher Judicial Institute	96
College of Sharia	1,619
College of Arabic Language	841
Institutes	12,155

2. Objectives and Policies

2.1 The following objectives are in keeping with the announced intention of further developing the University into an institution for higher education in Islamic Studies.

2.1.1 Provide higher education in Islamic Studies, including Sharia (Islamic jurisprudence), Arabic Language, Islamic History, Islamic Science, Social Science, and related subjects.

2.1.2 Establish a collection of Islamic documents and research material, undertake research, and translate and publish the results of this research.

2.1.3 Provide education at the intermediate and secondary levels to prepare students for higher education in Islamic Studies.

2.1.4 Promote and expand the Islamic mission by all possible means.

3. Programs and Projects

3.1 The Colleges

3.1.1 Enroll 7,181 new students in the colleges during the plan period.

3.1.2 Increase total enrollment from 2,556 students in 1394-95 to 7,037 students in 1399-1400.

3.1.3 Offer post-graduate programs leading to a master's degree in Arabic Language, Arts, Social Science, and other selected majors.

3.1.4 Construct a campus for the University in Riyadh during the early years of the Plan.

3.2 **The Institutes**

3.2.1 Enroll 19,220 new students in the institutes during the plan period.

3.2.2 Increase total enrollment from 12,155 students in 1394-95 to 21,142 students in 1399-1400.

3.2.3 Open two new institutes in 1395-96.

3.2.4 Construct 18 institutes during the plan period to replace rented buildings.
3.2.5 Expand the existing institutes by adding new classes.
3.2.6 Construct an administrative building and library.

4. Finance

Imam Mohamed Ibn Saud Islamic University's financial requirements during the plan period are estimated as follows:

	Budgeted 1394–95	*1395 –96*	*1396 –97*	*1397 –98*	*1398 –99*	*1399 –1400*	*Plan Total*
Recurrent	80.7	198.0	246.6	298.0	349.0	406.6	1,498.2
Project	31.7	440.0	104.0	138.0	175.0	230.0	1,087.0
Total	112.4	638.0	350.6	436.0	524.0	636.6	2,585.2

Table V-15
STATISTICAL SUMMARY OF EDUCATION
1394-95 TO 1399-1400 A.H.

Education Program	Enrollment		Teachers		Graduates			Schools	
	1394 -95	1399-1400	1394 -95	1399-1400	1394 -95	1399-1400	Plan Total	1394 -95	1399-1400
Elementary									
Ministry of Education	401,348	677,458	21,669	33,873	30,906	58,283	225,835	2,063	2,908
Holy Qur'an	2,306	8,687	116	435	111	481	1,549	7	23
Al Asma Model School	662	750	28	42	99	117	501	1	1
Thagr Model School	921	840	48	48	113	136	712	1	1
Elementary Girls	214,641	353,428	8,970	16,065	18,545	38,464	145,773	827	1,534
Total Elementary	619,878	1,041,163	30,831	50,463	49,774	97,481	374,370	2,899	4,467
Intermediate									
Ministry of Education	70,270	127,136	4,953	10,112	14,495	27,886	108,036	372	596
Holy Qur'an	128	950	13	24	18	139	535	4	4
Al Asma Model School	353	600	28	48	88	188	715	1	1
Thagr Model School	455	420	29	29	134	133	671	1	1
Adult – evening	6,570	16,290	(438)	(1,260)	1,498	3,834	15,169	47	115
Intermediate Girls'	34,061	70,200	2,030	4,550	7,177	17,401	65,826	93	233
Religious Institutes									
Ibn Saud University	8,107	13,098	240	656	1,628	3,287	13,113	37	39
Islamic University	466	1,358	20	94	135	298	971	2	2
Total Intermediate	120,410	230,052	7,313	15,513	25,173	53,166	205,036	557	991
Secondary									
Ministry of Education	19,892	39,875	1,353	2,879	4,038	9,165	35,910	65	102
Holy Qur'an	–	315	–	16	–	49	91	–	4
Al Asma Model School	430	525	34	42	93	141	685	1	1
Thagr Model School	303	357	21	21	71	98	465	1	1
Adult – evening	1,623	3,014	(118)	(212)	309	587	2,352	16	31
Secondary Girls'	7,616	17,571	480	1,337	1,347	4,417	16,529	18	50
Religious Institutes									
Ibn Saud University	4,048	8,044	197	403	1,100	2,030	7,217	37	39
Islamic University	1,532	2,785	70	163	–	534	1,953	3	3
Total Secondary	35,444	72,486	2,155	4,861	6,958	17,021	65,202	141	231
Special Education	2,119	4,416	612	975	–	–	–	15	28

CONTINUED

Table V-15 (continued)

Education Program	Enrollment 1394-95	Enrollment 1399-1400	Teachers 1394-95	Teachers 1399-1400	Graduates 1394-95	Graduates 1399-1400	Graduates Plan Total	Schools 1394-95	Schools 1399-1400
Teachers' Training Institutes									
Boys' General	9,093	12,139	698	968	2,156	3,474	15,652	16	21
Boys' Physical Education	230	687	21	69	64	189	530	1	3
Boys' Art	262	500	37	74	96	147	522	1	3
Upgrading Center	1,032	1,200	25	88	500	600	2,900	2	2
Teacher Preparation Course	511	–	25	–	511	–	600	–	–
Girls' General	4,561	12,961	250	755	1,220	3,504	11,090	26	31
Total Teachers' Training Institutes	15,689	27,487	1,056	1,954	4,547	7,914	31,294	46	60
Technical Institutes									
Industrial	2,160	7,375	273	846	297	1,650	5,537	4	13
Commercial-Day	715	3,303	57	244	167	915	2,574	5	9
Commercial-Evening	260	1,268	(22)	(86)	161	231	682	3	6
Agriculture	–	1,259	–	155	–	131	226	–	5
Technical (Girls)	550	1,200	45	120	232	542	1,585	4	4
Total Technical Institutes	3,685	14,405	375	1,365	857	3,469	10,604	16	37
Teacher Training Post-Secondary Level									
Junior Colleges (Male)	–	2,225	–	156	–	959	1,674	–	5
Junior Colleges (Female)	–	1,985	–	260	–	692	1,038	–	6
Higher Industrial Institute	105	375	40	70	42	106	285	1	1
Higher Commercial Institute	–	741	–	44	–	312	947	–	3
Science and Mathematics Center	100	4,929	15	283	–	1,099	2,118	1	5
English Language Course	66	70	6	6	60	65	325	–	–
Total Teacher Training Post-Secondary Level	271	10,325	61	819	102	3,233	6,387	2	20
Literacy									
Adult Literacy (Male)	55,540	126,080	4,881	11,374	–	10,688	34,620	1,015	2,015
Adult Literacy (Female)	28,893	393,751	1,445	19,687	–	43,477	89,078	99	1,312
Total Literacy	84,433	519,831	6,326	31,061	–	54,165	123,698	1,114	3,327

CONTINUED

Table V-15 (concluded)

Education Program	Enrollment 1394-95	Enrollment 1399-1400	Teachers 1394-95	Teachers 1399-1400	Graduates 1394-95	Graduates 1399-1400	Graduates Plan Total
University Level							
University of Riyadh	5,638	10,496	959	2,308	581	1,803	6,859
(Graduate level)	-	(276)	-	-	-	-	(231)
University of Petroleum and Minerals	1,497	2,651	166	357	155	459	1,727[b]
(Graduate level)	(54)	(135)	-	-	-	-	(166)
King Abdul Aziz University	3,737	11,610	633	1,832	431	1,580	4,221
(Graduate level)	-	(51)	-	-	-	-	(20)
Subtotal	10,872	24,757	1,758	4,497	1,167	3,842	12,807[d]
Women's Teacher Colleges							
Riyadh	790	3,893	79	364	74	692	1,710[e]
(Graduate level)	-	(?)	-	-	-	-	(81)
Jiddah	219	2,895	22	289	-	659	1,146
Women's College of Arts	-	396	-	40	-	-	-
Subtotal	1,009	7,184	101	693	74	1,351	2,856
Islamic University	890	3,987	48	397	128	506	1,521[f]
(Graduate level)	-	(176)	-	-	-	-	(92)
Imam Mohamed Ibn Saud Islamic University	2,556	7,037	181	515	334	1,459	4,902[g]
(Graduate level)	(96)	(1,541)	-	-	-	-	(1,444)
Subtotal	3,446	11,024	229	912	462	1,965	6,423
Total University level	15,327	42,965	2,088	6,102	1,703	7,158	22,086[h]

a Bachelor degrees = 6,628, Masters = 231.
b Bachelor degrees = 1,561, Masters = 137, Ph.D. = 29.
c Bachelor degrees = 4,201, Masters = 20.
d Bachelor degrees = 12,390, Masters = 388, Ph.D. = 29.
e Bachelor degrees = 1,629, Masters = 81.
f Bachelor degrees = 1,429, Masters = 92.
g Bachelor degrees = 3,458, Masters = 1,444.
h Bachelor degrees = 20,052, Masters = 2,005, Ph.D. = 29.

E. CULTURAL AFFAIRS

The Ministry of Education, supporting the concept of continued learning, will broaden its programs for the enrichment of the people of Saudi Arabia. Particular attention is directed to the national library system, the availability of museums, the preservation of national sites, and archeological explorations, as detailed in the following plan.

V.E. CULTURAL AFFAIRS

1. Present Conditions

1.1 The Kingdom's public libraries are being improved through a program of renovation and remodeling in keeping with modern library design.

1.2 Library activities have been expanded to include annual exhibitions of student art and book fairs displaying new publications in various fields.

1.3 The planned development of a national museum has not proceeded beyond the preliminary design stage.

1.4 The program of annual archeological field surveys has been modified, with little of the work that was scheduled being undertaken.

1.5 The Department of Antiquities has been reorganized to operate as a separate activity, reporting to an Assistant Deputy Minister of Education. Personnel who are professionally qualified in archeology and related fields are being assigned to the Department.

1.6 Legal controls have been established to govern the removal and export of antiquities.

1.7 Action is being taken to assure that development and construction programs provide for the preservation of sites and property of historic and archeological significance.

1.8 The King Abdul Aziz Research and Cultural Institute has been established as a library and research center on the history of Saudi Arabia and its monarchs, and the Arabian Peninsula. The Institute includes a library and translation, research, publishing, design, and photographic departments. A number of bibliographic activities have also begun.

2. Objectives and Policies

During the period 1395-1400, eight objectives will guide the Government's development of cultural affairs, as noted below.

2.1 Expand the national public library system and improve library facilities.

2.2 Establish a national museum system to provide opportunities for Saudis to increase their knowledge, appreciation, and understanding of their religious, cultural, and social heritage.

2.3 Strengthen the organization and technical capability of the Department of Antiquities.

2.4 Initiate a comprehensive program of archeological surveys.

2.5 Undertake intensive exploration at selected sites of potential archeological significance.

2.6 Initiate programs for the restoration and maintenance of historical landmarks.

2.7 Promote public interest in and knowledge of archeological findings.
2.8 Develop the facilities and activities of the King Abdul Aziz Research and Cultural Institute as a major library, research, publishing, and cultural center for the Arabian Peninsula and the Kingdom of Saudi Arabia in particular.

3. Programs and Projects

3.1 Complete prior authorized library construction (for which 23.6 percent of the original funding will remain) in 1395-96.
3.2 Establish a biography center and open 10 new general libraries, 2 per year beginning in 1395-96, to increase the number of public libraries from 22 to 32 by the end of the Plan.
3.3 During the period 1396-97 to 1397-98, construct one large, five medium, and ten small library buildings as replacements for existing facilities.
3.4 Initiate construction in 1396-97 of a national museum — an 11-unit complex of 220,000 square meters — in Riyadh.
3.5 Build six regional museums (three in 1397-98 and three in 1398-99) distributed throughout the Kingdom.
3.6 Build two Islamic museums, one in Jiddah and one in Mecca, in 1397-98 and 1398-99.
3.7 Construct four specialized museums, located at such major archeological sites as Madain Salih, two in 1397-98 and two in 1398-99.
3.8 Beginning in 1395-96 provide the Department of Antiquities with facilities and personnel to support research in manuscripts, site restoration and maintenance, and inscriptions. Specialties will include photography, survey, engineering, and technical drawing.
3.9 Conduct area surveys as follows:

1395-96	:	Eastern and Northern areas
1396-97 and 1397-98	:	Western and Tihama areas
1397-98 and 1398-99	:	Southwest area
1399-1400	:	Rub' al-Khali adjacent to Central area.

3.10 During the plan period, conduct detailed archeological explorations at the following sites.:

1395-96	:	Tarut area
1396-97 and 1397-98	:	Tayma
1397-98 and 1398-99	:	al-Ukhdud and Thaj
1399-1400	:	Sites south of Dhahran

3.11 Initiate the rehabilitation and restoration of selected structures at ad-Dir'iyah and develop plans for sound-and-light presentations at this historic site.
3.12 Conduct a detailed reconnaissance of the Durb Zobaidah (one of the traditional land routes to Mecca) and begin reclamation of the ancient reservoirs along the route.
3.13 Publish a journal of archeology beginning in 1396-97, and develop descriptive brochures and similar materials covering known sites of historic interest.
3.14 Develop the facilities and activities of the King Abdul Aziz Research and Cultural Institute as follows:
3.14.1 Construct a new building for the Institute, including a King Abdul Aziz Memorial Hall (1395-96).
3.14.2 Establish microfilm facilities and a photography laboratory (1396-97).
3.14.3 Increase the Institute's documentation and library facilities (continuing).
3.14.4 Publish the Institute's magazine and a wide range of books, articles, and verified manuscripts on the Arabian Peninsula and Saudi Arabia in particular (1395-1400).

4.Finance

The financial requirements of the King Abdul Aziz Research and Cultural Institute are estimated below (SR millions):

	Budgeted 1394-95	*1395 -96*	*1396 -97*	*1397 -98*	*1398 -99*	*1399- 1400*	*Plan Total*
Recurrent	2.9	12.0	14.9	19.5	25.1	29.4	100.9
Project	–	23.6	10.7	10.7	13.6	15.6	74.2
Total	2.9	35.6	25.6	30.2	38.7	45.0	175.1

The financial requirements of other Cultural Affairs programs have been included in the projections of the Ministry of Education under Boys' Education.

F. INFORMATION SERVICES

The public information media — printed materials but particularly radio and television — are known from the experience of many countries to be highly influential in the development of human resources. In many ways the media can be regarded as the infrastructure for such development. The Government's plan for expanding both the programming and broadcasting capabilities of its information services, both within the Kingdom and internationally, are described in this final section of Chapter V.

V.F. INFORMATION SERVICES

1. Present Conditions

1.1 The information media of the Kingdom have developed extensively in recent years. Not all projects included in the first plan could be implemented but some that were not included in the plan have been implemented. A severe shortage of professional and technical personnel was the major constraint on rapid growth of information channels during this period.

1.2 There are two radio complexes equipped with studios and transmitters, located in Riyadh and Jiddah. Arabic radio programs are now broadcast to the public 20 hours daily. In addition to general programs and primarily religious ones for domestic audiences, programs directed to audiences in European, African and Eastern countries are also broadcast. However, good medium-wave radio reception is not yet available in all parts of the Kingdom during daytime and medium-wave broadcasts beyond its borders are limited in range.

1.3 There are five television stations equipped with studios and transmitters, located in Riyadh. Jiddah, Medina, Qasim, and Dammam; two others, in Tayif and Mecca, are equipped with transmitters only. Half of the population of the country receives the television signal at the present time. Television programs are broadcast five hours daily, and ten hours on Friday. About half of the programs broadcast are produced domestically. Programs include news, documentaries, religion, sports, education/culture, but two-thirds of the schedule are entertainment programs — primarily musical — and children's shows. A contract was recently signed with the government of France for planning, designing, and installing a SECAM color television system throughout the Kingdom.

1.4 Information is also provided within the Kingdom in the form of press releases, films, photographs, and books. Information about the Kingdom is supplied to the foreign press, and visits by members of the foreign press are arranged.

1.5 A news-agency service was established in 1390 to collect and distribute news both within the Kingdom and externally. For external collection and distribution of news, the agency maintains a number of offices in a number of foreign cities. However, the agency is still in a very early stage of development.

1.6 There are a few radio and TV programs in the Kingdom devoted primarily to national development, but no concerted effort in this field of public information has been organized. Most ministries have not been able to develop information capabilities, and few have established cooperative relationships with the mass media of the Kingdom.

1.7 As already noted, the major constraint on information dissemination is a shortage of trained personnel, which affects all information production and distribution activities. In radio and television, staff shortages hamper efforts to improve domestic program

production and to extend broadcast coverage to a greater proportion of the population. Production and review of written information are also hampered by a shortage of manpower.

1.8 Current training programs are centered in the Ministry of Communications for broadcast technicians, and in the University of Riyadh for writers, researchers, and broadcast production staff. These programs are not able to graduate enough qualified students to meet current needs.

Objectives and Policies

2.1 For purposes of entertainment, education, and national development, expand the Kingdom's capabilities to:

- ☆ Collect information from relevant sources within the country and around the world.
- ☆ Produce and disseminate information concerning Islam to enrich the spiritual life of the Kingdom's citizens.
- ☆ Produce and disseminate entertainment to enrich the leisure time of citizens.
- ☆ Produce and disseminate news to ensure that the citizens are well-informed.
- ☆ Produce and disseminate information programs to aid the citizens to participate in national development and realize their own potentials to the fullest extent. Examples are given in Table V-16.

2.2 Expand the capabilities to collect, process, and disseminate information to appropriate world audiences in order to present a positive view of the Kingdom, its people, and the policies of the Government.

2.3 Expand the area of broadcast coverage, and increase the number of broadcast hours.

2.3.1 Complete high-quality medium-wave broadcast coverage of the entire Kingdom and neighboring countries.

2.3.2 Increase radio production facilities, including a remote broadcast capability to cover celebrations and other special events.

2.3.3 Improve the content of radio programs.

2.4 Expand and improve television broadcast transmission and production capabilities, and double the number of broadcast hours.

2.4.1 Extend television transmission to 90 percent of the Kingdom's population and to accessible areas of neighboring Arab countries.

2.4.2 Link all transmission stations by the national telecommunications network to achieve a central television transmission capability.

2.4.3 Provide a second television channel and introduce color television.

Table V-16
POTENTIAL PUBLIC INFORMATION PROGRAMS

Concerned Agency	*Program*
Ministry of Agriculture and Water	Increase community awareness of need for water-resource management. Continue to inform farmers about improved agriculture practices. Develop a market news service. Increase public appreciation of wildlife.
Agricultural Bank	Make farmers more aware of the Bank's services.
Ministry of Petroleum and Mineral Resources	Keep the people informed about the international energy situation and Saudi Arabia's policy.
Ministry of Labor and Social Affairs	*Labor* Continue to inform workers and employers about the labor law and their rights. Present a series on labor issues. Provide up-to-date information about job opportunities. Issue bulletins and films on labor health and safety. *Social Affairs* Encourage registration for appropriate social security benefits by using publicity. Increase public awareness of community development. Make the general public familiar with the merits of family care. Interest individuals and groups in the formation of cooperative units.
Ministry of Education and General Presidency for Girls' Education King Abdul Aziz University	Produce educational TV and radio programs for boys and girls in school, for the Literacy program, and for Bedouin children. In cooperation with the Ministry of Information, present university courses or study programs to the public over the national TV system.
Department of Antiquities, Ministry of Education	Promote public interest in and knowledge of archeological findings.
Ministry of Health	Present health information to the public. Encourage youth to make their careers in the health services.
Saudi Red Crescent Society	Publicize aims and principles of the Society. Increase public awareness of and interest in the Society's services.
General Presidency for Youth Welfare	Publicize the planned 'cultural weeks'. Spread awareness of sports activities.
Ministry of Interior	Produce regular radio programs (in Bedouin dialects) on Bedouin matters.
Under-Ministry of Communications for Roads and Ports	Make the public more conscious of road safety.
Postal Services	Acquaint the public with the nature and use of postal services.
General Housing Department	Disseminate information about each of the housing programs.

2.4.4 Increase efficiency in the use of present studio facilities and provide additional office as well as studio facilities.

2.4.5 Improve the content of programs produced domestically and the selection of programs produced in foreign countries, and double the number of hours of the domestically-produced programs.

2.5 Expand and improve all channels for the distribution of public information on national development.

2.5.1 Define the purpose and content of public information.

2.5.2 Evaluate the impacts of public information.

2.5.3 Assist appropriate government agencies to develop their capabilities to collect, process and disseminate public information.

2.5.4 Encourage the development of cooperative relationships among all segments of public information activities.

2.5.5 Develop in all of the mass media a regional capability to collect, process, and disseminate public information oriented to particular localities.

2.6 Develop an administrative structure in which responsibilities and functions in the collection, processing, and dissemination of information are clearly defined and efficiently performed.

2.7 Collect and organize written, oral, and visual information for purposes of historical research and documentation.

2.8 Overcome the manpower shortage that exists in virtually all public information activities by adding qualified staff on a massive scale and providing increased training opportunities in all aspects of information collection, processing, and dissemination.

3. Programs and Projects

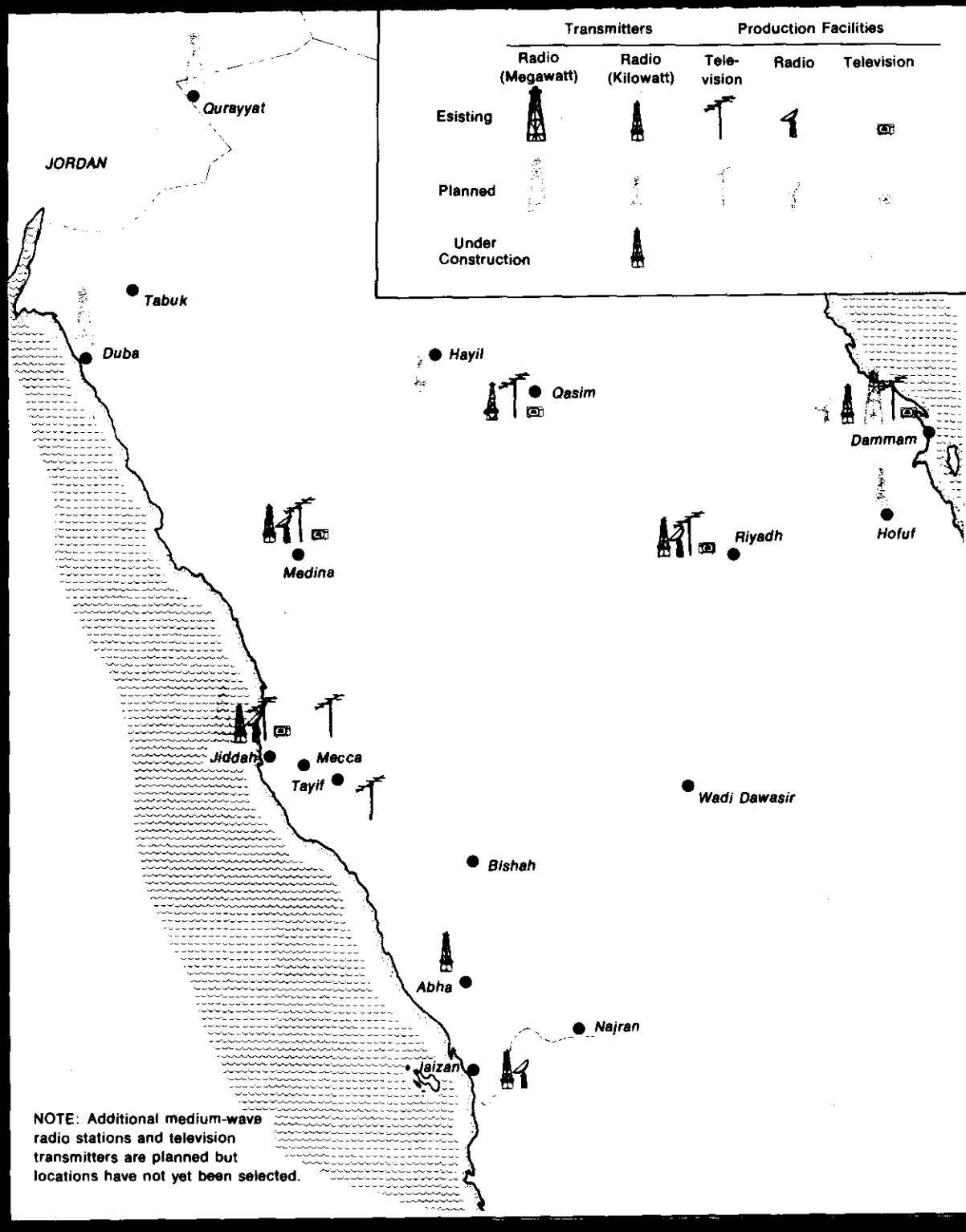
Figure V-17 shows the locations of existing and already planned radio and television stations which are among the major public information projects described below. (All construction and installation projects will be undertaken by the Engineering Department of the Ministry of Information.)

3.1 Improve Radio Transmission and Production

3.1.1 Construct and bring into operation the five medium-wave megawatt transmitting stations already planned for Duba, Qurayyat, Jiddah, Dammam, and Jaizan to expand coverage both locally and to neighboring countries (1395-99).

3.1.2 Construct a new building to provide offices, new studios, and stand-by power generation for the existing studios in Riyadh.

3.1.3 Improve medium-wave transmission in Jaizan, Medina, and Abha (1395-97).


Transmitters
Production Facilities
Radio (Megawatt)
Radio (Kilowatt)
Tele-vision
Radio
Television
Esisting
Planned
Under Construction
Qurayyat
JORDAN
Tabuk
Duba
Hayil
Qasim
Dammam
Hofuf
Riyadh
Medina
Jiddah
Mecca
Tayif
Wadi Dawasir
Bishah
Abha
Najran
Jaizan
NOTE: Additional medium-wave radio stations and television transmitters are planned but locations have not yet been selected.

3.1.4 Construct about 20 medium-wave, semi-automatic radio stations, one kW or more if necessary, to provide daytime coverage (radius 50-100 kilometers) to most of the population.

3.1.5 Acquire two portable short-wave transmitters to transmit special programs from remote locations to Riyadh and Jiddah for broadcast over the national radio network (1395-96).

3.1.6 Extend FM coverage to Dammam and Tayif.

3.1.7 Install shortwave transmitters and construct studios to provide shortwave broadcast coverage to Islamic and Arab countries.

3.1.8 Establish radio production centers in neighboring Arab states and a system of radio correspondents to expand and improve distribution of information to foreign countries.

3.1.9 Coordinate with the Ministry of Communications as necessary in the installation and activation of new transmission facilities and networks.

3.2 Expand Television Transmission and Production

3.2.1 Determine the optimal type and geographic location of transmitters for maximum domestic and foreign broadcast signal coverage (1395-96).

3.2.2 Install new transmitters according to the findings of the above study.

3.2.3 Coordinate with the Ministry of Communications in the installation and activation of the linkage of stations by a telecommunications network, and for the provision of a second television channel.

3.2.4 Construct a primary television center in Riyadh containing offices, studios, a film production and processing center, a stores complex, and facilities for a broadcast training institute (1395-98).

3.2.5 Construct a secondary television center in Jiddah containing offices and studios (1395-98).

3.2.6 Construct regional television centers containing offices and studios in Dammam, Medina, Qasim, Abha, and Mecca (1395-98).

3.2.7 Separate the production and recording facilities from the transmission facilities in Riyadh, Jiddah, and Dammam stations, adding new equipment as necessary.

3.2.8 Introduce equipment for color television in all existing stations and provide for installation of color television equipment in all new stations (1395-97).

3.2.9 Study the administrative organization of the Television Department to determine an appropriate organizational structure for its purposes.

3.2.10 Cooperate with the Ministry of Education in developing educational television (1395-1400).

3.3 Improve Program Quality in the Broadcast Media

3.3.1 Develop a system of pre-production planning for all domestic program production.

3.3.2 Improve the formats and scheduling of domestically-produced programs.
3.3.3 Design programs at a level appropriate for the audiences to which they are directed.
3.3.4 Contract with private production companies or freelance producers for special programs.
3.3.5 Expand contacts with foreign sources of programs and expand capabilities for reviewing foreign programs to determine their suitability for domestic broadcast.
3.3.6 Join international broadcasting associations and establish contacts with the broadcasting systems of other nations to exchange ideas on innovative program and production techniques.

3.4 Expand Public Information Capabilities
3.4.1 Draft a comprehensive, organized set of behavioral objectives for public information covering health, vocational training, social affairs, agriculture, commerce, and other developmental activities.
3.4.2 Develop a capability for formative and summative evaluation of the effects of public information, on both a formal and informal basis.
3.4.3 Provide consulting and in-service training opportunities to other government agencies in expanding their public information capabilities.
3.4.4 To promote cooperation in public information activities, establish formal and informal institutional relationships among:

- ☆ Government agencies
- ☆ Elements of the mass media
- ☆ Interpersonal channels.

3.4.5 Establish staff training programs and information production budgets to promote the development of regional public information capabilities in all mass media as soon as central capabilities are adequate.

3.5 Improve Press, Publications, and Public Relations.
3.5.1 Design an office building for press, publications, and public relations, which contains film and photography studios.
3.5.2 Construct and equip a printing office for information publications.
3.5.3 Establish information centers containing a library and an auditorium in Dammam and Abha (1397-1400).
3.5.4 Publish a general information magazine and a news-photo magazine on a periodic basis.
3.5.5 Establish information offices in conjunction with news-agency offices in Cairo, Beirut, Bahrain, Pakistan, London, and New York (1395-1400).

3.6 Develop News Agency Services

3.6.1 Construct a central news-agency office building in Riyadh, and a news transmission station and news reception station in the vicinity of Riyadh (1395-98).

3.6.2 Provide equipment for international transmission and reception of written and pictorial news, and for receiving news from and distributing it to about 40 news points within the Kingdom (1395-97).

3.6.3 Establish three regional news-agency offices.

3.6.4 Establish seven news-agency offices in foreign cities around the world.

3.7 Improve Information Control

Construct a central information control office building in Riyadh and branch offices in Salwah, Turaif, and Khafji (1395-97).

3.8 Improve Administration

3.8.1 Undertake a review of management organization and practice, and institute a continuing program of organizational and managerial improvement designed to promote efficiency and flexibility in the use of information services manpower.

3.8.2 Organize two documentation centers, one in Riyadh and one in Jiddah (1395-1400).

3.8.3 Construct a general stores building in Riyadh (1396-99) and branch administrative offices in Mecca and Dammam (1397-1400).

3.9 Construction

Construct the office buildings for Riyadh specified above, in a single complex.

3.10 Develop Recruitment and Training

3.10.1 Formulate a manpower recruitment and training program, and design a salary and promotion structure to meet planned manpower requirements estimated at 288 additional managerial positions and 1,074 professional positions, plus technical and support staff.

3.10.2 Establish a broadcast training institute in Riyadh for the in-service training of television and radio personnel in technical, production, administrative, and research activities (1396-97).

3.10.3 Consult with the Department of Mass Communications of the University of Riyadh on measures to augment the flow of new staff from this source and to provide in-service training.

3.10.4 Consult with the Ministry of Communications on expansion of telecommunications training programs to improve the supply of technical staff.

3.10.5 Provide as needed short- and long-term in-service training opportunities for staff in all other areas of information collection, processing and distribution.
3.11 Provide training abroad as needed in special communications skills.

4. Finance

The Ministry of Information's financial requirements for developing the above services in the coming five years are estimated as follows (SR millions):

	Budgeted 1394-95	*1395 -96*	*1396 -97*	*1397 -98*	*1398 -99*	*1399- 1400*	*Plan Total*
Recurrent	116.5	146.4	179.7	213.1	240.3	264.3	1,043.8
Project	205.3	385.4	522.1	510.6	249.7	222.4	1,890.2
Total	321.8	531.8	701.8	723.7	490.0	486.7	2,934.0

VI. SOCIAL DEVELOPMENT

VI. Social Development

Economic advances and social development are interdependent and mutually reinforcing.

Social policies to be framed over the next five years are intended to raise health and living standards; to ensure that all people share in the growing prosperity of the Kingdom; to ensure that no family is prevented by large numbers, misfortune, or lack of opportunities for employment from obtaining the basic necessities of life; and to bring to rural and nomadic communities health and welfare services comparable to those available to residents of urban communities.

Planned development of the Kingdom's social programs, discussed in this chapter, include improvement and expansion of health services; an increased and enlarged range of social security, community development, cooperatives, social welfare, and rehabilitation programs; and extension of the Government's contributory social insurance scheme. Specific plans for the youth and nomadic bedouin sectors of the population are also included.

Economic and social development would have little value without an effective system of administration of justice. The chapter concludes with a plan to develop the judicial system to meet the growing demands placed on it by economic and social development.

A. HEALTH

In addition to the expanded and improved health services to be delivered by the Ministry of Health and the Saudi Red Crescent Society, as described on the following pages, a number of health programs will be established or improved within other agencies. Most of these are described elsewhere — in specific plans of the respective agencies — and are therefore only briefly summarized below.

☆ Boys' Education — Ministry of Education
- A network of mobile health units, including X-ray and dental care facilities, will make regular school visits.
- 23 main health units, one in each school district, and 47 branch units will be established. The system will include 31 eye clinics, 17 X-ray centers, and 34 dental clinics.
- 6 hospitals for students will be established.

☆ General Presidency for Girls' Education
- The number of school health units will be increased from 23 to 30.
- Health visitors will make regular visits to all remote schools.
- A laboratory as well as dental and ophthalmological clinics will be included in the Jiddah, Riyadh, and Dammam health units.

☆ Higher Education
- The two existing student health units of the University of Riyadh will be expanded and additional units established on a one-per-college basis.
- At Islamic University, a 40-bed hospital will be constructed to provide both in-patient and out-patient care for students and staff.
- The health units at the women's colleges in Jiddah and Riyadh will be strengthened in both the preventive and curative fields.

☆ Department of Municipal Affairs
- Water, sanitation, and insect eradication services will be improved in the municipalities.
- Public health laboratories will be established in the major municipalities.

☆ Ministry of Labor and Social Affairs
- Labor law enforcement to protect against occupational hazards will be strengthened.
- The number of community development centers will be increased and the

health services available within each improved.

- The rehabilitation program is to be significantly expanded.

☆ Ministry of Defense

- The number and operation of health facilities available to military personnel and their dependents will be improved.

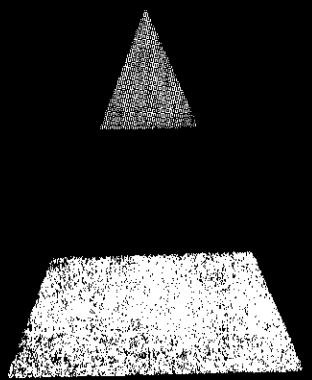
☆ King Faisal Specialist Hospital, Riyadh

- Opening in 1395, this hospital will offer a wide range of the most sophisticated health services on a referral basis.

☆ Medical Schools

- University of Riyadh — The new College of Medicine will be completed by the begining of the 1399-1400 academic year and enrollment increased from the current level of 258 males and 30 females to 597 males and 214 females in 1399-1400.
- King Abdul Aziz University — A College of Medicine will be established in 1395-96 with an initial enrollment of 60 males and 20 females, increasing to 397 males and 125 females in 1399-1400.

Figure VI-1 shows the pyramid of health services provided by the Ministry of Health and other government agencies.



VI.A.1. MINISTRY OF HEALTH

1. Present Conditions

1.1 Services relating to human health and nutrition are offered to the population through a number of channels, as just summarized above. By far the most significant health services in terms of size and coverage are those offered by the Ministry of Health. They are described below.

1.2 The current level of key health personnel and facilities under the jurisdiction of the Ministry of Health and in the private sector are compared with those at the beginning of the first development plan in Table VI-1. The health programs operated by other government agencies employ a further 517 doctors and 1,464 nursing and technical staff in a number of hospitals and clinics.

Table VI-1
KEY HEALTH FACILITIES AND PERSONNEL, 1390 AND 1394

	Ministry of Health		*Private Sector*	
	1390	*1394*	*1390*	*1393*
Hospitals	47	62	18	22
Hospital beds	7,165	7,734[a]	946	1,084
Dispensaries	187	215	b	b
Health centers	322	372	b	b
Doctors	789	1,900	162	509
Health inspectors and technicians	1,396	2,536	875	1,102
Nurses	2,253	3,934		

a Excluding a total of 1,326 beds used seasonally (for example, quarantine).
b Data not available.

In percentage terms, the Ministry of Health has made considerable progress in a number of fields during the past five years, but still has far to go before the level of basic health facilities and services can be said to be fully satisfactory. Moreover, a number of hospitals and other medical facilities are in serious need of improvement, equipment, and qualified staff.

1.3 Progress under the first five-year plan was hampered by a number of factors, including:

- ☆ Lack of skilled manpower at all levels.
- ☆ Organizational and management difficulties.
- ☆ Insufficient information and research on the health characteristics of the country and on the appropriate form and size of an effective health system.

- ☆ Lack of integration of the preventive, curative, and educational components of the health system.
- ☆ A low level of enrollment and output in the Kingdom's training schools; in the period 1390-94, only 152 female nurses and 357 technical assistants graduated from the nursing schools and health institutes.

1.4 A number of steps toward alleviating these and other problems were taken toward the end of the first plan period. These include:

- ☆ The preparation of a series of standardized designs for a full range of hospitals of varying size and function.
- ☆ Initiation of a major study and implementation program, of several years' duration, designed to evaluate and improve the health system, covering the following major areas:
  - General health survey.
  - Baseline survey of health facilities and related staff.
  - Improvement of the integration of health services in hospitals and clinics.
  - Pilot projects for evaluative research demonstration, and training concerning innovative patterns of integrated health services delivery.
  - A series of categorical health programs.
  - Health manpower planning, training, and recruitment.
  - Administrative improvement within the Ministry.
- ☆ Establishment of a General Directorate for Coordination and Follow-up within the Ministry to provide a strong central group for directing research, planning, program analysis and selection, training implementation, and evaluation throughout the Ministry.
- ☆ The awarding of 30 overseas scholarships for Saudis to study hospital management.
- ☆ Passing of Council of Ministers' resolution No. 183 (27.9.1394) for the granting of loans to persons intending to establish private hospitals; such loans will amount to 50 percent of hospital-establishment unit expenses.

Although it is in many instances too early to evaluate the effects of these significant innovations, they should nevertheless provide a strong base for achieving the improvements in health care envisioned in the current National Development Plan.

2. Objectives and Policies

2.1 A primary objective of the development of the health sector in the period 1395-1400 is to provide the Kingdom's population in all regions with a comprehensive range of preventive and curative health services so that the people may, through higher levels of health, both contribute to and benefit from the socio-economic progress of the Kingdom.

2.1.1 Expansion of preventive and curative services is planned both horizontally and vertically, and will include the following.

☆ Curative Services:
- Increasing the number of hospital beds, to provide 2.5 beds per 1,000 population by the end of the plan period.
- Increasing the number of dispensaries and upgrading a number of existing health points into category 'B' dispensaries.
- Establishing district dispensaries in selected urban areas to reduce the present out-patient loads of hospitals.

☆ Preventive Services:
- Strengthening and extending the system of preventive health services with the aim of reducing the incidence of disease and lowering the burden on curative services.
- Introducing a network of Mother and Child Care Clinics with the aim of reducing the infant mortality rate to no more than 110 per 1,000 births and improving mother and child care generally.
- Establishing a nutritional program.

2.1.2 High priority will be given to the integration of preventive and curative services at both the delivery and administration levels.

2.1.3 The development of private-sector health services will be encouraged and regulated.

2.1.4 Health education programs will be improved to increase public awareness of health problems, their causes, and the means of resolving them.

2.2 Significant improvement of the efficiency of health service operations at all levels is another major objective. The guiding policies associated with this objective are as follows.

2.2.1 Improve the range and performance of the support services necessary for the operation of a modern and efficient health system.

2.2.2 Develop a better understanding of the Kingdom's particular health situation by means of research and improved statistics.

2.2.3 Undertake significant management and administrative improvement to provide for efficient operation of the expanded health system.

2.2.4 Delegate increased responsibility for operation and control to the local level.

2.2.5 Expand the number and improve the quality of skilled manpower at all levels of the Ministry's operations. The specific plan target is a doctor: population ratio of 1:2,000 by the year 1400.

2.2.6 Increase coordination with other government ministries and agencies in order to derive the maximum benefit from scarce skilled health personnel and to develop common supportive health sevices.

3. Programs and Projects

3.1 Health Facilities Network

Health sevices will be delivered to the population through a hierarchy of strategically located health facilities in each region:

- ☆ *General hospitals* of varying sizes, located in urban communities and offering both preventive and curative health services.
- ☆ *Specialized hospitals,* located in the major cities of the Kingdom.
- ☆ *Dispensaries,* staffed by physicians and providing both preventive and curative services, which serve communities of 10,000-15,000 (type 'A') and 5,000-10,000 (type 'B'), and 40,000 (district dispensaries).
- ☆ *Health centers* providing, under the jurisdiction of a dispensary, both preventive and curative services, and serving the smallest communities.
- ☆ *District dispensaries (polyclinics),* located in major towns and each providing both preventive and curative services to a population of 40,000.
- ☆ *Specialized facilities,* providing services such as bilharzia and malaria control, chest disease clinics, and mother and child health centers.
- ☆ *Support services,* including regional laboratories, equipment and supply warehouses, and engineering departments.
- ☆ *Health offices,* responsible for organizing the collection of vital statistics and providing guidance on preventive health services.
- ☆ *Mobile health services,* to cover nomadic and other persons scattered in small villages.

3.2 Facilities Construction and Improvement

3.2.1 An additional 11,500 hospital beds will be established during the plan period. The precise location, size, type, and number of new hospitals is subject to ongoing surveys and studies. However, construction of hospitals in areas of urgent need will begin prior to completion of the facilities studies.

3.2.2 The following are the present and planned numbers of dispensaries:

	Existing	*Planned*	*Total in 1400*
Type 'A'	29	123[a]	152
Type 'B'	186	89	275
Total	215	212	427

a Funds for 55 type 'A' dispensaries were appropriated in the 1994-95 budget.

3.2.3 The following improvements are planned for health points.

3.2.3.1 Upgrade 40 health centers serving populations of 5,000 or more to Type 'B' dispensaries.

3.2.3.2 Equip all health centers serving populations of 800 inhabitants or more with an ambulance, and place them under the jurisdiction of a specified dispensary or hospital. Gradually upgrade these centers to Type 'B' dispensaries.

3.2.4 A total of 45 district dispensaries in urban areas will be rented or constructed by 1400 with the purpose of reducing the current pressure on hospital out-patient clinics.

3.2.5 Table VI-2 shows the specialized facilities program.

Table VI-2
PRESENT AND PLANNED
SPECIALIZED HEALTH FACILITIES

Type	*Existing*	*Planned*	*Total in 1400*
Medical rehabilitation centers	0	3	3
Bilharzia control stations[a]	8	32	40
Malaria control stations			
Central	7	3	10
Regional	3	8	11
Quarantine stations	34	10	44
Tuberculosis clinics	2	8	10
Chest disease dispensaries	12[b]	10	22
Mother and child welfare clinics	4	20	24
Dental clinics	55	91	146

a All rentals
b All to be improved.

3.2.6 Present and planned health training institutes are shown below:

Type	*Existing*	*Planned*	*Total in 1400*
Health institutes (men)	3	3	6
Nursing schools (women)	4	5	9
Socio-medical training centers	0	20	20
Health museum	0	1	1
Public Health Institute	0	1	1

3.2.7 The program of support services and administration for the planned health facilities is summarized as follows:

Type	*Existing*	*Planned*	*Total in 1400*
Supply stores			
Central	1	2	3
Regional	0	4	4
Regional engineering offices	1	5	6
General Directorate of Medical and Pharmaceutical Licenses (Building)	0	1	1
Regional Medical Laboratories	3[a]	2	5
Forensic Medicine offices	6	5	11
Health offices	17	31	48

a All to be replaced.

3.2.8 The above-described construction and improvement programs will be implemented by:

3.2.8.1 Using standardized designs as far as possible.

3.2.8.2 Renting appropriate facilities pending construction of specified buildings.

3.2.8.2 Immediately initiating research into the possibility of establishing multi-purpose health complexes.

3.2.8.4 Forming as soon as possible a new department for overall initiation and supervision of the facilities' improvement and procurement programs.

3.2.8.5 Strengthening the Inspection Department, as well as the Engineering Department, to ensure the improvement of health unit operation and maintenance standards (1395-1400).

3.3 New and Improved Health Services

3.3.1 Existing health programs will be expanded and strengthened, and new ones introduced, as follows.

3.3.1.1 Expand the mother and child care program for both pre- and post-natal care as well as child care, through dispensaries, district dispensaries, health centers, and community development centers. In addition, establish 20 specialized mother and child clinics (1395-1400).

3.3.1.2 Staff each of the 45 new district clinics in urban areas with 4 physicians, to provide preventive and curative services and thus relieve the current strains on hospital out-patient clinics in urban areas (1395-1400).

3.3.1.3 Establish 91 dental clinics in hospitals throughout the Kingdom (1395-1400).

3.3.1.4 Establish 3 rehabilitation centers for the physically handicapped in Riyadh, Jiddah, and Hofuf (1399-1400).

3.3.1.5 Expand chest disease programs through the planned increase of 10 specialized dispensaries (1398-99), 8 tuberculosis centers (1396-99), the establishment of vocational units within chest hospitals, and the improvement of existing facilities and services (1397-1400).

3.3.1.6 Increase manpower in the psychiatric health section (1395-96) and establish 9 psychiatric health sections within public hospitals (1395-1400).

3.3.1.7 Improve socio-medical services to provide social, psychiatric, and training services to patients during hospitalization and treatment: 69 centers plus 20 model/training units will be established under a Socio-medical Service Office to be located within the Curative Health Department (1396-99).

3.3.1.8 Establish a Laboratories Department at the Ministry level (1395-96) and establish two additional regional laboratories in the Northern and South Western regions which, together with the existing regional laboratories, will be under its jurisdiction (1398-99).

3.3.1.9 Improve blood banks at all hospitals (1395-1400) and provide a laboratory inspector for each health directorate (1396-97).

3.3.1.10 Establish 2 central medical supply centers (Jiddah and the Eastern Region) — as well as smaller stores in Qasim, Medina, Asir, and Jaizan — to be coordinated with the central stores in Riyadh (1395-98).

3.3.1.11 Establish 5 regional engineering departments to provide a higher level of equipment and facilities maintenance (Riyadh, Dammam, Jiddah, Abha, and the Northern Region) (1395-98).

3.3.1.12 Strengthen the Nutritional Department within the Ministry with additional manpower and establish a national Nutrition Institute, following study, to provide the Ministry with information upon which to base specific programs (1395-98).

3.3.1.13 Establish and staff an infectious disease research unit (1395-96).

3.3.1.14 Establish, progressively, a nationwide system of providing each citizen with a health card and medical file, with the purposes of improving medical records and facilitating referral (1395-99). Coordinate this program with programs for social services registration being undertaken in other ministries.

3.3.1.15 Increase skilled manpower and equipment available at the bilharzia and malaria control stations, the Environmental Health Department, and the Water Department (1395-96).

3.3.1.16 Provide additional manpower to the health programs operated through existing community development centers (1395-96) and initiate new programs as additional centers are opened by the Ministry of Social Affairs (1396-1400).

3.3.1.17 Improve staffing, both in terms of numbers and of competence, in existing health facilities by improved recruitment and training procedures (1395-1400).

3.4 Organization and Adminstration

3.4.1 Strengthen the Ministry's organizational and adminstrative structure for effective operation, as follows:

3.4.1.1 Re-define health region boundaries to coincide with the Kingdom's administrative divisions, thus providing an improved base for both administrative and statistical purposes (1395-96).

3.4.1.2 Following study in 1396-97, delegate increased authority for implemeting and operating health projects to Regional Health Directors while centralizing responsibility for policy, planning, and evaluation at the Ministry level.
3.4.1.3 Integrate preventive, curative, and educative services at the regional level; and establish a special department with the sole responsibility of supervising clinics and health centers (1395-96).
3.4.1.4 Increase decentralization of support services by establishing offices at the regional level (1395-1400).
3.4.1.5 Upgrade the quality of staff at all levels of the Ministry's activities by in-service training, specification of career development prospects, and by training programs operated by the Ministry, the Institute for Public Administration, and overseas (1395-1400).

3.5 Planning, Coordination, and Implementation

3.5.1 Place within the newly formed General Directorate for Coordination and Follow-up the major role in initiating, coordinating, and evaluating health policy and implementation. This General Directorate will comprise the following departments:

- ☆ Planning, Programming and Scientific Missions
- ☆ Organization and Administration
- ☆ Technical Training
- ☆ Budgeting
- ☆ Statistics
- ☆ Health Education
- ☆ Investigation
- ☆ Inspection
- ☆ Inter-Ministry Coordination Office
- ☆ Office of Construction Programs Coordination.

3.5.2 Specific projects to be undertaken by the General Directorate for Coordination and Follow-up are listed below.
3.5.2.1 Formulate the Ministry's objectives and plans (1395-1400).
3.5.2.2 Introduce improved methods of financial accounting, budgeting, and planning (1395-1400).
3.5.2.3 Review the specific projects and programs submitted by the Ministry's departments (1395-1400).
3.5.2.4 Prepare job descriptions (1396-99) and objectives for all departments (1395-1400), together with regular evaluations of performance.
3.5.2.5 Improve the statistical system relating to health and vital statistics, and train personnel in its use (1395-1400).

3.5.2.6 Initiate and monitor research programs for evaluation of technical and administrative aspects of the health system including, within the plan period:

- ☆ A general health survey.
- ☆ Survey of health facilities and related staff.
- ☆ Improvement in integrated health service delivery.
- ☆ Pilot projects for research, demonstration, and training.
- ☆ Categorical health programs.
- ☆ Health manpower planning, training, and recruitment.
- ☆ Management improvement.
- ☆ Feasibility of a nationwide health card system.
- ☆ Feasibility of mobile health services.

3.5.2.7 Establish a center for study and research into health and social development, in Riyadh (1395-99).
3.5.2.8 Strengthen the investigation and inspection activities of the Ministry to ensure proper practice at all levels of the health system (1395-1400).
3.5.2.9 Coordinate with the health activities of other government agencies, both to avoid duplication of effort and to provide a common source of information and understanding relating to health activities (1395-1400).

3.6 Medical Supplies

3.6.1 Improve the logistical aspects of assuring the availability of necessary medical supplies throughout the health system.
3.6.1.1 Strengthen operation of the medical supplies system by introducing an improved inventory control and reporting system (1395-96).
3.6.1.2 Establish additional central and regional medical supply stores, as already noted.
3.6.1.3 Improve training for personnel in the Ministry's Medical Supply Department (1395-1400).
3.6.2 Maintain a firm control over the quality and use of drugs and medicines.
3.6.2.1 Prepare a drugs directory for use by public and private health services (1395-96).
3.6.2.2 Establish a laboratory for the manufacture of vaccines and serums (1398-99).
3.6.2.3 Establish a factory for drug and medicine packaging (1395-96).

3.7 Health Education

3.7.1 Prepare, through the Health Education Department, literature and visual aids for dissemination through all general health facilities, including community development centers, and mother and child care clinics; such material will also be made available for the use of other government agencies and the private sector (1395-1400).

3.7.2 Undertake mass media campaigns (radio, television, and the press) on health information and careers (1395-1400).
3.7.3 Initiate special campaigns during the time of the pilgrimage in the Hajj areas.
3.7.4 Establish health education units, at the rate of two per year, in the regional health offices (1395-1400).
3.7.5 Establish a health museum for the education of students and the general population (1395-98).

3.8 Personnel Training and Recruitment
3.8.1 Operate training programs for technical and nursing personnel:

- ☆ Establish three new health institutes and five nursing schools (1395-99).
- ☆ Improve the present three institutes and four nursing schools (1395-98).
- ☆ Plan to graduate 5,250 technical assistants (1395-1400).

3.8.2 Establish, within each health institute, a specialized department of psychiatric nursing (1395-1400).
3.8.3 Establish 20 model socio-medical training centers to train staff for the new socio-medical service (5 per year: 1395-98).
3.8.4 Establish 1,061 scholarships for medical and related personnel.
3.8.5 Utilize the training courses offered by World Health Organization centers in the Middle East for the training of specialists in rehabilitation and artificial limbs (1395-1400).
3.8.6 Develop a series of incentives to attract an increased number of both males and females into health careers (1395-96).

3.9 Regulation and Stimulation of Private-Sector Health Activities
3.9.1 Analyze loan applications with the Ministry of Finance for the establishment of private hospitals; such loans will amount to 50 percent of establishment expenses in accordance with Council of Ministers' Resolution No. 1832.
3.9.2 Increase the staff and efficiency of the General Directorate for Medical and Pharmaceutical Licenses to strengthen its capabilities for registration, licensing, inspection, and the preparation of regulations (1395-98).
3.9.3 Provide assistance and information on technical matters (1395-1400).

4. Finance

The annual financial requirements of the Ministry of Health in the plan period are estimated as follows (SR millions):

	Budgeted 1394-95	*1395 -96*	*1396 -97*	*1397 -98*	*1398 -99*	*1399-1400*	*Plan Total*
Recurrent	727.9	775.1	829.4	944.7	1,198.9	1,215.5	4,963.5
Project	435.1	5,793.2	3,054.5	2,363.6	805.9	320.8	12,338.1
Total	1,163.0	6,568.3	3,883.9	3,308.3	2,004.8	1,536.3	17,301.6

VI. A.2. SAUDI RED CRESCENT SOCIETY

1. Present Conditions

1.1 The Saudi Red Crescent Society provides first-aid, ambulance and emergency medical services, principally on highways where traffic accidents are numerous and during the period of the Hajj. Through a General Center in Riyadh, the Society operates 3 branch offices, 8 health centers, 27 first-aid centers (24 hours per day), and 120 ambulances.

1.2 During the period of the first development plan the following objectives were met:

- ☆ Establishment of a First-Aid Training Institute.
- ☆ Equipment of ambulances with radios in the Hajj areas.
- ☆ Increased number of first-aid centers.

1.3 Targets not met were:

- ☆ Establishment of a public relations office.
- ☆ Procurement and operation of a mobile hospital.
- ☆ Adequate staffing of the First-Aid Training Institute.

Moreover, the Society is beset with problems relating to insufficient skilled manpower, outmoded equipment, and inadequate emergency supplies.

2. Objectives and Policies

For the period of the second Plan, the Saudi Red Crescent Society has eight specific objectives for its development.

2.1 The improvement of first-aid and other health and medical services provided for pilgrims has high importance in the Society's plan. Three policies will be followed in reaching this objective:

- ☆ New branches and clinics will be established in the Hajj zones in accordance with recommendations from the Hajj Committee.
- ☆ Mobile facilities will be provided for use in the Hajj zones during the pilgrimage period and in other areas at other times.
- ☆ First-aid patrols will be increased in the Hajj areas.

2.2 A second objective for the 1395-1400 period is to increase and diversify the Society's financial resources.

2.3 First-aid services throughout the Kingdom are to be upgraded and expanded, as follows:

- ☆ Improve and re-equip existing centers, branches, and clinics.
- ☆ Construct and equip new first-aid centers and branch offices.

☆ Increase the number of staff members qualified in first-aid.

2.4 To improve the Society's manpower skills and supply at all levels is another major aim, to be fulfilled by providing training courses for technical and administrative staff, and by attracting and recruiting more technical and administrative employees.
2.5 Increasing the number of voluntary first-aid workers is a distinct objective, to be reached by organizing training programs for youth groups and establishing Red Crescent societies among selected youth groups, and also organizing training programs for employees of establishments and organizations that are larger than a specified size.
2.6 Another objective is to procure additional reserves of emergency supplies and establish storage facilities for them.
2.7 Broader in scope is the objective of establishing a study and planning function to improve the overall efficiency of the Society's operations.
2.8 Finally, the aims and principles of the Society will be publicized through the various information media and publicity for selected groups.

3. Programs and Projects

3.1 Operational Improvements
3.1.1 Provide 150 fully-equipped ambulances (30 per year).
3.1.2 Introduce a system of eight-hour shifts in health centers over the first three years of the Plan.

3.2 New Facilities and Equipment
3.2.1 Establish 30 new first-aid centers for the emergency treatment of accident victims and for conveying them to hospitals (6 centers per year).
3.2.2 Establish 5 new clinics, mostly in the Hajj areas, for provision of first-aid and health services (1 per year).
3.2.3 Organize 2 stores for emergency supplies in case of catastrophes, in Riyadh (1396-97) and Mecca (1398-99).
3.2.4 Construct 3 branch offices to replace existing offices in Medina, Tayif, and Riyadh (1395-98).
3.2.5 Study and subsequently procure a mobile hospital primarily for the Hajj area during the pilgrimage, but also for remote areas at other times (1395-96).
3.2.6 Study and subsequently install a radio network to facilitate inter-unit communication and to improve emergency response-time (1396-97).

3.3 Training
3.3.1 Run one course each year at the Institute for Public Administration for administrative personnel.

3.3.2 Recruit and train 210 students in first-aid at health institutes to fill assignments in the Society's centers and clinics (1395-1400).
3.3.3 Increase voluntary assistance by running training programs at youth centers, schools, universities, institutes, and places of work (1395-1400).

3.4 Administration and Planning
3.4.1 Establish a planning office for the Society's operations (1395-96).
3.4.2 Study and formalize the Society's organizational and management structure to improve its operations (1395-96).
3.4.3 Study and implement ways of augmenting and diversifying the Society's financial resources (1395-96).
3.4.4 Strengthen the Society's public relations program to increase public awareness of, and interest in, the Society's services (1395-96).

4. Finance

The annual financial requirements for the Saudi Red Crescent Society are estimated as follows (SR millions):

	Budgeted 1394-95	*1395 -96*	*1396 -97*	*1397 -98*	*1398 -99*	*1399-1400*	*Plan Total*
Recurrent	15.9	20.6	24.8	28.5	30.1	31.6	135.6
Project	2.9	10.1	16.5	9.5	14.6	7.1	57.9
Total	18.8	30.7	41.3	38.0	44.7	38.7	193.5

B. SOCIAL SECURITY AND SOCIAL AFFAIRS

1. Present Conditions

The Ministry of Labor and Social Affairs offers a range of programs oriented toward the social development of individuals and groups, as well as the welfare of individuals in particular need of these programs. The Kingdom's Social Security System currently provides, on a non-contributory basis, two types of social assistance:

- ☆ Pensions payable to persons above the age of 60 and partially or completely disabled, to orphans, and to women without support.
- ☆ Grants-in-aid to persons affected by natural and social calamities.

Social Affairs provides several other types of services:

- ☆ Social welfare (institutional and other care) for orphans, problem children, the elderly, and beggars.
- ☆ Rehabilitation for the mentally and physically handicapped.
- ☆ Assistance to and regulation of cooperatives.
- ☆ Community development services.
- ☆ Planning and research relevant to social programs in the Kingdom.

Both the Social Security and Social Affairs programs expanded substantially during the first plan period under the Ministry of Labor and Social Affairs.

1.2 Social Security

1.2.1 In addition to the Ministry offices in Riyadh, Social Security has 3 regional offices (Jiddah, Riyadh, and Dammam) and 46 branch offices, 6 of which were established during the first plan period.

1.2.2 Benefits payable under Social Security were increased significantly in 1394. The current maximum annual payment for a family of 7 persons is SR 5,400 per year comprising a basic rate of SR 1,080 for the family head/supporter plus SR 720 for each additional family member. Budget provisions for 1393-94 included SR 178 million for the pension program and SR 6.6 million for grants-in-aid. In 1393-94, approximately 110,000 persons received pension benefits and 3,700 received grants.

1.2.3 The major operating difficulties of the Social Security scheme during the first plan period were encountered in familiarizing the general public with the scheme, verifying claims, and obtaining skilled manpower for all Social Security offices.

1.3 Social Welfare

1.3.1 Social welfare provides in the following institutions care for young and old persons in distress because of economic, social, or physical circumstances:

Institution			*Number of Persons (1394-95)*	
Type	*No.*	*Care for*	*Males*	*Females*
Social Educational Institutes	10	Orphans	954	220
Welfare Home for Muslim Children	1	Orphans	15	–
Social Nursery Home	1	Children 0-6 years	29	
Social Orientation Institutes	4	Non-delinquent problem children	211	–
Probation Homes	3[a]	Delinquent or first-offense juveniles	29	
Social Welfare Institutes	5	Elderly persons	149	
Offices for Beggars Control	7			

a Including 2 just completed.

1.3.2 Another Social Welfare function is the encouragement of private benevolent societies. The Ministry usually pays a subsidy to these societies; in 1394-95 these subsidies to 13 societies reached approximately SR 450,000.

1.3.3 Social Welfare also has a program for the foster and alternate family care of foundlings and infants separated from their mothers. In 1394-95 some 555 children were being cared for under this program, compared with 123 children in 1389-90.

1.4 Rehabilitation

1.4.1 A department was formed in 1393-94 to provide rehabilitation services and training to the mentally and physically handicapped. Within six months of a rehabilitation center being established in Riyadh, it was serving 42 persons.

1.5 Cooperatives

1.5.1 Cooperatives are registered and regulated by a department which also offers both technical and financial assistance in the establishment and initial operational stages of cooperatives. In 1394-95 there were 83 registered cooperatives with a membership of 27,560 in the Kingdom. There were 39 cooperatives at the beginning of the first plan period and the target for the end of the period was 76. Government policy in the most recent years has been to discourage the formation of consumer cooperatives, except in some rural areas.

1.5.2 The registered cooperatives are divided into five categories, as follows:

☆ Multi-purpose	30
☆ Agriculture	24
☆ Consumer	17
☆ Services	10
☆ Professional	2
Total	83

1.5.3 Subsidies to the 83 cooperatives totalled SR 790,000 in the year 1394-95; other relevant financial data for that year are:

☆ Capital	SR 7.87 million
☆ Financial reserves	SR 3.54 million
☆ Annual turnover	SR 14.93 million
☆ Total assets	SR 14.50 million

1.6 Community Development

1.6.1 Through 17 community development centers (CDCs) serving a total of 83 communities, government services are coordinated with local efforts to improve the welfare of the community. Major emphasis has been placed on the concept of the community members themselves improving their own level of living.

1.6.2 Although the community development program is operated under the jurisdiction of the Ministry of Labor and Social Affairs, the Ministries of Education, Health, and Agriculture and Water also participate. Typically, a CDC will include a health clinic, and operate programs in:

- ☆ Literacy
- ☆ Public hygiene
- ☆ Libraries
- ☆ Cooperative activities
- ☆ Agricultural extension (in rural areas).

1.6.3 Of the 17 CDCs in operation, 11 are located in rural and 6 in urban areas. By 1395, 60 local committees had been established and the CDCs undertook 250 community

projects, such as organizing of mother and child care centers, teaching home economics courses, and schemes for sanitary improvement.

1.6.4 Although no new CDCs were opened during the period of the first plan, a study of their effectiveness was initiated and its results will form the basis for decisions relating to expansion of the CDC network.

1.6.5 Training for community development personnel and persons from other agencies participating in CDC programs is undertaken jointly by the Ministry of Labor and Social Affairs and the United Nations at the joint Center for Training and Applied Research in ad-Dirʾiyah, near Riyadh. During the first plan period, short courses were attended by 323 persons and long courses by 131. Ten research projects on social topics were undertaken during this same period. The Center has a staff of 47 plus 7 U.N. advisors.

1.7 Planning and Research

In 1393–94 a Planning and Research Department was established in the Secretariat for Social Affairs as the basic unit for initiating research into all questions relating to social programs in the Kingdom, as well as for coordinating the planning activities of Social Affairs and Social Security. The Department has a staff of 16.

2. Objectives and Policies

2.1 Three basic objectives have been defined for Social Security and Social Affairs in the period 1395–1400. They can be summarized as follows.

2.1.1 Assist the Saudi people to improve by their own efforts their real standards of living without reducing their incentives to work.

2.1.2 Provide services and assistance to individuals who are prevented for reasons of health, age, or other particular cause from participating directly in the rewards of the Kingdom's development.

2.1.3 Help individuals and groups to adapt to the gradual urbanization and industrialization of Saudi society.

2.2 To meet the above objectives, the Ministry of Labor and Social Affairs will be guided by the following policies.

2.2.1 Improve and strengthen the existing Social Security transfer payments system.

2.2.2 Introduce additional transfer payment schemes designed to cover a wide range of persons, but with emphasis on the children of poor families and the elderly.

2.2.3 Stimulate both group and individual participation in social programs designed to further self-and community-improvement.

2.2.4 Encourage the private sector to develop social programs and, where possible, assign to private benevolent organizations the responsibility for operation of specified social programs started by the Government.

2.2.5 Improve and extend the system of institutional care for those in need.

2.2.6 Improve the services designed to prepare the mentally and physically handicapped and juvenile delinquents to assume productive roles in society.
2.2.7 Extend the application of social programs in urban areas through the existing range of institutions.
2.2.8 Provide guidance to, and collaborate with, government agencies concerned with (a) the well-being of those segments of the population who are slow to benefit directly from the development process, such as the Bedouin and small farmers, and (b) the changing social needs, such as housing, engendered by the development process.

3. Programs and Projects

Figure VI–2 summarizes the major programs described below.

3.1 Social Security

3.1.1 Before introducing the new non-contributory social assistance schemes, complete the following preparatory tasks (1395–97):

- ☆ Draft and promulgate new legislation regarding eligibility for, and operation of, the new schemes.
- ☆ Establish the procedural and organizational framework for the enlarged system.
- ☆ Finalize the payments mechanism.
- ☆ Register eligible persons.
- ☆ Prepare files for recipients, and install appropriate data processing facilities.
- ☆ Initiate (in 1395) training programs for both central and regional staff.

3.1.2 Introduce the following new non-contributory social assistance schemes (by the beginning of Jumad II, 1397):

- ☆ *Child allowances*, payable to limited-income families with children.
- ☆ *Old-age pensions*, for persons over 60 who are not covered by alternative pension schemes.
- ☆ *Death allowances*, payable to wives whose deceased husbands had been old-age pensioners under the Social Security Scheme.
- ☆ *Housing allowances*, payable as a lump-sum to tenants who have lost their accommodation owing to circumstances beyond their control.

3.1.3 Table VI-3 shows the projected expenditures on the above new and increased Social Security benefits during the period of the Plan.

SOCIAL SECURITY

Existing Benefits

- Disability Pensions
- Orphans Allowances
- Aid to Women Without Support
- Temporary Emergency Grants

Additional Benefits

- Old-Age Pensions
- Death Allowances
- Child Allowances
- Housing Allowances

SOCIAL WELFARE

Existing Institutions

- 19 Institutes for the Young
- 5 Institutes for the Elderly
- 7 Offices for Beggar Control
- 13 Private Benevolent Societies
- 555 Foster and Alternate Families

Additional Institutions

- 14 Institutes for the Young
- 2 Institutes for the Elderly
- 7 Offices for Beggar Control
- 20 Private Benevolent Societies
- 300 Foster and Alternate Families

COMMUNITY DEVELOPMENT

Existing Institutions

- 11 Urban Centers
- 6 Rural Centers

Additional Institutions

- 12 Rural Centers
- 5 Urban Centers

COOPERATIVES

Existing Institutions

- 83 Cooperatives

Additional Institutions

- 90 Local Cooperatives
- 5 Regional Marketing and Supply Cooperatives
- 2 Central Marketing and Supply Cooperatives

REHABILITATION

Existing Institutions

- 1 Rehabilitation Center

Additional Institutions

- 5 Vocational Rehabilitation Centers
- 3 Social Rehabilitation Centers

Table VI-3
PROJECTED SOCIAL SECURITY PAYMENTS, 1395-1400
(SR Millions)

	1395-96	*1396-97*	*1397-98*	*1398-99*	*1399-1400*	*Total*
Existing allowances Disability pensions Orphans allowances Pension for women without support Temporary assistance	119.77	129.81	143.18	148.78	154.78	696.32
New allowances Old-age pensions Death allowances Child allowances Housing allowances	812.00	844.20	2,751.48	2,777.48	2,799.88	9,985.04
Total	931.77	974.01	2,894.66	2,926.26	2,954.66	10,681.36

3.1.4 Ensure that all persons eligible for Social Security benefits are aware of, and do receive, the appropriate benefits through the following actions:

- ☆ Convert the Abha local office into a regional office (1395).
- ☆ Establish and staff 34 additional local offices as follows:

Region	*1395-96*	*1396-97*	*1397-98*	*1398-99*	*1399-1400*
Central	Hotat/ Sudayr	Thadaq Matheneb	al-Bekairyah	Sajer	Darma
Western	Rabigh	Mahdadh al-Mahd	Tarba/ Khaybar	Beni Malik/ Badr	Khulais
Eastern	Abqaiq	Haradh	al-Jarrarah	Ne'ariya	Jubail
Southern	Sabat al-Allaya/ Mekkwah	Sebya/ al-Birk	Dhahran/ al-Janoub	Samta/ Aradeya Shemalya	Adam/Abu Arish
Northern	Haql/ Tobrjal	al-Ha'it	Mowaqiq/ Turaif	Rafha	Duba

- ☆ Encourage registration by using public information messages, publicity via programs run by other government agencies and departments (e.g., Health, Education, and Community Development), and by excellence of service (1395-1400)
- ☆ Introduce a system of payment checks redeemable through a wide range of public and private institutions (1397).

3.1.5 Where they exist, assign to the private benevolent societies the responsibility for ruling on and disbursing extraordinary emergency payments on behalf of the General Directorate of Social Security.

- ☆ Formulate appropriate legislation to cover the responsibilities, jurisdiction, and accountability of the benevolent societies and their relation to the Social Security Directorate (1395).
- ☆ Formalize contracts with the separate benevolent societies based on the legislation approved (1396).
- ☆ Following contractual agreement, assign to each benevolent society a discretionary budget advance to cover both the estimated initial payments and a fixed contribution to administrative expenses (1396-1400).

3.1.6 Improve the operation and administration of the Social Security Directorate in order to increase the number and speed of claims handled, and to avoid false claims:

- ☆ Develop an improved information system — registration, file construction, and quick-access retrieval — and install it on the new data processing system by Jumad II, 1397.
- ☆ Improve vital statistics data through improved collection procedures at the local offices and storage on the central computer.
- ☆ Delegate responsibility for approval of allowances to the local offices, subject to subsequent checking by the regional offices; maintain card files on recipients at the local offices as well as the central office.
- ☆ Introduce diversified payment methods to assure coverage of the various types of population:
  - Organizations in urban areas.
  - Mobile teams attached to the local offices in rural areas.
  - Fixed geographical points, such as market towns, for nomads.

3.1.7 Expand training programs for employees as follows:

- ☆ Social Researchers and Statisticians — 40 trainees per year (ad-Dirʾiyah Center).
- ☆ Office Managers — 30 trainees per year (I.P.A.).
- ☆ Senior Administrators — 10 overseas scholarships per year.

3.1.8 Improve the rehabilitational activities of the Social Security Directorate as follows:

- ☆ Through vocational and technical assistance, establish 300 small productive units composed of Social Security beneficiaries (1395-1400).
- ☆ Expand the Directorate's program for providing the handicapped with artificial limbs and aids (1395-1400).

3.2 Social Affairs

Each of the major programs under Social Affairs — social welfare, rehabilitation, cooperatives, and community development — is described separately below in terms of the specific projects that are planned for 1395-1400.

3.3 Social Welfare

3.3.1 Construct and provide the initial staffing for the planned welfare institutions shown in Table VI-4.

Table VI-4
PLANNED SOCIAL WELFARE INSTITUTIONS[a]

Institution	*Existing in 1395*	*1395-96*	*1396-97*	*1397-98*	*1398-99*	*1399-1400*	*Total*
Social Nursery Homes	1		Western Region (25)	Eastern Region (25)	–	–	3
Social Educational Institutes							
Orphanages for boys	7		Northern Region (100)	Southwest Region (100)	al-Washm (100)	–	10
Orphanages for girls	3		Abha (100)	–	'Unayzah (20)	–	5
Social Orientation Institutes	4			Western Region (20)	Southwest Region (20)	–	6
Probation Homes							
For boys	3	Southwest Region	Northern Region	–	–	–	5
For girls	0	Riyadh	Eastern Region (20)	Western Region (20)	–	–	3
Social Welfare Institutes for the elderly	5	Jawf (20) 'Unayzah (20)	–	–	–	–	7
Home for handicapped children	0		Central Region	–	–		1
Offices for Beggars' Control	7	Northern Region	Eastern Region Central Region	Northern Region Southwest Region	Northern Region Southwest Region	–	14

a Numbers in parentheses indicate initial capacities.

3.3.2 Promote the registration of an additional 20 benevolent societies during the plan period and encourage the societies to assume as quickly as possible operation of such institutions as nurseries scheduled for construction in 1395-1400. Following agreement by the individual benevolent societies, specify the rules under which they are to manage and operate the institutions and fix a subsidy to cover their management and personnel costs (1395).

3.3.3 Raise the standards of institutional services and the quality of life within the institutions:

- ☆ Establish a series of standardized but flexible designs for all institutions, based on modules for 20 persons, with the objective of providing both pleasant and functional surroundings (1395).
- ☆ Introduce a wider range of recreational, hobby, and intellectual equipment and programs within each institution.
- ☆ Ensure that all institutionalized young persons have the same access to educational and training programs as their counterparts outside the institutions.
- ☆ Improve the vacation and excursion programs for persons within institutions.
- ☆ Establish centralized kitchens for social institutions in Riyadh (1396-97), Jiddah (1397-98) and Dammam (1398-99).

3.3.4 Expand the alternate and foster families programs by an additional 300 families during the Plan:

- ☆ Undertake continuous information campaigns throughout the plan period to familiarize the general public with the merits of family care.
- ☆ Use private benevolent societies as a major means of seeking out families that will adopt children.
- ☆ Include foster families under the provisions for child benefits in the Social Security program (1397-1400).

3.3.5 Improve in-family care for the aged:

- ☆ Provide financial assistance to families with aged dependents who are in need.
- ☆ Provide a servant to elderly persons without family and in need.

3.3.6 Strengthen the administration and organization of the General Directorate for Social Welfare at all levels:

- ☆ Increase the coordination of the General Directorate with the private benevolent societies in view of the plan to disburse Social Security payments through the societies.
- ☆ Establish, in 1395-96, a department for the follow-up of social welfare recipients after institutional care.

3.3.7 Increase staffing at each social welfare institution to include doctors (part-time) and social workers as well as teachers, physical-fitness trainers, and vocational counselors for children and adolescents (1395-1400).

3.3.8 Introduce training in social welfare activities at the intermediate level (1395-96).

3.3.9 Establish and equip, in 1395-96, two permanent camp sites which will be used annually by all social orientation and education institutions.

3.4 Rehabilitation

3.4.1 Improve and expand operation of the existing Riyadh Rehabilitation Center:

- ☆ Recruit a full-time director and fill existing staff vacancies (1395-96).
- ☆ Expand the capacity of the Center by 80 places per year to a total capacity of 470 in 1400.
- ☆ Increase staffing to include three teacher-assistants, an additional social worker, and a cashier/accountant (1395-96).
- ☆ Establish a live-in system and catering facilities (1395-96).
- ☆ Establish three classes for general education (1395-96).
- ☆ Establish workshops for training in book-binding (1396-97), repairs (1397-98), and small-industry skills (1398-99).

3.4.2 Establish and staff additional vocational and social rehabilitation centers.

3.4.2.1 Locate new vocational rehabilitation centers as follows:

Location	*Date of Establishment*	*Initial Size*	*Size in 1400*	*Type*
Western Region	1395-96	110	550	General, T.B. and mental illness sections
Eastern Region	1396-97	80	320	General
Riyadh	1396-97	40	120	For women
Riyadh	1397-98	80	240	Mentally retarded
Riyadh	1398-99	80	160	For the deaf and dumb

3.4.2.2 Establish 7 workshops for the blind in various locations across the country. Each workshop will have a capacity of 60 persons whose products will be sold on a commercial basis (1395-1400).

3.4.2.3 Establish a social rehabilitation division within the General Directorate for Rehabilitation (1395-96) and subsequently establish social rehabilitation centers for the seriously handicapped, as follows:

Location	*Date of Establishment*	*Initial Size*
Riyadh	1395-96	100
Western Region	1395-96	100
Eastern Region	1398-99	100

3.4.2.4 Expand overseas training programs for rehabilitation specialists (beginning in 1395-96).

3.4.3 Arrange an annual summer camp for handicapped persons from all over the Kingdom.

3.4.4 Improve administrative procedures and operations of the General Directorate for Rehabilitation.

3.5 Cooperatives

3.5.1 Encourage the formation of 90 new cooperatives, as shown in Table VI-5.

Table VI-5
PLANNED COOPERATIVES, 1395-1400

Type	*1395 -96*	*1396 -97*	*1397 -98*	*1398 -99*	*1399- 1400*	*Total New Cooperatives*
Agriculture	4	5	6	7	8	30
Housing and services	2	3	4	5	6	20
Production and professional services	6	6	7	7	7	33
Central and regional services cooperatives	1	2	1	2	1	7
Total	13	16	18	21	22	90

3.5.2 Improve the incentives and administrative framework for cooperative development at the local, regional, and central levels (beginning in 1395-96).

3.5.2.1 Local Level:

- ☆ Introduce a subsidy for the construction of an administrative building for each cooperative (1395-96), the subsidy not to exceed SR 300,000 per cooperative.
- ☆ Establish a subsidy, payable annually to each cooperative, for defraying accounting costs (1395-96); this subsidy will be paid at the rate of SR 15,000 per cooperative per year.
- ☆ Introduce a one-time establishment subsidy of SR 10,000 for each new cooperative upon registration.
- ☆ Increase the project start-up subsidies for cooperatives to between 50 and 80 percent of the project costs, according to the nature of the cooperative activity (1395-96).
- ☆ Introduce a subsidy to each cooperative for improving management procedures of SR 2,000 per month (1395-96).
- ☆ Increase the participation of individual cooperative workers by (a) opening executive board meetings to employees of cooperatives, and (b) holding a meeting of each cooperative's General Assembly at least twice per year (1395-1400).
- ☆ Require that each cooperative distribute all net profits on the basis of each member's transactions, withholding from each allocation 20 percent for deposit in the cooperative's revenues and 6 percent for the social services fund (1395-1400).
- ☆ Establish within each cooperative a basic reference library of relevant technical and administrative information (1395-1400).

3.5.2.2 Regional Level:

☆ Strengthen the staff and capabilities of the offices for cooperative development in each region, emphasizing the following:
- Provide technical assistance to cooperatives.
- Stimulate the formation of new cooperatives.
- Coordinate the actions and management of cooperatives at the regional level.
- Assist the management of regional-level cooperatives.

☆ Establish 20 field cooperative units, attached to the regional offices and responsible for assisting the development of cooperatives.

☆ With capital from participating cooperatives and from government subsidy, establish a regional cooperative in each region with the following responsibilities:
- Provision to participating cooperatives of agricultural equipment and supplies directly from importers or through the central supply and marketing cooperative (see below).
- Marketing of the production of participating cooperatives.

☆ Establish the regional cooperatives according to the following timetable:

- Southwest:	1396-97
- Northern:	1397-98
- Central and Western:	1398-99
- Eastern:	1399-1400

3.5.2.3 Central Level:

☆ Establish two central cooperatives to coordinate and assist the operations of the five regional cooperatives in the fields of supplies and marketing, and other cooperative services (1395-96).

☆ Strengthen the Cooperatives Department by increasing the number of employees and reorganizing into two distinct departments (1395-96):
- Cooperatives Orientation Department, responsible for the overall economic and social aspects of cooperatives development.
- Management Control and Accounting Department, responsible for the legal, financial, and operational aspects of the cooperatives.

☆ Establish a department for the training of the General Directorate's personnel and cooperative members (1395). Specific training programs in the period 1395-1400 will include the following:
- 5 courses for cooperative workers.
- 5 follow-up courses for cooperative workers.
- 5 regional seminars for cooperative members.

- 5 local training seminars for cooperative members.
- 2 conferences for Central Cooperative members (1395-96 and 1397-98).
- 10 training courses for staff of the General Directorate of Cooperatives.
- 39 scholarships for study overseas.

☆ Initiate a public information campaign to interest individuals and groups in the formation of cooperative units (1395-1400).

3.6 Community Development

3.6.1 Expand the number of community development centers (CDCs) emphasizing rural areas.

3.6.1.1 Undertake a study to finalize the location of proposed new CDCs (1395-96).

3.6.1.2 Establish and staff 17 new CDCs according to the following timetable:

	Existing 1394-95	*1395 -96*	*1396 -97*	*1397 -98*	*1398 -99*	*1399-1400*	*Total*
Rural CDCs	11	–	2	2	3	5	23
Urban CDCs	6	–	–	1	1	3	11
Total	17	–	2	3	4	8	34

3.6.1.3 Evaluate, in 1397-98, the need for three additional urban CDCs and implement accordingly.

3.6.2 Expand the number and scope of projects run by CDCs as shown in Table VI-6.

3.6.3 Improve the effectiveness of programs operated through the community development system.

3.6.3.1 Increase and improve training programs for both new and established personnel by practical training at the ad-Dirʾiyah Center. Arrange courses for CDC directors and assistant directors as well as for specialists in education and project implementation — a total of 209 males and 187 females in the period 1395-1400.

3.6.3.2 Increase the utilization of audio-visual and other modern techniques to intensify and extend the impact of community development programs: 16 fully qualified technicians will be added to the audio-visual staff, and 27 mobile demonstration units will be put into operation.

3.6.4 Increase effective coordination with other government agencies involved in community development.

3.6.4.1 Reorganize in 1395-96 the composition of the National Committee for Community Development to include the following:

Minister, Labor and Social Affairs (Chairman)
Deputy Minister, Labor and Social Affairs
Vice President, Central Planning Organization
Deputy Minister, Health

Deputy Minister, Agriculture and Water
Deputy Minister, Education
Director General, Community Development Department
Director General, ad-Dir'iyah Training Center
Director General, Planning and Research Department (Ministry of Labor and Social Affairs)
Director General, Technical Cooperation Agency
Director General, Preventive Medicine (Ministry of Health)
Director General, Cultural Affairs (Ministry of Education)
Director General, Extension Services (Ministry of Agriculture and Water).

Table VI-6
PROJECTS TO BE SPONSORED BY COMMUNITY DEVELOPMENT CENTERS, 1395-1400

Type	*Number*
Individual projects and programs	1,500
Establishment of classes in girls' homes	35
Establishment of centers for the education of mothers	40
Establishment of youth athletic clubs (with General Presidency for Youth Welfare)	33
Youth recreation campaigns	100
Inter-center cultural contests	113
Establishment of mother and child care clinics (with Ministry of Health)	33
Mobile health clinics (with Ministry of Health)	10
Public hygiene campaigns	350
Inoculation campaigns	166
Adult education classes	50
Literacy campaigns	80
Mobile cultural exhibits	10
Public exhibitions	35
Conference/recreation room construction	17
Establishment of female production groups	40
Product marketing exhibitions	17
Establishment of agricultural training centers	20
Distribution of bee-hives	1,000
Establishment of chicken farms	100
Establishment of livestock and chicken demonstration farms and plots	120
Establishment of kindergartens	50
Establishment of child day-care centers	20
Improvements for homes of low-income families	4,000

3.6.4.2 Appoint the General Directorate for Community Development as the permanent secretariat for the National Committee for Community Development (1395-96).

3.6.4.3 Arrange an annual conference for the employees of community development centers (1395-1400).

3.6.5 Increase public awareness of community development.
3.6.5.1 Formulate public media information messages for Kingdom-wide publicity throughout the plan period.
3.6.5.2 Increase local knowledge of community development programs with the assistance of local community leaders and through the excellence of community development activities.

3.7 Planning and Research
3.7.1 Increase the number of employees in the General Directorate for Planning and Research and reorganize into the following departments (1395-96):

- ☆ Planning Division
- ☆ Statistics and Research Division
- ☆ Organization and Coordination Division
- ☆ Evaluation and Follow-up Division
- ☆ Training Division
- ☆ Secretarial Division

Delegate responsibilities for the running of training programs and for the undertaking of applied research to the ad-Dirʾiyah center but retain the responsibility for planning in both these areas (1395-96).
3.7.2 Establish within each regional office a regional research section to analyze specific regional social problems (1395-96).
3.7.3 Through the ad-Dirʾiyah center and other organizations initiate (in 1395-96) a major program of both basic and applied social research according to the schedules shown in Table VI-7.
3.7.4 Improve statistical processing and recording by the procurement and operation of automated data processing equipment (1395-96).
3.7.5 Raise the technical level of planning personnel through the following training programs:

- ☆ Organize two training courses in planning (1395-96 and 1396-97).
- ☆ Award a total of six scholarships for the pursuit of higher studies overseas.

3.7.6 Expand the Ministry's library and documentation services (1395-1400).

3.8 Ad-Dirʾiyah Center for Training and Applied Research
3.8.1 Reorganize the ad-Dirʾiyah Center into two separate departments for training and research (1395-96).

Table VI-7
SOCIAL AFFAIRS RESEARCH PROGRAM, 1395-1400

	1395 -96	1396 -97	1397 -98	1398 -99	1399-1400
Basic Research					
Study of the Environment					
The transformation of rural society	—	—	—	—	—
Changes in nomadic herding and Bedouin life	—	—	—	—	—
Urbanization and slums	—	—		—	—
Cultural problems	—	—	—	—	—
The role of women in society		—	—		
Impact and needs of foreign workers		—	—	—	
Changing patterns of consumption		—	—	—	—
Studies on New Social Programs					
Preparatory study for establishment of registration system	—				
Computerization of the Social Security Administration	—	—			
Studies for location of new social institutions	—	—	—	—	—
Study of programming CDC activities	—	—			
Feasibility study of cooperatives	—	—	—	—	
Studies on the Functioning of Institutions					
Reorganization study of the Social Affairs Ministry	—	—	—		
Study on the functioning of benevolent societies	—	—	—		
Study on the functioning of cooperatives		—	—	—	
Studies of the Effects of Social Programs					
Life in social care institutions and its effects on the psychological development of recipients	—	—	—	—	—
Assessment of the effects of CDC activities	—	—			—
Social transfers and household budgets		—	—	—	
Establishment of a system of social indicators		—	—		
Applied Research					
Study on the effects of the Bedouins' and rural population's migration to Riyadh	—				
Study on the population's response to classes for illiteracy eradication					—
Completion of the study on the South Western Region	—	—	—	—	—
Evaluation study of cooperatives		—	—		
Evaluation study on the experimental vocational rehabilitation center of Riyadh				—	
Evaluation study on the role of Offices for Beggars Control					—
Study on juvenile delinquency and vagabondage and on the role of social institutions in coping with these problems		—			
Study on the population's attitude towards manual work	—				
Study on the rural population's attitude towards the cooperative movement and its effect on their stability			—		
Locational studies for CDCs	—	—	—	—	—
Study on training needs for the Deputy Ministry's personnel				—	

3.8.1.1 Establish and staff within the new research department four principal additional research sections:

- ☆ Socio-economic studies
- ☆ Sociology of values
- ☆ Sociology of organizations
- ☆ Psycho-sociology of persons in institutions.

3.8.1.2 Extend the current scope of the training department to include training of persons in the fields of:

- ☆ Community development
- ☆ Cooperatives
- ☆ Social welfare
- ☆ Women's activities.

3.8.2 Undertake, or participate in, the social research projects specified above in cooperation with the General Directorate for Planning and Research.

3.8.3 Increase the number of training programs held for CDC and other Ministry personnel as follows (1395-1400):

Subject	*No of courses*	*Total No. of trainees*
Community development personnel training	5	300
Assistant social workers:		
Female	3	90
Male	2	50
Literacy teachers	5	300
Rural handicraft specialists (female)	2	60
Community Development:		
Health workers	5	125
Agricultural extension workers	2	50
Cooperative specialists	5	200
Visual aids preparation	2	60
Community development program supervision	2	undefined
Research related to Social Security	3	120
Social planning	2	30
Local leaders development	15	450
Women's department social workers	2	40
Mother and child-care volunteers	3	90
Social institutions personnel	3	90
Orientation of new Ministry employees	2	60

3.9 Organization and Administration

3.9.1 Increase decentralization of the Social Affairs operations.

3.9.1.1 Upgrade the existing regional Social Affairs offices into Social Affairs directorates (1395-96) and delegate increased autonomy to them; these directorates will act as the regional headquarters for all programs operated by Social Affairs except those of the Women's Department.

3.9.1.2 Establish and staff new regional Social Affairs directorates in the Southwest (1395-96), Central (1396-97), and Northern (1397-98) regions.
3.9.2 Establish offices for women's activities in the Eastern (1395-96) Southwestern (1396-97), and Northern (1397-98) regions.
3.9.3 Increase the staff and widen the activities of the two existing offices for women's activities (1395-96).
3.9.4 Study in 1395-96 the Ministry's organization and the consolidation of the Social Security, Social Welfare and Rehabilitation departments; gradually implement the results during the period 1397-1400.
3.9.5 Evaluate placing the departments for Budgeting and Engineering under the Planning and Research Department (1395-96).
3.9.6 Construct a new office complex for the Social Affairs Department in Riyadh (1398-99).

4. Finance

Estimated financial requirements for Social Security and for Social Affairs as a whole are estimated separately below (SR millions):

4.1 Social Security

	Budgeted 1394-95	*1395 -96*	*1396 -97*	*1397 -98*	*1398 -99*	*1399- 1400*	*Plan Total*
Recurrent	463.7	939.5	988.1	2,914.6	2,951.9	2,984.6	10,778.6
Project	-	5.2	17.9	11.7	1.7	1.6	38.1
Total	463.7	944.7	1,006.0	2,926.3	2,953.6	2,986.2	10,816.7

4.2 Social Affairs

	Budgeted 1394-95	*1395 -96*	*1396 -97*	*1397 -98*	*1398 -99*	*1399- 1400*	*Plan Total*
Recurrent	46.5	74.0	88.1	109.6	126.5	141.5	539.7
Project	30.8	122.4	118.3	117.5	128.3	53.4	539.9
Total	77.3[a]	196.4	206.4	227.0	254.8	194.9	1,079.6

a Excludes General Bureau expenditures (recurrent) of SR 1.6 million.

C. SOCIAL INSURANCE

1. Present Conditions

1.1 The General Organization for Social Insurance (GOSI) began enforcement of the Social Insurance Law in Muharram 1393. The Social Insurance Law provides for the following types of protection for workers, regardless of nationality, sex, or age:

- ☆ Disability, old age, and death benefits (Annuities Branch).
- ☆ Occupational injuries and occupational diseases (Occupational Hazards Branch).
- ☆ Temporary disability due to sickness or maternity.
- ☆ Family grants in cases where the insured has several dependents.
- ☆ Unemployment compensations.
- ☆ Protection for the self-employed.

1.2 The Social Insurance Law is being enforced in a number of stages. To date the major application has been the Annuities and Occupational Hazards provisions. Commencing in 1393, the Annuities program expanded steadily so that, in the fiscal year 1394-95, coverage would include all workers in private establishments with 20 workers or more as well as workers subject to the labor law in public organizations and government agencies. Coverage under the Annuities program at the end of 1394 was over 199,400 persons employed in more than 770 private and public organizations. The Occupational Hazards program is being extended as rapidly as possible to cover, as a first phase, all those under the Annuities program.

1.3 The Social Insurance scheme operates on a contributory basis, that is, GOSI revenues comprise contributions from both employees and employers (although only the latter contribute to the Occupational Hazards program) as well as investment revenues and government subsidy. GOSI's annual revenues in 1394-95 are estimated at SR 240.5 million.

1.4 GOSI is administered by a Board of Directors responsible for policy and for supervising the implementation of the Social Insurance Law. The Directorate General, located in Riyadh, supervises regional offices in Riyadh, Jiddah, and Dammam as well as a branch office in Abha. As with other government organizations, GOSI experiences great difficulty in recruiting suitably qualified staff; only about 60 percent of the 311 approved cadre-level positions were filled at the end of 1394.

1.5 As a result of the manpower limitations, the GOSI concentrated on improving its efficiency in 1394-95. Steps taken toward this end include:

- ☆ Better availability and utilization of statistics.
- ☆ Improved training for administrative and other personnel.
- ☆ Planning for improved computer utilization.
- ☆ Analysis of work methods improvement.
- ☆ Improved coordination with other government agencies.
- ☆ Assessment of new building requirements.

2. Objectives And Policies

2.1 In the period 1395-1400, the primary objective of the General Organization for Social Insurance is to provide a comprehensive range of insurance programs for workers and their dependents, in accordance with the provisions of the Social Insurance Law.

2.1.1 As the first priority, coverage of the Annuities program will be completed for all workers in establishments employing five persons or more.

2.1.2 As the second priority, the Occupational Hazards program will be extended to include all workers covered by the Annuities program.

2.1.3 Before the end of the plan period, insurance programs will be developed to apply the remaining major provisions of the Social Insurance Law:

- ☆ Temporary disability due to sickness or maternity.
- ☆ Family grants for dependents of the insured.
- ☆ Unemployment compensation.
- ☆ Social insurance for the self-employed.

2.2 The second major aim during the plan period is to maintain GOSI, insofar as possible, on a financially self-sustaining basis without increasing the level of contributory payments.

2.2.1 A high level of internal operating efficiency will be developed.

2.2.2 A sound investment policy for GOSI reserves will be formulated and adopted.

2.2.3 GOSI operations will be coordinated with those of other government agencies to avoid duplication of payments, data storage, and claims verification.

3. Programs And Projects

3.1 Expand application of the Social Insurance Law.

3.1.1 Implement increased coverage of the Annuities and Occupational Hazards programs as shown in Table VI-8 to cover at least 250,000 employees by 1400.

3.1.2 By the end of the plan period, formulate a specific program for implementation of other provisions of the Social Insurance Law within the third plan period, or earlier if possible.

Table VI-8
SCHEDULED EXTENSIONS OF SOCIAL INSURANCE COVERAGE
1395–1400

Fiscal Year	*Stage*	*Insurance Branch*	*Approximate Number of Insured*	*Coverage*
Existing				
1394–95	1–6	Annuities	199,500	Workers in establishments with 20 or more workers and government workers subject to the labor law.
Planned				
1395–96	7	Occupational Hazards		Workers in establishments with 50 or more workers and government workers subject to the labor law.
1396–97	8	Occupational Hazards	203,490	Workers in establishments with 20 to 49 employees.
1397–98	9	Annuities and Occupational Hazards	226,950	Workers in establishments with 10 to 19 employees.
1399–1400	10	Annuities and Occupational Hazards	250,000	Workers in establishments with 5 to 9 employees.

3.2 Upgrade the operating efficiency of GOSI.

3.2.1 Install in 1396-97 a new and larger computer to meet GOSI's expanding data processing requirements as well as providing data processing on a rental basis for other agencies such as the Social Security Department of the Ministry of Labor and Social Affairs. (The entire system will be subjected to a study to be completed by the end of 1395-96.)

3.2.2 In conjunction with the computer requirements study, assess GOSI's information and statistical systems requirements, and begin the implementation of recommended improvements (1395-96).

3.2.3 Study improved Social Insurance registration methods and put on-line in the new computer in 1396-97.

3.2.4 Evaluate methods for further improving GOSI's work efficiency at both the national and branch levels, and implement immediately (1395-96).

3.2.5 Strengthen the Kingdom-wide Social Insurance network by establishing two branch offices in each year of the Plan (specific locations for these offices have yet to be finalized).

3.2.6 Construct four new regional offices, two each in 1396-97 and 1397-98.

3.3 Adopt a sound investment policy for the Organization's trust funds.
3.3.1 In conjunction with Ministry of Finance, SAMA, and other relevant government agencies, study alternative investment strategies open to GOSI (1395-97), adopt the selected strategy (1397-98), and review it on a continuing basis (1398-1400)
3.3.2 On the basis of actuarial studies, estimate and negotiate the required annual government subsidy for continued operation of GOSI (1397-98).
3.4 Improve manpower availability and skills at all levels of operation.
3.4.1 Review and evaluate current personnel policy in order to provide a specific development program for the Personnel Department (1395-96).
3.4.2 Establish a definitive organizational chart, including branch offices, together with a job description for each position (1395-96).
3.4.3 Use the computer system to reduce the ratio of clerical to technical personnel (1397-1400).
3.4.4 Increase the productivity of employees and develop long-term career satisfaction by introducing a comprehensive series of measures relating to training, promotional ladders, and other incentives.
3.4.5 Establish ten scholarships for senior Saudi personnel to obtain training overseas each year: five scholarships will be devoted to academic courses and five to practical training.
3.4.6 Increase training programs in the Kingdom, especially in technical and administrative fields and for branch office personnel; emphasize procedures for registration, revenue collection, and benefits payment.
3.4.7 Establish specialized training program for computer personnel (1395-96).
3.4.8 Ascertain means for attracting more university-trained personnel to employment in GOSI (1395-96).

4. Finance

The General Organization for Social Insurance will estimate any subsidy it may require on the basis of the actuarial studies.

D. YOUTH WELFARE

1. Present Conditions

1.1 In 1393, the department responsible for youth welfare became a directorate general within the Ministry of Labor and Social Affairs. In 1394, the General Presidency for Youth Welfare was established by Council of Ministers' Resolution No. 560 to carry out policy design, agency coordination, and planning functions under the Supreme Council for Youth Welfare.

1.2 During the first plan period, ten youth centers were to be established, one each in Riyadh, Jiddah, Dammam, Mecca, Medina, Tayif, Qasim, Qatif, Abha, and al-Hasa. Parts of the Riyadh and Dammam centers are usable, and work has started on the Jiddah center.

1.3 In spite of the lack of youth centers, serious work has been started to coordinate and expand on a national basis a wide variety of athletic activities.

1.3.1 There are 53 sports clubs officially registered in the Kingdom that qualify, under the Council of Ministers' Resolution No. 500, dated 29 Rabi I, 1394, to receive a variety of subsidies, including:

- ☆ SR 100,000 as a founding grant
- ☆ SR 10,000 for equipment
- ☆ SR 5,000 for maintenance
- ☆ SR 2,000-5,000 for specific events.

1.3.2 Nine national societies have been officially recognized for the following sports: football, basketball, volleyball, bicycling, handball, table tennis, swimming, weaponry, and track and field.

1.3.3 Saudi Arabia sent a track and field team to the Munich Olympic Games. In 1393-94, it participated in many other international events, such as football tournaments in Tunisia, Egypt, and Kuwait; swimming competitions in Egypt and Kuwait; track events in Morocco and Algeria; and a weaponry competition in Lebanon.

1.3.4 Within Saudi Arabia, area and national championships have been held for specific sports and for the sports clubs generally.

1.4 Cultural activities for youth within the Kingdom include acting, reading, and painting competitions; 774 lectures and 71 exhibitions have been held at the national, area, or club level; and knowledge-exchange trips have been organized for the youth of different areas.

1.5 Youths are being encouraged to invest their energy and talents in public service at the local level — for example, helping to eradicate illiteracy, repairing mosques, filling in swamps, and fencing land — and voluntary labor camps at Abha were organized in both 1392-93 and 1393-94.

1.6 The importance of developing youth leaders has been recognized in a specific item of the 1394-95 budget which provides for an Institute for Preparation of Youth Leaders, linked with the General Presidency in Riyadh.

2. Objectives and Policies

Eight general objectives for youth welfare have been formulated. In achieving these objectives, it will be the policy to ensure that services are comprehensive, integrated, and justly distributed; and that the services are in harmony both with the Islamic code for rearing youth and modern knowledge of handling youth.

2.1 Contribute to the bringing up of youth in a manner that balances the moral, mental, physical, health, psychological, and social aspects of their lives.

2.2 Organize the energies and creative capabilities of youth so that they will contribute positively to the nation's socio-economic development.

2.3 Support the family structure and strengthen its ties within the context of youth welfare.

2.4 Spread sporting and recreational activities to enhance the enjoyment of living.

2.5 Encourage young citizens to invest their free time in activities that improve their physical fitness, their skills and capabilities, and their capacity to defend their country.

2.6 Raise the standards of excellence in sports and other activities to international levels.

2.7 Develop the leadership needed to promote sports and recreational activities.

2.8 Assist the private sector to bear its responsibility for youth in that sector.

3. Programs and Projects

Activities form the "basic commodity" provided under the Supreme Council for Youth Welfare via the Directorate General. The major activity programs in which children and youths directly participate, and the projects planned for 1395-1400 are described first below. Subsequently the research and other support programs that are designed to expand and upgrade the activity programs are described, followed by the construction program.

3.1 Cultural Activities

3.1.1 Religion and Language

☆ Conduct lectures and forums, to expand youth's general knowledge in these

important fields. One seminar will be held annually in each district, and two at the national level.

- ☆ Establish literary competitions — both open and among the literature groups within clubs — to discover and encourage early literary talents. Competitions will be held annually in each district and at the national level.
- ☆ Hold Souk Ukaz (cultural fair) competitions beginning in 1396-97 and continuing on an annual basis.

3.1.2 Artistic Fields

- ☆ Continue to encourage the artistic hobby groups within clubs through competitions at the local level. One contest will be held in each district annually.
- ☆ Establish an Annual Festival of Acting, Music, and Folk Arts at the national level to raise the level of technical performance and encourage young artists in these fields.

3.1.3 Scientific Fields

- ☆ For children age 9 and over, establish model Science Clubs in 1396-97 (provided that supervisory leadership can be recruited and studies started during the first year of the Plan).
- ☆ Hold competitions among the Science Clubs, and an annual exhibition commencing in 1396-97.

3.1.4 To encourage all cultural activities among talented youth, conduct "cultural weeks" in different areas of the Kingdom to be recorded and broadcast by the mass media. Eleven such events will be staged during the plan period.

3.1.5 As a summit occasion, organize an Islamic World Youth Festival to be held at Riyadh or Mecca during the fourth year of the Plan; establish a festival committee in the first year and send out invitations to other Islamic nations in the second year.

3.2 Athletic Activities

3.2.1 Plan construction of club facilities for each of the 53 existing registered athletic clubs and construct where possible.

3.2.2 Establish and equip "children's gardens" in public parks or other areas where children of pre-school age can safely enjoy bodily exercise. Eleven such gardens will be built commencing in 1397-98.

3.2.3 Organize seven exhibition tours of foreign teams to demonstrate new games in different cities and regions, commencing in 1395-96.

3.2.4 Televise athletic competitions among the clubs and government and private sports groups in the different regions, to spread awareness of athletic activities, commencing in 1396-97.

3.2.5 For youths age 12 to 18, develop tests of physical fitness (1395-96) and award badges for successfully passing the tests, commencing in 1396-97.

3.2.6 Develop special programs in existing centers for the training of 2,900 young persons in various sports before the end of the Plan. The General Presidency will also provide coaching for 240 elected teams covering 12 different sports and will organize the appropriate area leagues and contests; 152 area championships will be held in the period 1395-1400.

3.2.7 Prepare national teams at the training centers, with the assistance of advisors in athletic medicine, physical therapy, and modern training methods (1395-1400).

3.2.8 Establish specific athletic curricula in certain intermediate schools for selected students who are outstanding in their chosen athletic fields, with a view to enrolling them in a specialized Institute to be established by the Ministry of Education in 1396-97. Expand this school to the secondary level in 1397-98.

3.2.9 Organize Kingdom-wide contests (138 in the period 1395-1400), with appropriate championship awards, in:

- ☆ Football
- ☆ Basketball
- ☆ Volleyball
- ☆ Handball
- ☆ Table tennis
- ☆ Track and field
- ☆ Bicycling
- ☆ Short- and long-distance swimming.

3.2.10 For youths under 18 in different types of schools or employment, hold a Sporting Festival every two years, beginning in 1397-98.

3.2.11 Continue or begin participation in international contests, such as the Olympic Games, World Cup football, and events organized by the Arab League, Arabian Gulf states, and other selected countries. The Kingdom will participate in 98 such international contests during 1395-1400.

3.3 Social Activities

3.3.1 Organize area celebrations of national occasions, in cooperation with religious and other scholars. At least one such celebration will take place in each area annually.

3.3.2 Beginning in 1395-96 hold at Riyadh an annual ceremony to honor youths from all parts of the Kingdom who have excelled in sports and other activities, and have shown leadership qualities. This project should lead to an annual "Youth Day" in the Kingdom.

3.3.3 Organize camp outings of various duration — from one day to one week or more — for youths of various ages, for those who have excelled in particular activities, for youths from other Islamic countries, and for the board members of the youth clubs. 100

local camps, and one for youths from Islamic countries will be held during the Plan.
3.3.4 Organize trips for Saudi youths to other parts of the Kingdom and to other countries; develop "youth embassy" exchange visits with friendly countries. 43 domestic and 14 international projects are planned.

3.4 Public Service and Work Camps

3.4.1 Establish a public service campaign to involve youths in programs of environmental clean-up, hygiene, traffic control, alphabetization, and first aid/Red Crescent Society programs: 11 programs will be implemented.
3.4.2 Expand the program of volunteer labor camps in selected areas for persons age 15-30, to carry out developmental and other socially useful local projects; 13 such camps will be held, beginning in 1395-96.
3.4.3 For trained youths 18 years and older with previous public service experience, organize three work camps designed to accomplish major public service projects of benefit to the Kingdom as a whole (annually, commencing 1397-98); in the fourth year of the Plan (1398-99), organize a work camp for youths of the Islamic world.

3.5 Support Programs

Several projects within the research and other central services of the General Presidency for Youth Welfare are planned for the 1395-1400 period, including the following:

3.5.1 Research

- ☆ In 1396-97 undertake a study of the use of free time by Saudi youths.
- ☆ In 1395-96, start a full-scale evaluation of all the existing services that provide or support youth activity in the Kingdom.
- ☆ In 1395-96, start developing the tests and evaluation scale for physical fitness, implementing the study first among general education students age 12 to 18.

3.5.2 Regulations

- ☆ Develop and issue regulations to govern the organization and work of clubs and other youth institutions, athletic training, committees of the Supreme Council for Youth Welfare, and relations among agencies concerned with youth (1395-97).
- ☆ Issue regulations relating to contests and to the award of badges and citations for athletic and other activities (1396-98).

3.5.3. Training

- ☆ Athletic activities — 65 trainers and 1,400 referees will undergo training or upgrading courses.

☆ Vocational and other activities — two-week training courses will be held for 1,140 activity leaders.

3.5.4 Library and Documentation

☆ In 1395-96, establish a special youth welfare library at the new GPYW premises in Riyadh, to provide both general reference books and special services to youth leaders and organizations.

☆ As a part of the library, establish a center for documentation concerning the SCYW and the GPYW, research studies, and youth welfare agencies in other countries; in 1397-98, make the documentation center a function independent of the youth welfare library.

3.5.5 Public Information and Conferences

☆ Issue a youth magazine, starting in 1395-96, and a weekly review of youth activities.

☆ Hold press conferences as newsworthy events occur, and as a means of distributing the weekly reviews (1395–1400).

☆ Issue a youth welfare guide as an easy-reference to all the Kingdom's relevant agencies and organizations, and an annual statistical report.

☆ Obtain more films and slides for both participants and leaders in athletic and other activities.

☆ Hold annual conferences for youth leaders and for the boards of directors of clubs and athletic societies; hold a special conference annually for the purpose of evaluating progress in implementing the youth welfare plan.

3.6 Construction

The General Presidency will undertake the construction program shown in Table VI-9.

4. Finance

The recurrent and project budgets of the General Presidency for Youth Welfare are summarized below (SR millions):

	Budgeted 1394–95	*1395 -96*	*1396 -97*	*1397 -98*	*1398 -99*	*1399- 1400*	*Total*
Recurrent	56.4	105.5	116.2	135.8	138.3	164.3	660.1
Project	86.5	465.3	490.0	413.0	315.5	215.5	1,899.3
Total	142.9	570.8	606.2	548.8	453.8	379.8	2,559.4

Table VI-9
YOUTH WELFARE CONSTRUCTION SCHEDULE, 1395 TO 1400

Project	*Number*	*Location*	*1395 -96*	*1396 -97*	*1397 -98*	*1398 -99*	*1399-1400*
1. International Sports Stadium	1[a]	Riyadh	—	—	—	—	—
2. Youth Welfare Centers:							
'A'	3[b]	Riyadh, Jiddah, Dammam	—				
'B'	3	Mecca, Medina, al-Khobar	—	—	—		
'C'	4	Hayil, Tayif, Qasim, al-Hasa	—	—	—		
3. Indoor Swimming Pools (within class 'A' centers)	3	Riyadh, Jiddah, Dammam	—	—			
4. Mineral Springs Pools	4	Qatif, al-Hasa, Jiddah, Dhahran	Study	—	—		
5. Gymnasia	3	Riyadh, Jiddah, Dammam	—	—			
6. Permanent Camps	9	Riyadh, Jiddah, Dammam, Abha, Tayif, Mecca, Medina, Qasim, al-Maja	—	—			
7. Youth Hostels	7	Riyadh, Jiddah, Dammam, Abha, Mecca, Medina, Tayif	—	—			
8. Athletic Clubs[c]	53		—	—	—	—	—
Class 'A'	18						
Class 'B'	7						
Class undetermined	28						

a Completion after 1400.
b Already under construction.
c Study and planning; construction if possible.

CONTINUED

Table VI-9 (concluded)

Project	*Number*	*Location*	*1395 -96*	*1396 -97*	*1397 -98*	*1398 -99*	*1399 -1400*
9. GPYW Premises	1	Riyadh	———				
10. Youth Club Recreation Areas	14	a	———	———	———	———	
11. District Offices	17	a	———	———	———	———	
12. Olympic Committee and	1	Riyadh	———				
Sports Association Offices	1	Riyadh	———				
13. Institute for Youth Leaders Training	1	Riyadh	———				
14. Children's Playgrounds	11	a		———	———	———	———

a Located in various cities and towns.

E. BEDOUIN NOMADS

1. Present Conditions

1.1 The Bedouin nomads comprise an estimated 10 percent of the Kingdom's population and are virtually the only users of about 90 percent of the country's land area. The nomadic Bedouin graze sheep, goats, and camels extensively over this vast area which has practically no other economic use. Their distribution around the Kingdom is as follows:

Region	*Number*	*Percent of Regional Population*
North	263,000	48.2
Central	152,000	9.4
Southern	92,000	5.5
West	71,000	4.2
East	57,000	8.4
Total	635,000	

1.2 The life and economy of the Bedouin have the following characteristics:

- ☆ Low per capita income in comparison to the national average.
- ☆ Heavy reliance on raising livestock as their basic source of income while producing the major part of domestic meat supplies.
- ☆ Almost total dependence on clement weather for the survival of flocks and herds.
- ☆ Rapidly deteriorating range lands in most areas due largely to overgrazing.
- ☆ Lack of immediate access to most social, educational, and other services.
- ☆ Significant migration to urban areas resulting in an estimated net annual decrease of 2 percent per year in the nomadic population.

1.3 The Bedouin have a complex and highly developed social, economic, and legal system that has adapted to change over many hundreds of years. Nevertheless, the pace of change in the rest of the Kingdom has recently been so fast that the economic and social gap between the Bedouin and the remainder of the population is widening; consequently specific programs, based on realistic appraisal of the needs and changing social and economic role of the Bedouin, are required to improve the life of this segment of the population.

1.4 At the present time financial assistance is extended to the tribes in times of hardships by the Bedouin Affairs Office in the Royal Bureau. The programs for agriculture, health, education, and social services in the first development plan were intended to include the nomadic Bedouins, but no specific programs for them were planned.

2. Objectives and Policies

The basic goal of the Development Plan 1395 relative to the Bedouin nomads is to formulate and implement a series of programs specifically oriented toward improving their economic and social well-being. Six policies have been formulated to guide this development, as noted below.

2.1 The Bedouin programs will have an economic rather than a welfare basis, even though government investment and support may be needed in the early stages.

2.2 The programs will be adapted and operated in accord with the special needs and situation of the Bedouin.

2.3 A new unit in the Ministry of the Interior will provide appropriate administrative machinery exclusively concerned with all aspects of Bedouin development policy and programs, securing the support and cooperation of the tribal leaders.

2.4 The work of the new unit for Bedouin development will be coordinated with that of specialized agencies directly responsible for implementing relevant projects.

2.5 Through the new unit research necessary for successful implementation and acceptance of Bedouin programs will be undertaken.

2.6 Special care will be taken to familiarize the Bedouin, and especially their leaders, with the programs available for their advancement, thereby obtaining the cooperation required from both individuals and tribes.

3. Programs and Projects

3.1 Administration

3.1.1 At the beginning of the plan period, establish a unit for Bedouin Programs within the Ministry of Interior, and entrust to this unit responsibility for ensuring realization of the government's policy for economic and social development of the Bedouin nomads. As the policy is realized, this unit should be phased out.

3.1.2 Also near the beginning of the plan period, establish a research program within the unit for Bedouin Programs to collect all available data with relevance to Bedouin development and to organize and initiate necessary new research. A priority research program should include study of the basic economics of the Bedouin system and its integration with the national economy.

3.1.3 Within the first year of the plan period, prepare in cooperation with other government agencies, specific coordinated projects for implementation in the period 1396-1400.

3.1.4 Review existing legislation which may relate to the implementation of new Bedouin programs and submit, where necessary, draft legislation to the Council of Ministers for promulgation.

3.1.5 Train competent Bedouins to fill central roles in the new unit as soon as possible.

3.1.6 For the third year of the Plan, organize an international conference on the economic and social development of nomadic populations.

3.2 Special Programs

3.2.1 Agriculture

Within the first year of the Plan, formulate a program for Bedouin agricultural projects to be undertaken in the period 1396-1400. Priority projects will include:

- ☆ Formulation of a National Rangelands Code for the regulation of range use, renovation of the range, and grazing rights.
- ☆ Specific projects for range management, improvement, renovation, and grazing control with emphasis on the Northern and Western regions.
- ☆ Specific projects for livestock improvement, animal health protection, and veterinary assistance in areas with a population heavily dependent on livestock.
- ☆ Development of livestock-fattening units on irrigated lands in association with range land, for the purpose of reducing the current pressures on range land and thus maintaining — and possibly increasing — animal production.
- ☆ Encouragement of the formation of production and marketing cooperatives.
- ☆ In cooperation with the High Committee for Village Development, analyses of the community requirements of agricultural projects.
- ☆ Introduction of substitute fuels to replace the woody plants used by Bedouins as fuel, and whose use is contributing to the deterioration of the range land.

3.2.2 Health

3.2.2.1 Investigate means to include the Bedouin in the Kingdom's increasing health services. Priority projects will include:

- ☆ Health centers for the developing centers of forage production and the summer concentrations of nomadic Bedouin.
- ☆ Mobile hospitals and clinics for areas without concentrations of population.

3.2.2.2 Organize classes in hygiene and nutrition for Bedouin women.

3.2.3 Education

3.2.3.1 Investigate means to provide schooling for Bedouin children. Possibilities include:

- ☆ Boarding schools at locations where Bedouin tribes summer or concentrate their marketing activities.
- ☆ Radio programs reinforced by occasional visits of teachers and summer programs in specified locations.

3.2.3.2 Initiate literacy programs for adult Bedouin.
3.2.3.3 For the above purposes, organize educational caravans in conjuction with the ministries concerned.
3.2.4 Social Affairs
3.2.4.1 Investigate means to ensure that Bedouin have access to all social and welfare programs for which they are eligible.
3.2.4.2 Organize Bedouin women to design and produce traditional handicrafts. Study the desirability of establishing a centralized or cooperative organization for the mutual teaching and marketing of such handicrafts.

3.3 Information
3.3.1 Prepare and disseminate, through the mass media, programs in Bedouin dialects to familiarize the Bedouin with ideas that will help them play an active role in the Government's efforts to assist them.
3.3.2 Prepare and disseminate, through the mass media, regular programs on matters relating directly to the Bedouin economy, including information on pasture conditions and lamb prices.

4. Finance

When the unit for Bedouin Programs is established, estimates of its financial requirements will be developed.

F. JUDICIAL SYSTEM

1. Present Conditions

1.1 Saudi Arabia is almost the only country, among Arab and Islamic states, that bases its government on the Sharia (Islamic jurisprudence). This has distinguished Saudi Arabia internationally and assured security, prosperity, and stability domestically thereby attracting attention, esteem, and respect.

1.2 The Ministry of Justice administers the Sharia system in all disputes relating to citizens and residents of the Kingdom and in so doing demonstrates its soundness and comprehensiveness in dispensing justice.

1.3 The rising population, economic and social development, and increasing numbers of foreign workers have together resulted in a rise in the number of judicial disputes. Cases heard increased from 91,203 in 1389 to 99,632 in 1392. This growth calls for strengthening the judicial system both quantitatively and qualitatively so that justice can be administered promptly with no loss of dignity or respect.

1.4 During the first development plan, the judicial system was strengthened by increasing the number of courts from 207 to 241, of judges from 321 to 464, and of notaries from 33 to 51. These increases were not matched by corresponding increases in supporting staff.

2. Objectives and Policies

2.1 The objective of the plan for the judicial system is to strengthen it both quantitatively and qualitatively to enable it to administer justice promptly and in an atmosphere of dignity and respect. Policies to this end are stated below.

2.1.1 Increase the number of courts and offices in accordance with criteria of need, including population of areas served and courts already serving them.

2.1.2 Increase and up-grade staff.

2.1.3 Improve administration.

2.1.4 Provide new buildings.

3. Programs and Projects

3.1 New Courts and Offices

3.1.1 Establish a Court of Appeal in the Eastern Region (1397-98).

3.1.2 Strengthen the Appeal Courts in Riyadh and Mecca.

3.1.3 Establish ten new ordinary courts each year in accordance with criteria of need, including population of the area and courts already serving it.
3.1.4 Establish five mobile courts in each of the first three years of the Plan.
3.1.5 Establish Notary Public Offices in Mecca, Jiddah, Riyadh, Medina and Dammam (1395-96).
3.1.6 Establish 60 new Notary Public Offices in other towns (12 each year).
3.1.7 Establish 2 Treasury Offices at the major courts, 14 at the medium courts, and 177 at the small courts.
3.1.8 Establish 13 units of experts to assist in estimating damages and fracture indemnities.
3.1.9 Establish 18 follow-up units for major courts in each of the first two years of the Plan, and 21 for medium courts in each of the next three years to expedite settlement of court transactions.
3.1.10 Expand the central legal reference library at the Ministry and establish 17 legal reference libraries for appeal and major courts, and 14 for medium courts.

3.2 Staff Strengthening And Upgrading
3.2.1 Provide staffing for the above new courts and offices.
3.2.2 Strengthen staffing of existing courts and offices.
3.2.3 Formulate and implement training programs (1395-96).
3.2.4 Establish a training center.
3.2.5 Publish a judiciary periodical to keep judges informed of the rulings and decisions of the Supreme Judiciary Council.

3.3 Administrative Improvement
3.3.1 Establish 13 branches of the Ministry at selected locations.
3.3.2 Study and introduce modern methods of record keeping and administration.

3.4 Buildings
Construct 10 new court buildings each year.

4. Finance
Financial requirements for the Ministry of Justice for the period of the Plan are estimated as follows (SR millions):

	Budgeted 1394-95	*1395 -96*	*1396 -97*	*1397 -98*	*1398 -99*	*1399-1400*	*Plan Total*
Recurrent	83.9	152.9	183.8	217.6	272.3	244.7	1,071.3
Project	55.0	90.0	34.7	24.0	21.0	21.0	190.7
Total	138.9	242.9	218.5	241.6	293.3	265.7	1,262.0

VII. PHYSICAL INFRASTRUCTURE DEVELOPMENT

VII. Physical Infrastructure Development

To achieve the social and economic objectives of the Plan, it is necessary, at the same time to develop the physical infrastructure of the Kingdom. This chapter includes plans for developing the international and inter-city transportation networks to accommodate projected increases in passenger and goods traffic, and for bringing the telecommunications and postal services to a level capable of meeting future demands.

It also presents plans for developing municipalities throughout the country into healthy and attractive communities, and for expanding the construction of standard or better housing to accommodate their growing populations.

The chapter concludes with setting out requirements for planning the physical infrastructure developments necessary to accommodate the increasing number of pilgrims who make the Hajj each year to the holy city of Mecca and visit the holy city of Medina.

A. TRANSPORTATION

VII.A.1 ROADS

1. Present Conditions

1.1 There were 8,438 kilometers of paved roads in 1390. During the first plan period, 3,221 kilometers of new roads were completed and 908 kilometers of existing roads reconstructed. This total of 4,129 kilometers represents 79 percent of the first plan's target. Figure VII-1 shows the present extent of the main road network.

1.2 The first plan called for the construction of 5,212 kilometers; actual construction totaled 4,129 kilometers.

1.3 A number of factors contributed to the shortfall in construction and an increase in costs during the period 1390-95. Among the problems encountered were the following:

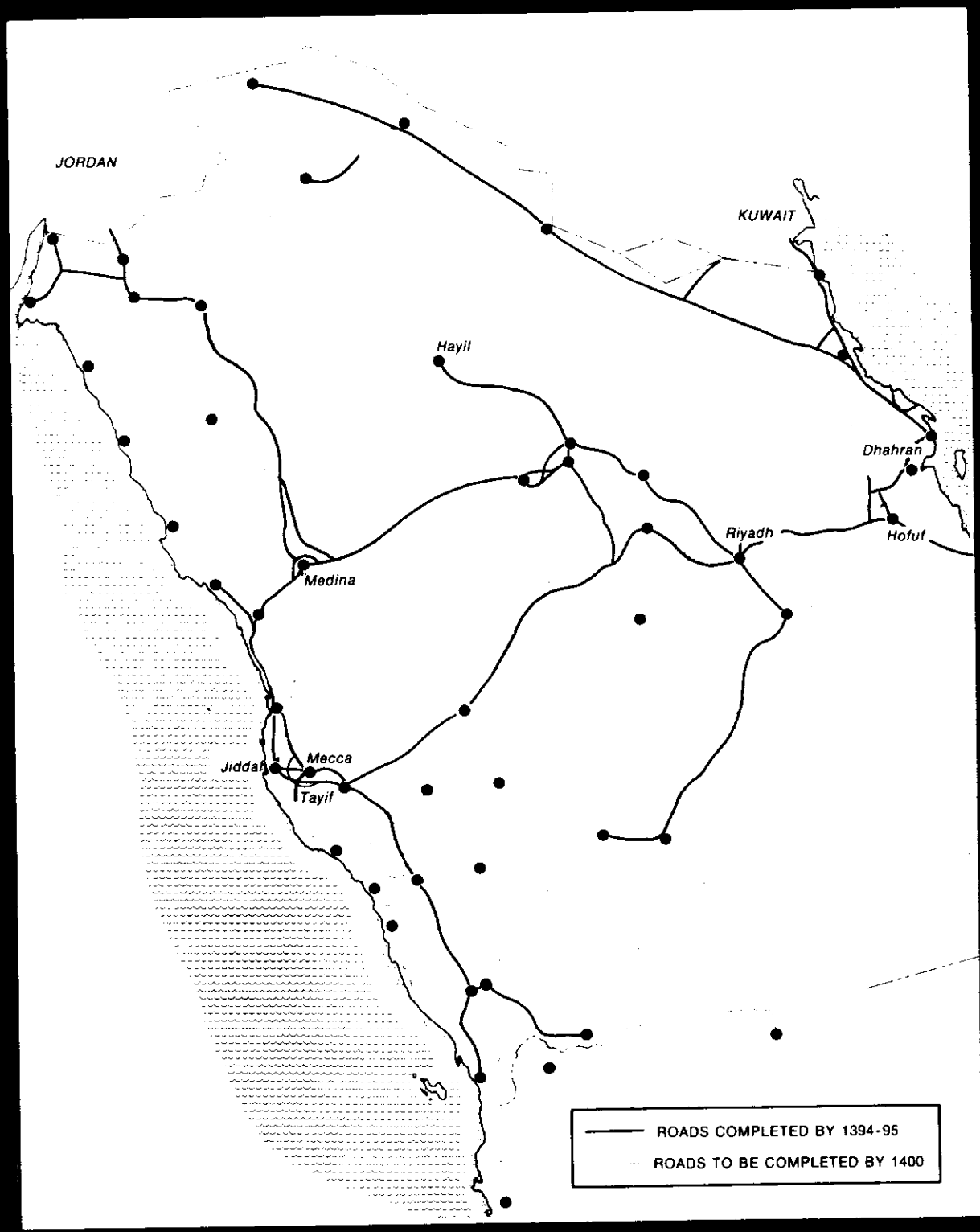
- ☆ Delays occurred between budgeting and actual start of work.
- ☆ Many types of essential services, materials, and equipment increased in cost.
- ☆ A general lack of construction manpower, materials, equipment, and spare parts — or delays in acquiring the manpower and supplies.

1.4 A maintenance program for paved roads was instituted and covered 7,904 kilometers of roads by 1395, compared with a target of 8,260 kilometers.

1.5 4,338 kilometers of rural roads were opened during the first plan period, exceeding planning targets. Twenty new mechanized construction teams were added to the force, making a total of 37 teams. There are now 7,825 kilometers of rural roads providing access to 3,225 villages.

1.6 During the first plan period the total number of employees of the Under Ministry of Communications for Roads and Ports — the agency responsible for the design, construction, and maintenance of all roads within the Kingdom — increased from 1,530 to only 1,553, leaving 465 positions unfilled.

1.7 While traffic in recent years has increased by about 12 percent annually, growth rates of 15 percent and more are anticipated during the plan period. The number of motor vehicles is expected to increase from 200,000 to more than 500,000 during the period 1395-1400. Although most non-urban roads have ample capacity, constant


JORDAN
KUWAIT
Hayil
Dhahran
Riyadh
Hofuf
Medina
Mecca
Jiddah
Tayif
ROADS COMPLETED BY 1394-95
ROADS TO BE COMPLETED BY 1400

monitoring of traffic will be necessary to see where additional capacity is needed in the future. Several of the road links included in this Plan will serve as alternatives to some of the most-used roads of the Kingdom.

2. Objectives and Policies

The primary goal for the Plan is to complete the main road network. The dotted lines on the map show the major roads planned for the period. Of these, the links connecting the Southwest Region with the Central Region, the completion of the coastal road between Yanbu' and Aqaba, and the roads between Mecca and Darb and inland through the foothills area of the Southwest Region will all connect large areas still without major road links. Other links will improve road connections with the neighboring countries of Jordan, Syria, Yemen, and Kuwait. The main objectives and policies of the second Plan can be summarized as follows:

2.1 Facilitate international communications and commerce by building all-weather roads to link the Kingdom's road network with neighboring countries.

2.2 Facilitate agricultural, mineral, and industrial development of the Kingdom, and help the social services to develop by completing the main and secondary road programs, expanding the rural roads program, and maintaining close cooperation with the appropriate government agencies.

2.3 Improve the roads system by:

- ☆ Advising appropriate agencies of constraints to construction and maintenance activities, and initiating action to eliminate these constraints.
- ☆ Expanding the road maintenance program.
- ☆ Developing an intensive recruitment and training program.

2.4 Monitor all aspects of road traffic development to improve road safety and to ensure a healthy road transport industry capable of accommodating the Kingdom's growth.

3. Programs and Projects

3.1 Studies and Design

3.1.1 Complete study and design for 5,704 kilometers of main roads (1395-1400).

3.1.2 Complete study and design for 7,000 kilometers of secondary and tertiary bitumen-surface roads (1395-1400).

3.1.3 Complete a study to develop and improve the tertiary earth-surface roads program, including 10,000 kilometers of new roads (1395-1400).

3.1.4 Review and evaluate the recommendations of the Saudi Arabia National Transport Survey (SANTS), and implement the recommendations where feasible.

3.2 Construction

3.2.1 Complete construction of 13,066 kilometers of main, secondary, and paved feeder roads (1395-1400). The number of kilometers of road to be constructed each year is:

1395-96:	3,057
1396-97:	2,925
1397-98:	2,752
1398-99:	2,440
1399-1400:	1,892

Table VII-1 at the end of this section gives details of these roads.

3.2.2 Construct 10,250 kilometers of earth-surface rural roads. The number of kilometers of road to be constructed in each year of the plan period is:

1395-96:	1,750
1396-97:	1,900
1397-98:	2,050
1398-99:	2,200
1399-1400:	2,350

3.3 Maintenance

3.3.1 Continue and expand the maintenance program for all kinds of paved roads, as follows (kilometers):

1395-96:	8,149
1396-97:	9,149
1397-98:	11,379
1398-99:	14,262
1399-1400:	16,791

3.3.2 Add 15 new teams to construct and maintain rural earth roads, bringing the total to 52 fully-equipped teams (1395-1400).

3.4 Equipment

3.4.1 Establish a program to provide adequate equipment, including replacements, for the rural-road teams (1395-1400).

3.4.2 Provide additional surveying equipment as required (1395-1400).

3.4.3 Provide required equipment to expand the road materials testing laboratory already established (1395-1400).

3.5 Organization, Information, And Safety

3.5.1 Establish institutional procedures to alleviate shortages of materials, manpower, and equipment.

3.5.2 Establish a division to maintain a data bank and undertake road research (1395-96).

3.5.3 Classify roads as primary, secondary, or tertiary, and implement a road numbering system accordingly (1395-96).
3.5.4 Modify road design standards as recommended by SANTS (1395-96).
3.5.5 Establish a program of continuous traffic counts (1395-96).
3.5.6 Adopt improved safety measures (1395-96).

3.6 Recruitment And Training

3.6.1 Establish a recruitment program to provide the quality and quantity of manpower required. Use contract expatriate personnel only after trying all ways to obtain Saudi nationals (1395-96).
3.6.2 Establish training programs for maintenance technicians and operators of heavy equipment, and for technical and administrative personnel (1395-96). The following employees will receive training during the second plan period:

Mechanics	66
Assistant mechanics	37
Drivers	284
Heavy equipment operators	261
Winch operators	75
Crane operators	44
Store-keepers	11
Total	778

3.6.3 Establish a division for technical and administrative training (1395-96).

4. Finance

The Plan calls for expenditures of about SR 14,000 million. Of these the largest item is actual road construction, accounting for nearly SR 10,000 million or an average of SR750,000 per kilometer. As the road networkis expanded the maintenance expenditures increase proportionally. Maintenance costs are estimated at SR 2,288 million for the period, corresponding to an average of about SR 38,000 per kilometer per annum. Nearly 80 percent of this amount will go toward protective or preventive maintenance (including resurfacing). Below are summarized the estimated financial requirements of the roads sector (SR millions):

	Budgeted 1394-95[a]	*1395 -96*	*1396 -97*	*1397 -98*	*1398 -99*	*1399-- 1400*	*Plan Total*
Recurrent	107.5	425.5	492.7	628.8	774.1	908.8	3,229.9
Project	3,275.1	2,516.7	2,599.0	2,291.1	1,923.0	1,522.3	10,852.1
Total	3,382.6	2,942.2	3,091.7	2,919.9	2,697.1	2,431.1	14,082.0

a The 1394-95 figures include Ports.

Table VII-1
ROADS TO BE COMPLETED DURING PLAN PERIOD, BY YEAR [a]

Fiscal Year 1395-96	*Length Kilometers*
Atawila-Wadi Walaf	98
Mecca-Hawiyah	100
Turaif-Jordan border	182
ʾArʾar-Skaka	118
Muzahimiyah-Quwayeyah	127
Amlaj-al-Wajh, Section I	85
Yanbuʾ al-Bahr-Yanbuʾ an-Nakhl	78
Tahama Mountains, Phase I	25
Jaizan-Abuʾ Arish-The Dam	49
ar-Rass-Dakhna	62
al-Bijadiyah-Ameriya	62
al-Qarah-round al-Oyoun	42
ad-Dawadimi-Arja-Masadah	51
Buraydah-Tarfiyah	34
Rughba-Ruwayebah	51
Luzan-al-Thameriyah- al-Ameriyah	39
Doredhiyah-Masakh-Seeh	44
Eneiza-Awshaziyah	38
Jubail-Tofeih	44
Zumayqah-Athar-Khafs	35
Dammam-College of Petroleum	24
Roads East of Jiddah Airport	42
Abha-Quraʾa	44
Abha-Khamis Mushayt	25
Asfan-Qaraʾa	30
Sabti-Osailah	34
Nuayriyah-al Sarrar	78
Orayarah-Jawdah	60
Qasb-Dahina	46
Albeer-Sadig	20
Reaf-Haqu	46
Banban-Sadi	14
Ghat-Abi Salabekh	30
Madraj-Arjaʾa	14
Karina-Malham	16
Rowaygheb Road	37
Salasel-Abqaiq	31
Soula-al Madiek	14
Fiscal Year 1396-97	
Ethnain-Shaar	85
Shaar-Wadi Wolf	89
Akabet-Dalaʾa	29
Darb-Shuqayq-Mahayel	140
Yanbuʾ -Amlaj	142

a Major links only. Various minor links omitted.

CONTINUED

Table VII-1 (continued)

Fiscal Year 1396-97 (continued)	*Kilometers*
al-Hanakiyah-Hayil	319
Khaibar-Ula-Madaen Salih	185
Ranyah-Kharma	143
Kharma-Hijaz road	73
ar-Ruq' i-Hamatiyat	95
Najran-Sharoura, Phase 1	97
Ramah-Khurais road	100
' al-Artwiyah-az-Zilfi	66
Turabah-Aburaka	76
Amlaj-Wajh, Section II	85
' Udhailiyah-Abqaiq	116
Bada' a-Duba, Section I	72
Orayja-Muzahamiyah	40
Abqaiq-Dammam	75
Hajj Roads, Phase III	65
S abya-Ayabi	72
Sabya-Abu 'Arish and links	78
Mahd Al Thahab-Suwairaqiah	61
al-Khobar-al-Aziziyah	20
Hofuf-Aqir	50
Sarar-Hanidh	69
Thadeq-Thuwaydej-Asafir	34
Khushaib-al-Bado	37
al-Birk	45
Khays-Rowaydah-Amar	32
Hanidh-Orayarah	80
Hazna-Baljarshi	25
Seeh-Fursha in al-Aflaj	38
Dammam-Ras Tanura	20
Fiscal Year 1397-98	
Hafar al-Batin-al-Artawiyah, Section I	100
al-Jawf-Kulayba, Sections I and II	200
Mecca-al-Lith, Sections I and II	190
al-Lith-Mudayleef	80
al-Artawiyah-al-Majma ' ah	100
Quwayiah-Halban	117
Jaizan-Samta-Mawsem	109
al- 'Ulayyah-Bishah. Section I	68
Tayif-Bani Saad. Section I	90
al-Khamasin-Tathlith, Section I	100
Hayil-Aklat Sakour, Section I	100
al-Kharj-Harad, Section I	100
Mahayel-Majarda, Section I	81
Dammam-Nu ' ayriyah	215
Hajj Roads, Phase IV	100
Tarfiyah-Quba	145
Bada'a -Duba, Section II	74
al-'Ulayyah-Bishah, Section II	80
Khamis Mushayt-Tathlith, Section I	110

CONTINUED

Table VII-1 (concluded)

Fiscal Year 1397-98 (continued)	*Kilometers*
as-Sulayyil-Najran, Sections I and IV	190
Mudaylef-Majarda, Section I	80
Najran-Shourour, Section II	100
Fiscal Year 1398-99	
Hafar al-Batin-al-Atarwiyah, Section II	130
Wejd-Bier Jiddah	107
Hayil-Uqlat as-Sugur, Section II	112
Halban-Zalim, Section I	125
Mudailaif-al-Qunfudhah	65
Wejd-Duba, Section II	75
al-Kharj-Harad, Section II	115
Harad-Odeiliya	120
Mudailaif-Majarda, Section II	80
al-Jawf-Qulaiba, Section II	76
al-Khamasin-Tathlith, Section II	90
Khamis Mushayt-Tathlith, Section II	100
Jaizan-Hodeida, Section II	100
Tayif-Bani Sa ʾ ad, Section IV	75
al-Jawf-Tabarjal	120
Khamis Aza-Mudaad	168
Hamatiyat-Zargani	160
Jiddah-Mecca	75
Bishah-Jeefa	37
Bishah-Junianah	48
Mahayil-Turaif 54/A	75
Tapline Road, Section 8	100
as-Sulayyil-Najran, Sections II and III	180
Ma ʾ akela-Tapline	120
Tapline-Zurgani	60
Fiscal Year 1399-1400	
Bier Jiddah-Ula	100
Wejd-Duba, Section I	75
al-Qunfudhah-Kiyah	80
Kiyah-Shaqayq	143
Halban-Zalim, Section II	128
Hawaiyah-Ohad Mizab	103
Tathlith-Bishah	137
Zharan South-Sa ʾ ada	90
Jaizan-Hodeida, Section III	90
Najran-Sharourah, Section III	100
Khulais-Medina, Sections I and II	260
Bishah-Ranya	140
Hayil-Jubbah	105
Hayil-Rafha, Sections I and III	220

VII.A.2. PORTS

1. Present Conditions

1.1 The major ports of Jiddah and Dammam are the main entry points to the Kingdom for the capital, intermediate, and consumer goods that must be imported in increasing quantities to support the development of the economy. The handling capabilities of both of these ports were often exceeded during recent years to such an extent that ship-waiting periods and penalty freight rates became excessive, development projects were delayed, and supplies of consumer goods were late in reaching markets.

1.2 During the first plan the major ports were expanded. Jiddah now has ten new and two old berths; seven additional berths have been approved. Dammam has seven new berths, two old, and seven under construction. Yanbuʾ has two berths and Jaizan has the equivalent of one standard berth. Excluding oil products, cargo imported through Jiddah in 1393 was 1.2 million tons and through Dammam also 1.2 million tons.

1.3 A feasibility study was completed for the five small Red Sea ports at Duba, al-Wajh, Amlaj, al-Lith and al-Qunfudhah. Minor construction work and repairs were carried out at these ports and at Jubail on the Arabian Gulf during the first plan period.

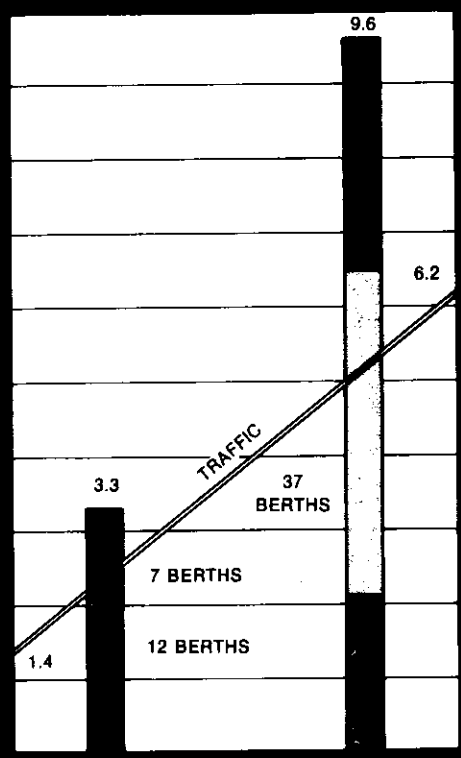
1.4 Total imports by sea amounted to approximately 3 million tons in 1392-93 (1973 A.D.). Of these, 1.1 million tons were livestock and foodstuff; 0.65 million tons construction materials, cement, and iron bars; 0.6 million tons consumer products; and the rest were various industrial products including machinery, pipes, and motor vehicles.

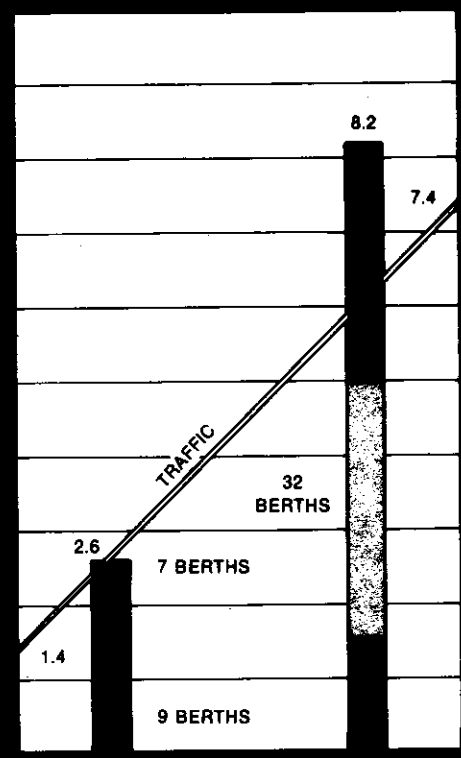
1.5 Exports by sea, excluding petroleum products, were negligible, totalling as little as 100,000 tons annually, mainly fertilizers.

1.6 The large increase in economic activity during the second Plan will necessitate an equally large increase in imports. By 1400, over 13 million tons of general cargo (exclusive of ores) are expected to be imported annually. The implementation of much of the second Plan depends on the ability of the ports to cope with this large inflow of goods. If they cannot, severe disruptions in the implementation schedule for the Plan as a whole must be anticipated.

2. Objectives and policies

2.1 The main objective for port development is to provide capacity, facilities, and organization at the ports of Jiddah and Dammam which will be more than adequate to handle the rapidly increasing volume of imports required to support the development of the economy. To meet this objective, not only will more berths have to be constructed but the average annual cargo handled per berth increased — by further mechanization and use of pallets and containers — as illustrated in Figure VII-2. Also required is the construction of specialized industrial ports to serve the industrial complexes at Jubail and Yanbuʾ and additional berths at Jaizan.


9.6
6.2
TRAFFIC
3.3
37
BERTHS
7 BERTHS
12 BERTHS
1.4


8.2
7.4
TRAFFIC
32
BERTHS
2.6
7 BERTHS
1.4
9 BERTHS

2.2 A second objective is to support regional development by providing port facilities for small boats and fishing at the lesser ports shown in Figure VII-3.

3. Programs and Projects

3.1 Jiddah

3.1.1 Design and Construction:

- ☆ Improve the entry-exit channel and install marine-guidance devices to permit 24-hour utilization (1395-96).
- ☆ Design and construct 20 berths — two as replacements — including one for "roll-on/roll-off" cargo (1396-1400).
- ☆ Design and construct dry dock facilities (1396-1400).

3.1.2 Equipment:

- ☆ Purchase and operate a self-propelled floating crane with 150-ton capacity (1395-97).
- ☆ Purchase and operate an electric crane with a 40-70 ton capacity for handling "containers" (1398-1400).

3.1.3 Administration and Organization:

Complete a study of port administration and organization to recommend improvements for increasing efficiency, and implement the recommendations (1395-97).

3.1.4 Training:

Develop and implement training programs for port personnel (1395-1400).

3.1.5 Review and evaluate the Saudi Arabia National Transport Survey (SANTS), and implement recommendations where feasible.

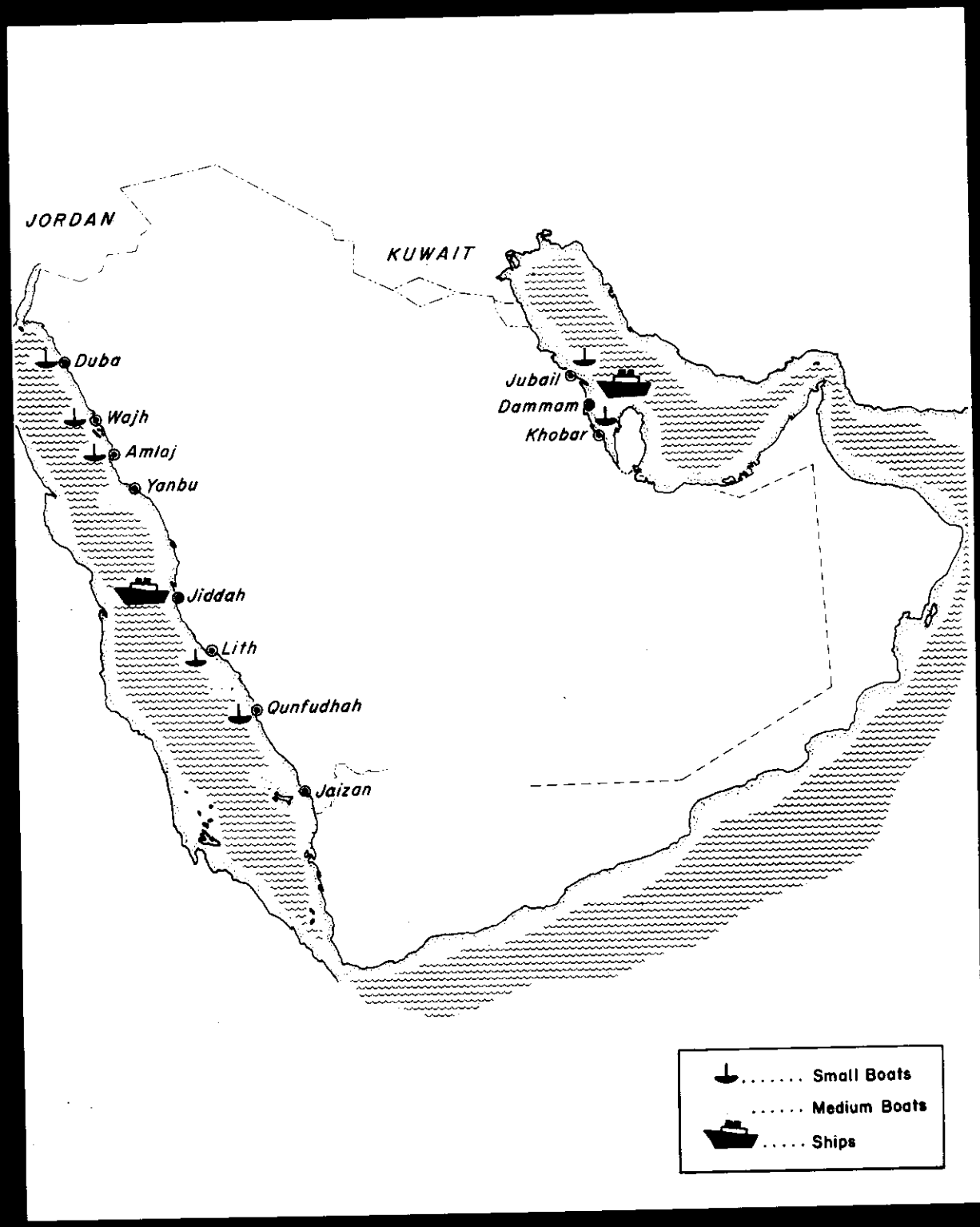
3.2 Dammam

3.2.1 Design and Construction:

- ☆ Improve the entry-exit channel and install marine-guidance devices (1395-97).
- ☆ Design and construct 16 berths with requisite facilities.
- ☆ Design and provide an area adjacent to the port for all customs, storage, operations, and other purposes.
- ☆ Design and construct facilities for supplying fuel to ships.

3.2.2 Equipment:

- ☆ Purchase and operate container-handling equipment (1397-98).
- ☆ Purchase and operate a heavy-duty self-propelled floating crane and other equipment (1395-98).


JORDAN
KUWAIT
Duba
Wajh
Amlaj
Yanbu
Jiddah
Lith
Qunfudhah
Jaizan
Jubail
Dammam
Khobar
Small Boats
Medium Boats
Ships

3.2.3 Administration and Organization:

- ☆ Engage a management consulting firm to help improve the efficiency of port organization, administration, and operation (1395-96).
- ☆ Establish in 1395-96 a contingency fund for emergencies to be replenished annually.

3.2.4 Training: Develop and implement improved training programs for port employees (1395-1400).

3.2.5 Review and evaluate SANTS, and implement recommendations where feasible.

3.3 Yanbu'

- ☆ Design and construct basic pier facilities (1395-98).
- ☆ Design and construct two berths (1397-1400).
- ☆ Schedule construction of 12 additional berths in the Yanbu' area to satisfy the needs of planned industrial projects.

3.4 Jaizan

- ☆ Design and construct two berths, sea walls and requisite facilities, dredging as necessary (1395-1400).
- ☆ Establish a maintenance program (1399-1400).

3.5 Jubail

- ☆ Design and construct the port facilities necessary for the planned industrial development of the area (1395-1400).

3.6 Minor Red Sea Ports

- ☆ Provide each port (Duba, al-Wajh, Amlaj, al-Lith, al-Qunfudhah) with adequate facilities for small boats and fishing (1395-98).

3.7 Minor Arabian Gulf Ports

- ☆ Provide each port (al-'Uqayr, Darain, al-Birk, Zahma, al-Khobar) with adequate facilities for small boats and fishing (1395-1400).

3.8 Training: develop and implement improved training programs for the personnel of Yanbu', Jaizan, and Jubail ports, and at the minor ports noted above.

4. Finance

Below are summarized the estimated financial requirements of ports during the second plan period. The funds for Dammam include projects detailed under Railroads (the Saudi Government Railroad Organization is in charge of actual operation of this port). These projects account for SR 123 million out of the total of SR 1.941 million.

	(SR Millions)					
	1395 -96	*1396 -97*	*1397 -98*	*1398 -99*	*1399- 1400*	*Plan Total*
Jiddah	182	419	674	610	357	2,242
Dammam	485	535	470	293	158	1,941
Yanbu'	23	22	57	43	27	172
Jaizan	64	60	65	45	45	279
Jubail	80	400	500	500	400	1,880
Small ports	90	107	97	67	50	411
Total	924	1,543	1,863	1,558	1,037	6,925

The breakdown between recurrent and all project costs is as follows (SR millions):

	1395 -96	*1396 -97*	*1397 -98*	*1398 -99*	*1399- 1400*	*Plan Total*
Recurrent	20	18	15	17	18	88
Project	904	1,525	1,848	1,541	1,019	6,837
Total[a]	924	1,543	1,863	1,558	1,037	6,925

a Budgeted 1394-95 expenditures are included under Roads.

VII.A.3 AIRPORTS

1. Present Conditions

1.1 Geographical factors make aviation a most important element in the Kingdom's transport network. At present 20 airports are served on a regular basis. In 1393, about 350,000 international and 800,000 domestic passenger departures by scheduled services were recorded. In addition, 350,000 pilgrims traveled on special flights. Scheduled service passenger departures have increased more than 20 percent annually since 1390. In 1394, SAUDIA alone performed more than 800 movements (landings and departures) every week. Jiddah, Riyadh and Dhahran account for more than 90 percent of all activities.

1.2 During the first plan period the Civil Aviation Department (CAD) began a comprehensive program to improve airport facilities all over the Kingdom. This program will be continued and expanded to provide for a rapidly growing volume of air traffic.

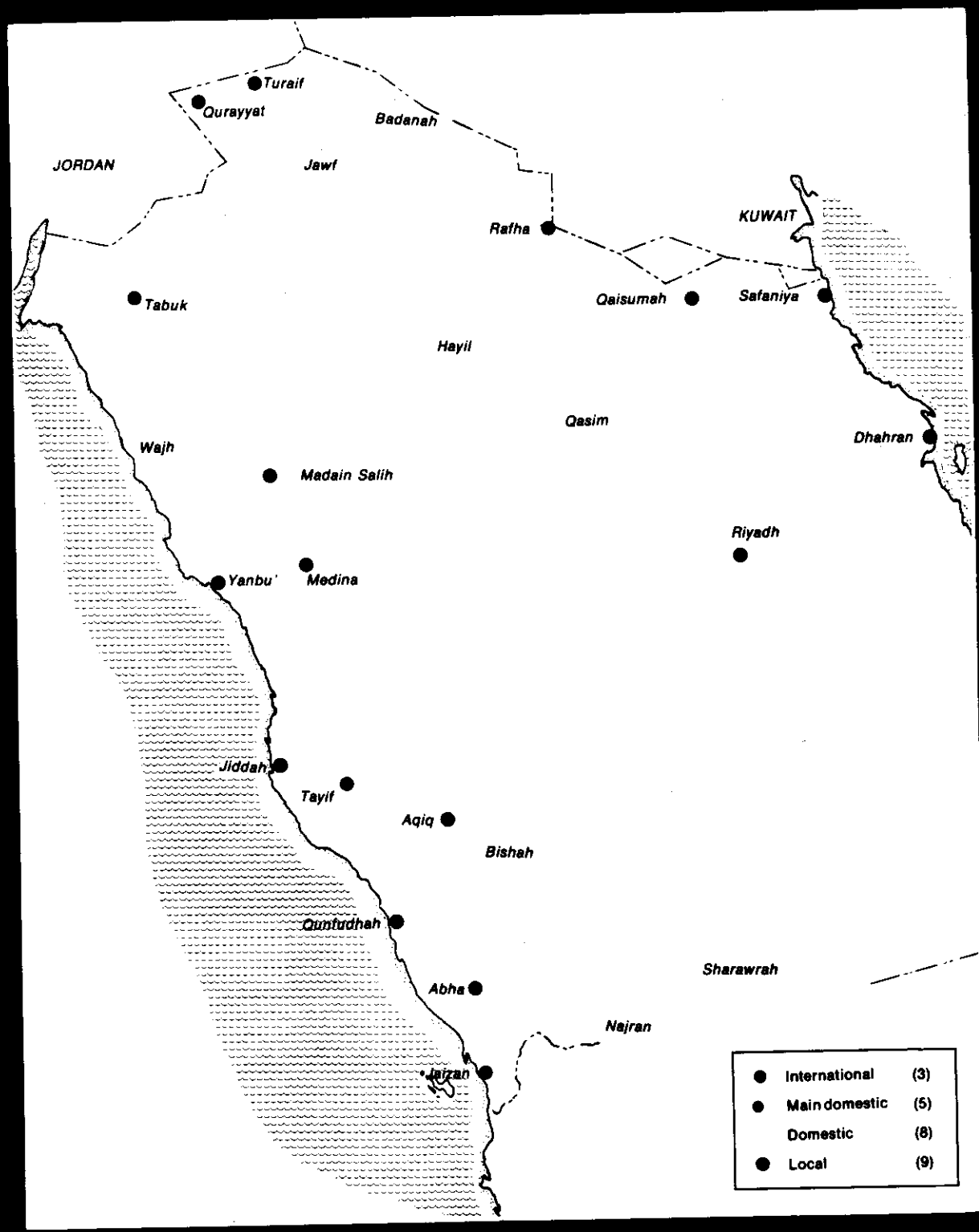
1.3 A new airport classification system has been introduced in line with international practice — for each group there are certain design criteria such as runway length, navigational aids, etc. The present and planned airports, shown in Figure VII-4, have been classified as follows:

Class	*Airport*	*Design Group*	*Pavement Strength*
International	Jiddah, Riyadh, Dhahran	III	LCN[a] 100
Main Domestic	Medina, Tayif, Jaizan, Abha, Tabuk	II	LCN 70
Domestic	Qasim, Najran, Hayil, al-Jawf, Bishah, Badanah, al-Wajh, ash-Sharawrah	I	LCN 50
Local	Turaif, Qurayyat, Rafha, Qaisumah, Safaniya, Madain Salih, 'Aqiq, Yanbu', Qunfudhah	Ia	LCN 20

1.4 The main tasks of CAD are:

- ☆ Controlling the Kingdom's airspace (in cooperation with RSAF).
- ☆ Flight control at all airports.
- ☆ Providing search, rescue, and fire-fighting services.
- ☆ Providing a flight information service.
- ☆ Licensing pilots, aircraft, and maintenance personnel.
- ☆ Development of existing and new airports.
- ☆ Maintenance and operation of existing airports.
- ☆ Running the Aeronautical Training Center.
- ☆ Representing the Kingdom in international aviation organizations.

a Load classification number.


Turaif
Qurayyat
Badanah
JORDAN
Jawf
KUWAIT
Rafha
Tabuk
Qaisumah
Safaniya
Hayil
Qasim
Dhahran
Wajh
Madain Salih
Riyadh
Yanbu'
Medina
Jiddah
Tayif
Aqiq
Bishah
Qunfudhah
Sharawrah
Abha
Najran
Jaizan
International (3)
Main domestic (5)
Domestic (8)
Local (9)

1.5 The activities of the CAD have been severely hampered by lack of proper communication facilities. Very little progress was made during the first development plan and urgent improvements are necessary to bring conditions to a satisfactory level.
1.6 Operation of sophisticated communication and navigational equipment requires highly qualified and motivated personnel whom it has not been possible to recruit in sufficient numbers. The Aeronautical Training Center also suffers from a lack of students of the right caliber.
1.7 A major change in policy took place recently with the decision to separate civil and military aviation at airports with joint service (Tabuk, Tayif, and Khamis Mushayt) in accordance with RSAF priorities.
1.8 Recently a five-year contract was signed for maintenance of airport facilities for 13 airports. Several airports will now receive regular maintenance for the first time.

2. Objectives and Policies

The primary objective in civil aviation development is to provide the facilities and services necessary to accommodate the growing volume of air traffic in the Kingdom while maintaining international standards of safety and reliability. Policies to meet this objective are as follows.
2.1 Provide airport and aviation facilities of the highest engineering standard at locations of air traffic demand:
2.1.1 Employ consultants for design and supervision of airport development.
2.1.2 Employ contractors for maintenance of installations of airport and airway systems. The contractors will be supervised by the CAD with the long-range goal of performing the work with its own forces.
2.2 Improve air traffic information services to ensure safe, regular air traffic:
2.2.1 Expand Jiddah Flights Information Region (FIR) boundaries to include all of Saudi Arabia.
2.2.2 Extend the range of navigational aids to cover the entire Kingdom.
2.2.3 Supply all airports with necessary ground aids.
2.2.4 Cooperate closely with RSAF concerning control of the Kingdom's airspace.
2.3 Provide all CAD units with the most efficient communication facilities:
2.3.1 Install direct-speech circuits where needed.
2.3.2 Cooperate with Department of Telecommunications, RSAF, SAUDIA, and the Department of Meteorology to establish required telecommunication facilities.
2.4 Ensure adequate search and rescue, and fire-fighting efforts in case of aircraft distress:
2.4.1 Cooperate with RSAF, Coast Guard, Army, Navy, and other agencies.
2.4.2 Supply necessary equipment.
2.5 Maintain the highest level of flight standard service:

2.5.1 Ensure airworthiness of Saudi aircraft according to international standards.
2.5.2 Examine and license Saudi and foreign personnel engaged in aircraft operation and maintenance.
2.5.3 Prepare and implement Civil Aviation Regulations for Saudi Arabia.
2.5.4 Supply the most up-to-date flight information by regular revision of the Aviation Information Publication (AIP).
2.6 Make the organizational changes necessary to accommodate the continuous technical development and needs for increased service.
2.7 Train sufficient Saudi personnel to operate, maintain, and install all aeronautical facilities within the Kingdom by expanding the activities of the Aeronautical Training Center.

3. Programs and Projects

3.1 Airport Facilities

3.1.1 Jiddah: Complete terminal facilities for L-1011 aircraft at existing airport (1395-96). Complete construction of Jiddah new airport (1398). Complete runway and taxi-way development at new airport (1399-1400).
3.1.2 Riyadh: Complete runway, taxi-way and lighting improvements (1396-97). Complete design for new airport (1395-96) and construct (1396-1400), scheduling construction so that major work follows Jiddah work.
3.1.3 Dhahran: Construct extension of terminal, cargo building, and other work necessary to separate civil and military aviation (1395-99). Extend runway taxiways and apron for wide-bodied aircraft (1396-98).
3.1.4 Medina: Construct Hajj terminal and carry out minor works (1395-97).
3.1.5 Tayif: Complete improvements to existing airport (1395-97). Construct new airport (1396-99).
3.1.6 Abha: Complete new airport under construction —
3.1.6.1 Complete runway and taxi-way extension (1396-97).
3.1.6.2 Complete terminal building (1395-96).
3.1.7 Jaizan: Complete new terminal building (1397-98).
3.1.8 Tabuk: Construct new airport (1396-99).
3.1.9 Najran: Complete new terminal building and parallel taxi-way (1397-98).
3.1.10 Hayil: Complete terminal building and runway construction (1396-97).
3.1.11 Badanah: Complete construction of new airport and parallel taxi-way (1396-97).
3.1.12 Local airports: Open new local airports for scheduled service after assessing traffic in cooperation with SAUDIA (1395-1400). Construct airport facilities at local airports in accordance with the design standard mentioned above.

3.2 Aviation Safety And Control

3.2.1 Expand Jiddah Flight Information Control (1395-1400).

3.2.2 Expand Jiddah Communication Center (1395-1400).
3.2.3 Establish Search and Rescue Center (1395).
3.2.4 Provide Flight Standard Service (1395-1400).
3.2.5 Establish Aeronautical Information Center (1395-97).
3.2.6 Improve fire-fighting, rescue, and protection services at all airports (1395-1400).

3.3 Ground Service

3.3.1 Provide direct-speech circuits with adjacent Flight Information Controls (1395).
3.3.2 Obtain direct-speech circuits on the national telecommunications network to link all domestic airports (1395-98).
3.3.3 Install remote control air/ground stations (1395-1400).
3.3.4 Install additional radar equipment (1395-1400).
3.3.5 Install additional navigational aids (1395-1400).
3.3.6 Purchase one additional flight checking aircraft for instrument calibration (1395).

3.4 CAD Organization

3.4.1 Review and evaluate Saudi Arabia National Transport Survey (SANTS) and implement recommendations where feasible (1395).
3.4.2 Carry out organizational study and improvements (1395-98).
3.4.3 Expand CAD headquarters (1395-98).

3.5 Training

3.5.1 Expand the Aeronautical Training Center (1395-1400).
3.5.2 Plan to graduate the following numbers of students.

1395-96	285
1396-97	330
1397-98	530
1398-99	550
1399-1400	550

4. Finance

The CAD collects fees and taxes from airport users (both airlines and passengers), but these revenues are minor beside the large expenses. The CAD's financial requirements are as follows (SR millions):

	Budgeted 1394-95	*1395 -96*	*1396 -97*	*1397 -98*	*1398 -99*	*1399-1400*	*Plan Total*
Recurrent	146.6	133.2	196.8	264.9	339.8	401.7	1,336.4
Project	1,150.8	2,186.2	3,920.9	3,425.2	1,781.6	1,162.4	12,476.3
Total	1,297.4	2,319.4	4,117.7	3,690.1	2,121.4	1,564.1	13,812.7

VII.A.4. SAUDIA

1. Present Conditions

1.1 SAUDIA, as a principal transportation link both within the Kingdom and between the Kingdom and other countries, has been directly and immediately affected by the Kingdom's accelerated economic growth during the past several years.

1.2 While the objectives and targets of the first development plan have been met or exceeded, rapid expansion to serve the growing national interests has severely taxed the airline's present capabilities in terms of manpower, equipment, and facilities.

1.3 Since 1969, revenue passengers have more than doubled. Hajj passengers increased three-fold; the jet fleet has increased from 4 to 18 while the propeller fleet has decreased from 21 to 4; employees have increased from 3,944 to 5,126; and the company has achieved an operating profit in each of the last two years.

1.4 A major reorganization of the airline's structure has been necessary to cope with this greatly increased level of operation and further changes will be necessary as this growth continues.

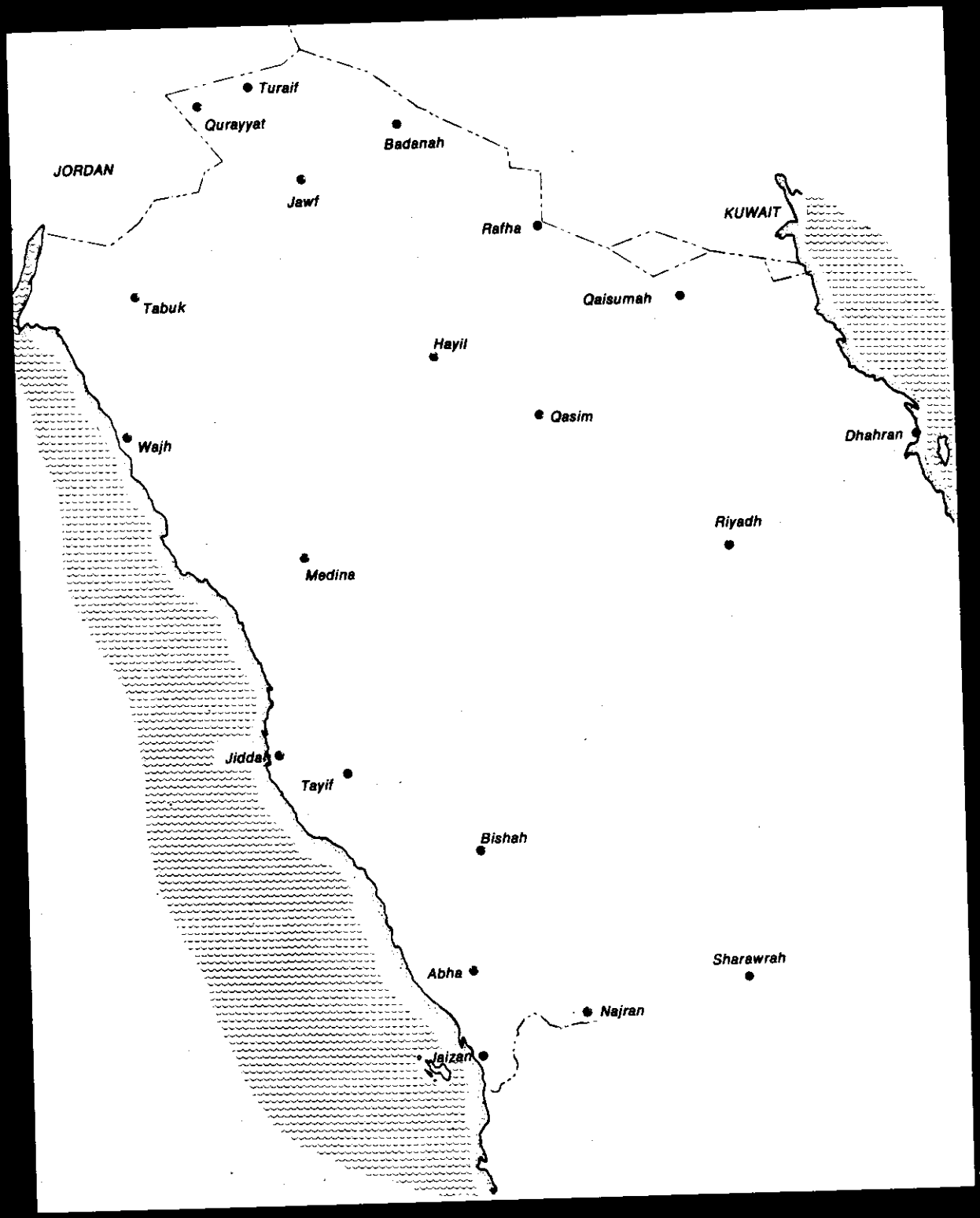
1.5 SAUDIA currently serves, on a scheduled basis, 20 cities within the Kingdom (see Figure VII-5) as well as several international centers:

Saudi Arabia		*Middle East*	*Africa*	*Europe*
Abha	Qaisumah	Amman	Algiers	Amsterdam[a]
Badanah	Qasim	Bahrain	Asmara	Frankfurt[a]
Bishah	Qurayyat	Baghdad	Casablanca	Geneva
Dhahran	Rafha	Beirut	Khartoum	Istanbul
Hayil	Riyadh	Cairo	Port Sudan	London
Jaizan	ash-Snarawrah	Damascus	Tripoli	Paris
Jiddah	Tabuk	Doha	Tunis	Rome
al-Jawf	Tayif	Dubai		
Medina	Turaif	Kuwait		*Asia*
Najran	al-Wajh	Muscat		Bombay
		Sanaa		Karachi
		Shiraz		

a Freight service only.

1.6 Studies have recently been completed or are now underway to evaluate the desirability of extending scheduled service to the Iberian Peninsula, East and West Africa, Malaysia and the Far East, as well as New York.

1.7 While the acquisition of new equipment is primarily a financial consideration, the expansion of manpower and facilities to properly utilize such equipment presents a variety of problems. Airline dependency on communications requires that the Kingdom's entire communications network be upgraded before a new airline reservations system can be implemented. Large numbers of people must be screened, employed, and trained.


Turaif
Qurayyat
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Jawf
KUWAIT
Rafha
Tabuk
Qaisumah
Hayil
Qasim
Dhahran
Wajh
Riyadh
Medina
Jidda
Tayif
Bishah
Sharawrah
Abha
Najran
Jaizan

The shortage of qualified Saudi college and high school graduates to fill the additional jobs presents an ever-increasing challenge, as does the expansion of experienced training staff and facilities to improve classroom and on-the-job instruction.

1.8 Many of SAUDIA's major problems rest on factors that are not amenable to immediate change or correction. Progress must therefore come from constant improvements, as distinct from precipitous corrective action. The following corporate objectives have been designed with an appreciation of this fact.

2. Objectives and Policies

2.1 Create and exemplify the highest public image of the Kingdom and the airline.

2.1.1 Improve the quality and appearance of the airline's physical facilities and the apparel of its public contact personnel.

2.1.2 Improve the quality of services and communications provided by SAUDIA.

2.2 Maintain an operation free from the need for public service revenue (Table VII-2).

2.2.1 Reduce cost of available ton-kilometers.

2.2.2 Increase revenue ton-kilometers.

2.2.3 Remain constantly alert to possibilities for activating viable ancillary services.

Table VII – 2
SAUDIA PRO FORMA PROFIT AND LOSS STATEMENT
(SR Millions)

	1975	*1976*	*1977*	*1978*	*1979*	*Total*
Operating revenues[a]	612.8	747.9	902.7	1,094.5	1,323.0	4,680.9
Operating expenses[b]	590.1	717.4	896.4	1,095.0	1,334.2	4,633.1
Operating profit (loss)	22.7	30.5	6.3	(0.5)	(11.2)	47.8
Non-operating revenue (expense)	2.5	2.5	2.5	2.5	2.5	12.5
System profit (loss)	25.2	33.0	8.8	2.0	(8.7)	60.3

a 3.2% p.a. increase in yield per revenue passenger-kilometer assumed.
b 8.6% cost escalation factor assumed.

2.3 Maintain SAUDIA's position domestically and internationally as the chosen organization to meet the Kingdom's expanding needs for air transportation.

2.3.1 Maintain a continuous review and assessment of the air transport needs of Saudi Arabia and the intentions of existing and potential competitors elsewhere in the world.

2.3.2 Meet or exceed the forecast passenger- and cargo-kilometer targets (see Table VII-3) which provide the basis for revenue forecasts and the fleet plan.

2.3.3 Provide prompt and timely corporate response to changing conditions, demands, and competitive climate.

2.3.4 Stimulate the growth of Hajj air traffic and improve SAUDIA's participation in such traffic.

Table VII – 3
STATISTICAL SUMMARY OF FUTURE SAUDIA SCHEDULED REVENUE SERVICE

	1975	*1976*	*1977*	*1978*	*1979*	*Plan Total*
Block hours flown (all equipment)	44,059	49,139	57,299	66,440	75,873	292,810
Available seat-kilometers (millions)	2,442	3,103	3,826	4,703	5,509	19,583
Revenue passenger-kilometers (millions)	1,517	1,829	2,197	2,633	3,166	11,342
Revenue load factor	62%	59%	57%	56%	57%	58%
Yield per revenue passenger-kilometer (SR)	.232	.238	.239	.245	.250	.242
Passengers boarded (thousands)	1,347	1,596	1,880	2,203	2,578	9,604
Average ticket value (SR)	261	273	279	293	307	286

2.4 Provide a cadre of competent personnel at all managing and operating levels for the present and future development and expansion of the airline.

2.4.1 Establish and prescribe the required levels of qualifications/competency for all management positions.

2.4.2 Establish a comprehensive and coordinated program for human resources acquisition and utilization.

2.4.3 Maintain the system of Management by Objective throughout SAUDIA's management structure.

2.5 Conduct a safe and reliable operation in keeping with the highest industry standards.

2.5.1 Improve station on-time performance to 95 percent for domestic flights and 85 percent for international flights.

2.5.2 Improve operating reliability to scheduled plus 5 minutes for departures and scheduled plus 15 minutes for arrivals.

2.5.3 Improve existing safety standards and performance in all corporate operations.

2.6 Establish and monitor corporate standards for various operating functions relative to staffing, space needs, and equipment requirements.

2.7 Establish specific on-the-job development and training programs for Saudi employees to enhance their present skills and prepare them for greater responsibility.

3. Programs and Projects

3.1 Fleet Plan

Table VII-4 shows the SAUDIA fleet planned to meet forecast demand and improve on-time performance. Wide-bodied jets will be introduced into service on 1 August 1975.

Table VII - 4
SAUDIA AIRCRAFT FLEET PLAN
(as of 31 December)

Type	*1974*	*1975*	*1976*	*1977*	*1978*	*1979*
L-1011	-	2	3	4	5	6
B-707 Passenger	5[a]	4[b]	5[a]	5	6	6
B-707 Cargo	2[b]	2[b]	2	3	3	4
B-720	2	2	2	2	2	2
B-737	7	7	8	9	10	11
F-27	-	3	3	3	4	4
DC-3 Passenger	3	-	-	-	-	-
DC-3 Cargo	1	1	1	1	1	1
Total	20	21	24	27	31	34

a Two units leased.
b One unit leased.

3.2 Communications

3.2.1 Establish a long-range, Kingdom-wide very-high frequency (VHF) system with stations at Tayif, Dhahran, Khamis Mushayt, and Turaif to provide air-ground communication (1975-79).

3.2.2 Establish a voice single side band (SSB) station at the new Jiddah International Airport (1975-76).

3.2.3 Acquire other new services as they become available through implementation of the Kingdom's Telecommunications Plan (1975-79).

3.2.4 Establish a net ground system or a Master PABX at Jiddah to provide an adequate communication system for SAUDIA facilities in the Jiddah area (1975-76).

3.3 External Affairs

3.3.1 Improve the quality and scope of information and research services provided to other divisions of the corporation, including more accurate traffic and financial reporting (in cooperation with the Finance Division), comprehensive manuals and ready-reference tables on cargo and passenger tariffs, and a library of selected transportation publications.

3.3.2 Expand SAUDIA's route system through negotiation of favorable bilateral agreements, including blocked space and pooling arrangements.

3.3.3 Increase corporate revenues by monitoring the relationship between yields and costs, conducting market studies, expanding airmail postal services, and other means.

3.3.4 Improve schedule performance and fleet utilization by monitoring flight profitability and instigating schedule changes.

3.3.5 Obtain favorable action by other government agencies on matters affecting the welfare of SAUDIA, such as visa requirements, baggage inspection, and customs clearance facilities.

3.3.6 Subject to economic feasibility, increase SAUDIA's share of total Hajj air traffic by 1 percent per year.

3.3.7 Expand public relations activities in order to improve the image of SAUDIA domestically and internationally.

3.4 Finance

Develop computer support for all divisions of the corporation; the systems to be developed include payroll, several marketing development reports, inventory and purchasing, accounting, and flight planning.

3.5 Flight Operations

3.5.1 Improve existing safety standards and performance of flight operations with purchase and installation of a B-737 simulator, closed circuit television for ground school, expanded flight training, and a complete flight watch control for all SAUDIA aircraft.

3.5.2 Move all flight operation facilities to the new Jiddah International Airport (1977-78).

3.6 Industrial Relations

3.6.1 Expand personnel administrative functions with the aid of automation, and develop or improve employee health, pension, thrift, and promotion plans.

3.6.2 Expand administrative services in line with corporate growth by introducing an automated typing facility and increasing in-house printing and record-storage capabilities.

3.6.3 Consolidate all non-technical manuals into a standard practices system, publishing the first Standard Practices Manual in 1975.

3.6.4 Provide adequate medical facilities and staff for the examination and general treatment of SAUDIA personnel. A new medical facility is planned for 1977.

3.6.5 Ensure proper compensation programs for all SAUDIA personnel and improve organizational effectiveness with a system of biannual review of job descriptions and study of salary scales both within the Kingdom and among other Middle East carriers.

3.6.6 Increase personnel recruitment to meet growing corporate demands and expand information relative to individual employee skills and potential: employee testing procedures will be developed and a centralized employment service established for the corporation.

3.7 Marketing

3.7.1 Increase cargo revenue ton-kilometers to 172.5 million annually in 1975 through a maximum sales effort.

3.7.2 Establish corporate standards in 1975 for customer ground services, baggage and freight handling, manpower manning levels, administrative procedures, communications systems, and physical facilities.
3.7.3 Conduct feasibility studies for such ancillary services as hotels, motels, and guest houses (1975-79).
3.7.4 Institute a construction and renovation program for airport and city ticket offices throughout the system (1975-79).
3.7.5 Improve the reservations inventory control and sales system beginning with a complete feasibility study in 1975, developing automated systems, and consolidating the smaller domestic reservations offices in 1979.
3.7.6 Purchase additional passenger and cargo handling support equipment throughout the system (1975-76).
3.7.7 Expand dining and commissary facilities.
3.7.8 Improve the efficiency and morale of inflight service personnel by renovating and expanding office and lounge facilities, and providing a dormitory in Jiddah for 500 hostesses.
3.7.9 Reduce no-show factor by improved adherence to the present reconfirmation procedures and avoidance of duplicate bookings under the computerized Inventory System (1975-79).

3.8 Organization and Manpower Development

3.8.1 Provide an organization and system for analyzing and determining manpower needs of the corporation, based on a special study to be conducted in 1975.
3.8.2 Expand SAUDIA's management planning and programming system to all areas of management and train employees in its effective use as a management tool.
3.8.3 Teach supervisors in job-skill training to develop standard procedures for on-the-job training and assist each operating department to implement them.
3.8.4 Concentrate major training efforts on basic education and training programs for newly recruited personnel.
3.8.5 Initiate and administer a management appraisal and development program for all levels of present and potential managers (1975).
3.8.6 Provide education, training, and development facilities and services, including a first-level supervisory course.

3.9 Properties and Facilities

3.9.1 Supervise the design and construction of the new administrative complex at Jiddah (1975-79).
3.9.2 Coordinate with Civil Aviation Department in the planning, design, and construction of new airport projects (1975-79).

3.9.3 Design and construct or renovate SAUDIA sales and operating facilities.
3.9.4 Provide engineering support for feasibility studies of ancillary services, and provide design and construction supervision as required (1975-79).

3.10 Technical Services

3.10.1 To reduce dependency on outside contractors for aircraft maintenance, improve its quality, and lower its costs: expand maintenance facilities, establish shop and hangar standards, and standardize tools and equipment.
3.10.2 Maintain technical research and development in all areas of aircraft maintenance, including installation of engine AIDS and of on-board weight and balance systems on all aircraft.
3.10.3 Move all technical service facilities to the new Jiddah International Airport (1977-78), and complete the establishment there of a FAA/ARB approved repair station by 1979.

3.11 Training

Table VII-5 summarizes the planned annual output of SAUDIA training programs.

Table VII-5
SAUDIA TRAINING PROGRAMS
(Study Courses Completed)

Program	*1975*	*1976*	*1977*	*1978*	*1979*	*Total*
Organization and manpower development	2,563	3,262	3,512	3,867	4,072	17,276
Technical services	420	318	318	317	317	1,690
Other services	2,125	2,430	2,275	2,225	2,125	11,180
Total	5,108	6,010	6,105	6,409	6,514	30,146

4. Finance

Annual requirements of SAUDIA for financing during the Plan are estimated as follows (SR millions):

	1395 -96	*1396 -97*	*1397 -98*	*1398 -99*	*1399-1400*	*Plan Total*
Project expenditures	439.3	362.8	345.6	313.8	273.7	1,735.3
System profit (loss)	25.2	33.0	8.8	2.0	(8.7)	60.3
Depreciation	63.6	98.4	139.1	163.7	181.0	642.7
Financial requirements[a]	350.6	231.5	200.7	148.1	101.4	1,032.2

a Project expenditures less depreciation, less system profit or loss.

VII.A.5. RAILROAD

1. Present Conditions

1.1 The Kingdom's railroad is owned, operated, and managed by the Saudi Government Railroad Organization (SGRRO), which also operates the port of Dammam; hence this section covers both the railroad and the operation of Dammam Port. (Apart from its operation, Dammam has been discussed earlier under Ports.)

1.1.1 The rail system consists of two main sections, one running between Riyadh and Dammam (562 kilometers), and the other between Dammam and Dammam Port (17 kilometers). In addition there are branch lines and spurs totalling 140 kilometers.

1.1.2 SGRRO owns 12.3 million square meters of land in Riyadh and Dammam in addition to the land occupied by the rail line.

1.1.3 The rolling stock consists of 1,202 units (locomotives, passenger and freight cars) and 83 motor vehicles. Much of the equipment is old and needs replacement.

1.2 Rail Operations

1.2.1 Regular operations consist of one freight and one passenger train daily in each direction between Dammam and Riyadh. Trains are operated as required from Dammam Port, to the customs yard and the neighboring industrial areas.

1.2.2 The rail activities of recent years are summarized as follows:

	1390-91	*1391-92*	*1392-93*	*1393-94*
A. *Passenger Transport*				
No. of passengers	105,377	118,360	144,305	190,155
Passenger-kilometers (millions)	38.3	43.2	52.1	66.3
B. *Freight Transport* ('000 tons)				
Western direction	1,021.5	1,318.7	1,416.9	1,183.6
Eastern direction	50.8	95.2	99.1	250.0
Total	1,072.3	1,413.9	1,516.0	1,433.6
Ton-kilometers (millions)	171.5	194.6	200.9	192.9

1.3 Port Operations

1.3.1 Port facilities consist at present of seven modern berths and two berths located at the original port, together with handling equipment, boats, and barges. In addition, there are seven new berths under construction.

1.3.2 Imports constitute the major part of the operations, as the following figures indicate (metric tons):

	Imports	*Exports*
1390-91	742,533	61,501
1391-92	977,039	101,640
1392-93	1,146,626	81,074
1393-94	1,267,635	196,330

1.4 Maintenance

1.4.1 Track maintenance is performed by labor supplied by a contractor according to a two-year agreement. Supervision is carried out by SGRRO. The major maintenance problems are drifting sand and seasonal flooding.

1.4.2 SGRRO has four main workshops for maintenance and repair of mechanical equipment. All kinds of maintenance work can be performed except the overhaul of locomotive engines.

1.5 Manpower Conditions — The organization suffers from a lack of qualified personnel. The wages, benefits, and working conditions SGRRO offers are not competitive with the conditions generally prevailing in the Eastern Region. Qualified personnel often leave the organization to be replaced by less-qualified men who do not receive the incentives to obtain the needed skills.

1.6 Owing to various factors, the performance of the railroad has not been satisfactory in recent years. Studies are currently being carried out to define the long-term function of the railroad, actions to be taken in the short-term to enable it to perform this function, and measures for improving existing management and operations.

2. Objectives and Policies

The basic objective of the railroad system is to provide transport for goods and passengers on routes where the railroad can offer more economic, convenient, and reliable services than other modes of transport. Policies to meet this objective are specified below.

2.1 Studies

Determine the long-term function of the railroad in the national transport system, and how this function is to be performed.

2.2 Railroad

2.2.1 Provide high-quality rail service between the Eastern and Central regions for goods suitable for rail transport:

- ☆ Identify shipper needs.
- ☆ Purchase suitable equipment and rolling stock.

2.2.2 Improve rail service from Dammam Port:

- ☆ Define role of the railroad at Dammam Port.
- ☆ Institute service according to needs.

2.2.3 Improve all facets of rail operations. maintenance, work organization, labor conditions, and land utilization.

2.2.4 Integrate rail and road transport where feasible.

2.3 Dammam Port Operations

2.3.1 Improve cargo-handling operations and utilization of berths to increase capacity (1395-1400).

2.3.2 Increase efficiency of other port operations (1395-1400).

3. Programs and Projects

3.1 Studies

3.1.1 Undertake continuing study of requirements for expansion of port operations to ensure capacity to handle expected volumes of imports and exports.

3.1.2 Review and evaluate the recommendations of the Saudi Arabia National Transport Survey and complete the studies referred to above.

3.1.3 Define requirements for expansion and improvement of the railroad system.

3.2 Improvement of Railroad Facilities and Equipment

Subject to the outcome of the above studies, undertake the following projects over the period 1395-1400:

- ☆ Construct spur lines as needed.
- ☆ Install more safety equipment.
- ☆ Weld track.
- ☆ Purchase required maintenance equipment.
- ☆ Purchase required rolling stock.
- ☆ Purchase workshop and office equipment.
- ☆ Improve and expand workshops.
- ☆ Expand employee housing.
- ☆ Construct new station and other smaller buildings at Dammam.
- ☆ Replace worn-out equipment.
- ☆ Improve work organization.
- ☆ Improve labor conditions.
- ☆ Improve training program.

3.3 Utilization of Railroad Land Holdings

3.3.1 Establish a commercial center at Dammam (1395-98).

3.3.2 Establish a land port and storage area at Riyadh (1395-98).

3.4 Integration of Rail and Motor Vehicle Transport

3.4.1 Carry out studies to identify areas where motor vehicles could be utilized in conjunction with the railway (1395-96).

3.4.2 Purchase required motor vehicles (1395-97).

3.5 Dammam Port Operations

3.5.1 Define and initiate a program for improvement of cargo-handling and other port operations (1395-96).

3.5.2 Establish a contingency fund (1395-96).

3.5.3 Obtain management and training assistance (1395-97).

3.6 Training

Formulate and initiate a training program for SGRRO personnel (1395-96).

4. Finance

The financial requirements for SGRRO projects, excluding port projects, are estimated below (SR millions). Only those projects necessary for improved operation of the existing rail network are included pending the outcome of the studies referred to above. Recurrent costs are usually covered by the revenue and are not included.

Budgeted 1394-95	*1395 -96*	*1396 -97*	*1397 -98*	*1398 -99*	*1399-1400*	*Plan Total*[a]
52.1	117.1	60.6	57.0	14.0	27.8	276.5

a Excluding the cost of projects at Dammam Port which is included in the section on Ports.

B. COMMUNICATIONS

VII.B.1. TELECOMMUNICATIONS

1. Present Conditions

1.1 The general objective of the first plan was to provide the Kingdom with a national communications system. Targets included:

- ☆ Installing 137,000 telephones, nearly all automatic, and constructing 50 telecommunications offices.
- ☆ Providing trunk dialing facilities between important cities in the Kingdom through coaxial and/or microwave networks.
- ☆ Improving the telegraph services with teleprinters.
- ☆ Providing direct access to neighboring states and all important centers in the Eastern and Western hemispheres.
- ☆ General strengthening of the capabilities of the Ministry of Communications through organizational changes and by complete separation of telecommunications and postal services, possibly establishing an autonomous government body to operate the telecommunications system.
- ☆ Increasing the number of trained Saudi personnel to minimize the foreign employees in network operation.

1.2 Progress was made during the first plan toward these and related goals, but the achievements were not uniform. For example, although revised current programs will meet the first plan target for the quantity of automatic telephones, the installations are concentrated in a few large population centers rather than including the planned replacement of manual exchanges. This deficiency is attributable to the delayed implementation of the planned three-phase intra-Kingdom network described in the first plan. In addition, two portable Earth stations were installed, one at Riyadh and the second at Jiddah, but completion of the permanent stations was delayed. Schedules for telegraph services, building construction, and training were also stretched out.

1.3 At the end of 1394 there were 93,600 lines of automatic telephone exchange equipment in ten cities across the Kingdom; completion of 23 telephone office switch projects during the next three years will provide an additional 105,200 lines, supported by appropriate outside plant work. There are also under contract seven telephone office

buildings, and ten installations of tandem switching equipment. Based on current forecasts, however, the planned near-term capacity of about 198,000 lines will fall far short of the forecast requirements. The 7 buildings under contract will also be considerably less than the forecast requirements for telephone office buildings. In addition, there is a need for a management building complex and several regional management offices.

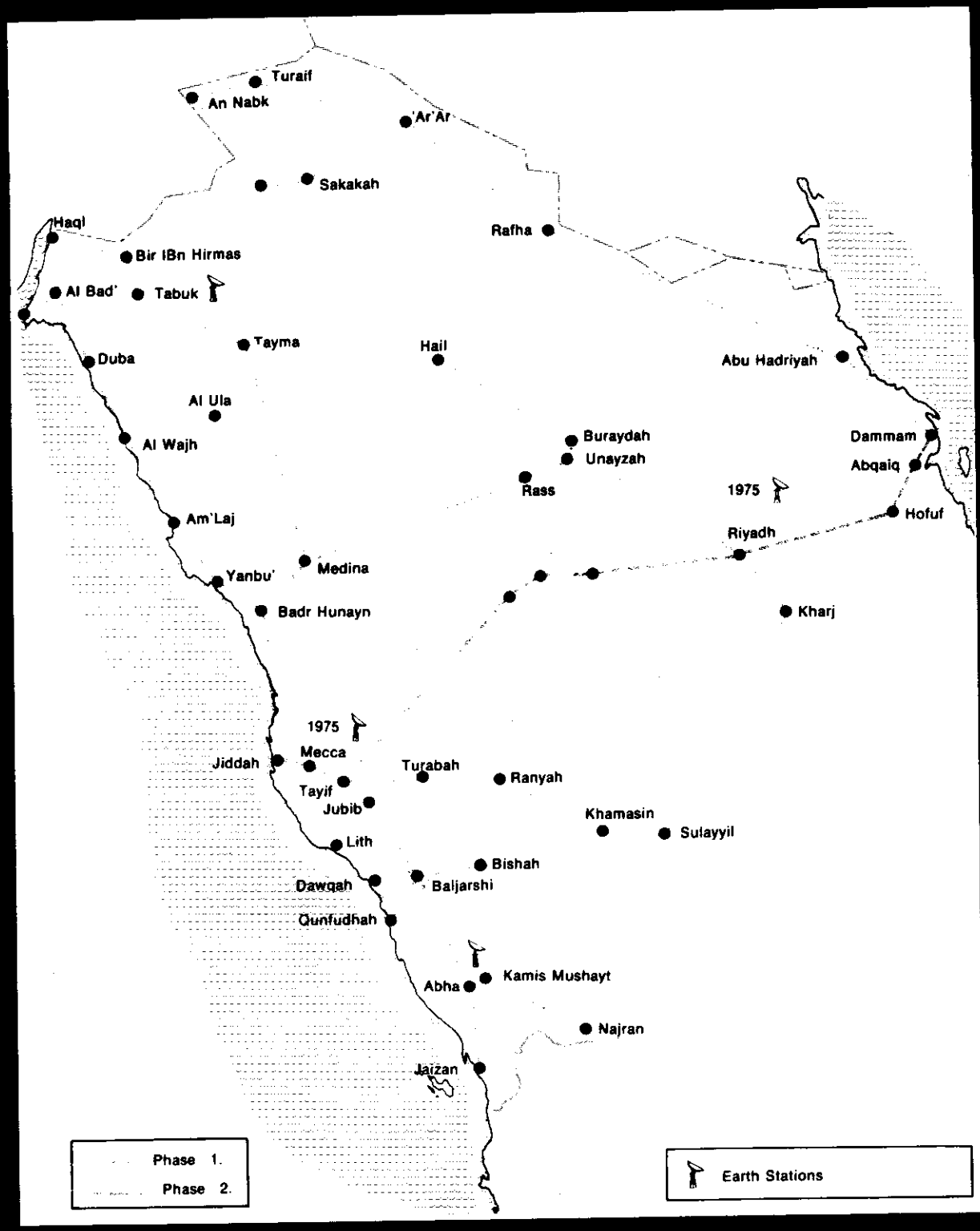
1.4 Long-haul telecommunications facilities are very limited at present, and most long-distance communications are carried out almost exclusively over high frequency radio. In recognition of the need to establish good and reliable long-distance communications, the Ministry of Communications has contracted for the installation of a major telecommunications network which, with completion of Phase One (the backbone system linking Jiddah through Riyadh to Dammam), will have the capacities shown below:

Phase I	*Circuit Type*	*Circuits*	*Distance (km)*
Jiddah-Mecca	MWave	1800+TV	75
Mecca-Tayif	MWave	1800+TV	90
Tayif-Dammam	Coaxial	2400+TV	1,360

1.5 With the installation and operation of the two phases of the program, the cumulative total capacity of the overall network will give long-distance telecommunications to over 90 percent of the Kingdom's population. Figure VII-6 shows the communication routes of the total system. While the system as now planned will be adequate in the near term, traffic growth projections based on Ministry of Communications goals indicate that:

- ☆ Planned multiplex provisions for the Phase One backbone network will be inadequate in the near term.
- ☆ The microwave system between Jiddah and Tayif will be inadequate in the near term.
- ☆ The planned capacity of the coaxial cable system will be inadequate in the Tayif-Dammam area by the early 1400s.
- ☆ The capacities of major links in the overall system will fall short of requirements in the early 1400s, and there will be a need for alternate routing capabilities.

1.6 Record traffic (telegraph and telex) in Saudi Arabia relies heavily on HF radio to provide the teletype network that connects most of the cities and towns throughout the Kingdom. Studies indicate that teletype traffic can be supported quite easily on the overall transmission network when it is installed, since the plan is to multiplex 24 teletype channels per voice channel. Telex, on the other hand, will grow at a substantial


Turaif
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Al Ula
Al Wajh
Buraydah
Unayzah
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Jubib
Khamasin
Sulayyil
Lith
Bishah
Dawqah
Baljarshi
Qunfudhah
Kamis Mushayt
Abha
Najran
Jaizan
Phase 1.
Phase 2.
Earth Stations

rate during the next 15 years. Current programs of telex switching centers and the provision of up to 2,050 subscriber lines in the next three years will give good impetus to this service. Present indications concerning record traffic are as follows:

- ☆ Telex will be implemented at a rate expected to meet industry and Government requirements.
- ☆ Switching capability and international facilities will provide adequate capacity in the near term.
- ☆ Teletype will grow at a minimal rate and can be accommodated within the long-haul transmission network.
- ☆ Teletype stations remote from the long-distance network will continue to rely on HF radio.

1.7 Television and radio rely heavily at present on local high-powered transmitters in Riyadh, Jiddah, and Dammam. The planned intra-Kingdom system will provide two-way TV and radio services throughout the Phase One network, and one-way TV and radio services are planned for Phase Two. The present outlook regarding these special services is as follows:

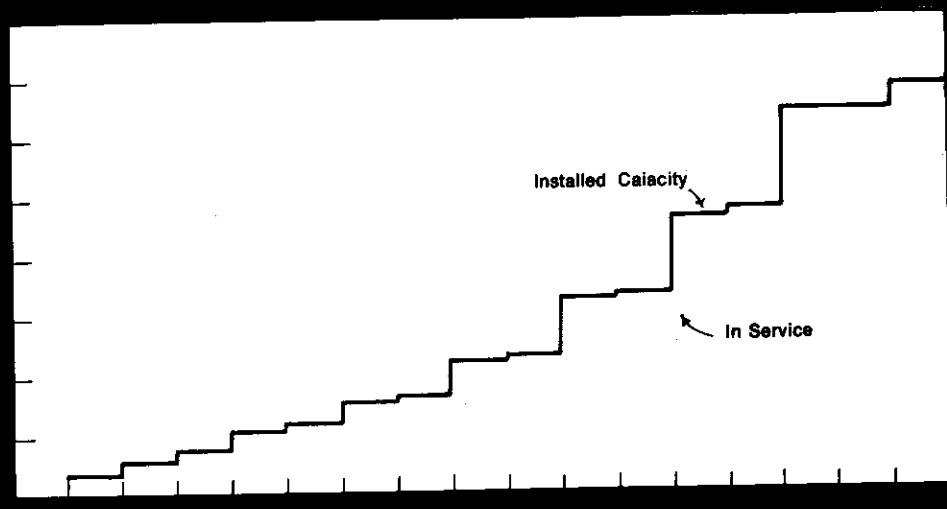
- ☆ Television and radio requirements will be adequately served by the system as currently planned.
- ☆ Several links in the currently-recommended system will not be required to carry TV or radio programming services since they are provided with alternate-routing protection on telephone equipment.
- ☆ Early planning is required concerning the technical capabilities for transmitting full-color TV service throughout the Kingdom, with particular reference to the capability of coaxial systems to carry color TV under the environmental conditions that prevail in Saudi Arabia.

2. Objectives and Policies[a]

2.1 The basic objective of the telecommunications plan in the next five years is to provide a system of local, intra-Kingdom, and international telecommunications that will meet the demands for service implied by the overall social and economic goals of the national Development Plan, and establish a basis for meeting a projected continuing growth in demand over the longer term. Selected indicators of this projected growth are shown by Figure VII-7. The policies designed to reach this objective are noted below.

2.2 Upgrade the local telephone network to provide by the year 1980 at least 20 telephones per 100 residents in the larger cities and approximately 5 telephones per 100

a Because of the international nature of telecommunications, Gregorian dates are used in the discussions of Objectives and Policies, and Programs and Projects.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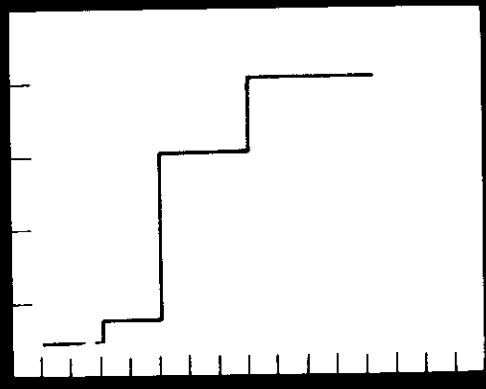
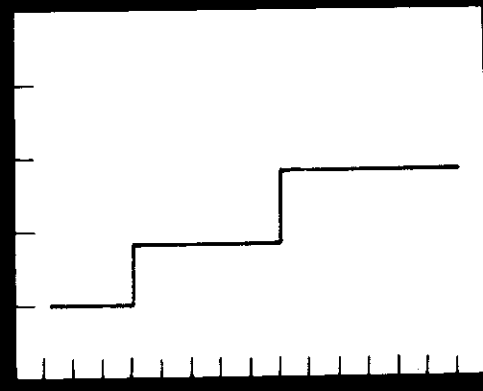




in the smaller communities. This upgrading, as suggested by Figure VII-7, will require by the end of the Plan an installed capacity of approximately 666,000 lines of which 490,000 lines will be in service.

2.3 Complete the currently planned intra-Kingdom and international telecommunications network and, in view of an expected rapid growth in use, substantially expand and improve the currently planned network in regard to telephone service, record traffic, and special services.

2.4 Develop an organization that will provide an efficient operational framework for the Kingdom's telecommunications industry, complete with the required basic systems, staffing, and definition of priorities for action.

2.5 Examine the public policy and social implications of several alternatives to the present tariff structure, in order to effectively balance the important economic, social, and technical factors that are involved in the establishment of rates and the resulting revenues.

2.6 Undertake an entirely new approach to training, and promote Saudi management control and the development of Saudi nationals by early identification of talented Saudis for new positions so they may begin working in appropriate capacities as soon as possible.

3. Programs and Projects

3.1 Current Programs

Complete, as expeditiously as possible, all ongoing programs and projects, including:

- ☆ Local-level switching equipment, buildings and support facilities, outside plant, supporting infrastructure, record communications, and construction of training facilities.
- ☆ Phases One and Two of the intra-Kingdom network.
- ☆ International communications, including installation of the permanent Earth stations at Riyadh and Tayif.

3.2 Studies and Planning

3.2.1 Undertake at the earliest possible time a detailed study of the feasibility of using electronic switching.

3.2.2 Give early consideration to a study to determine the feasibility of using digital transmission.

3.2.3 Consider the expansion of automatic switching to other locations.

3.2.4 Revitalize the telephone office building program with entirely new guidelines for design, which must include an atmospheric-overpressure system for each building.

3.2.5 Develop special detailed analyses of (a) broad-band requirements of facsimile in the design of local loop plant and broadband bearers, (b) electronic mail delivery.
3.2.6 Review new technologies with respect to record-copy transmission and switching facilities.
3.2.7 Plan immediately to upgrade the Jiddah-Mecca and Mecca-Tayif links to a coaxial system.
3.2.8 Perform preliminary planning for interface between remote teletype HF network facilities and the current and planned intra-Kingdom network facilities.
3.2.9 Undertake an early review of projected growth in demand for telex services to determine whether additional expansion is needed in the scope of planned projects for telex switches and equipment. In addition, consider extending the planned Phase One telex system to additional cities and towns in the late 1970s.
3.2.10 Proceed soon on fundamental telecommunications planning for implementation of full-color television service throughout the Kingdom. In particular, evaluate the technical capability of the TV channels for color transmission.
3.2.11 Consider carrying TV and radio services on additional links of the planned intra-Kingdom network, and providing two-way TV programming services via the international gateway facilities at Riyadh.
3.2.12 Study the further use of communications satellites, including such alternatives as a Saudi Arabian domestic satellite (Domsat) or a regional satellite: the latter concept would require close cooperation with other Arab nations that would be potential users.

3.3 Expansion Program

3.3.1 Local Plant:

Undertake 72 new telephone service and expansion projects in as many locations in the Kingdom: see Table VII-6. As part of the program, establish new guidelines for construction and undertake the following schedule for completing construction of new telephone office buildings:

1395-96	*1396-97*	*1397-98*	*1398-99*	*1399-1400*
3	11	25	25	10

Table VII-6
NUMBER OF TELEPHONE LINES PER 100 PERSONS BY 1980
(Following Local Plant Expansion Program
for the 72 Locations)

Location	*Lines/100*
Northern	
Amlaj	6
ʾArʾar	6
Hayil	12
Khaybar	5
Medina	22
Nabk	5
Skakah	8
Tabuk	10
Southern	
Abha	10
Abu ʾArish	5
Baysh	5
Jaizan	9
Khamis Mushayt	8
al-Majmaʾah	7
Najran	8
Pamad	6
Qabil	6
Qunfudhah	5
Rushan (Bishah)	10
Saamta	5
Sabya	6
Shuqayri	6
Western	
Baljarshi	10
Jiddah	22
al-Khurma	7
al-Lith	6
Mecca	24
Rabigh	13
Ranyah	5
Tayif	22
Turabah	6
al-Wajh	5
Yanbuʾ	10
Eastern	
Abqaiq	

Location	*Lines/100*
Eastern (continued)	
Ain Dar	6
ʾAnik	5
al-ʾAwwamiyah	5
Ayeen	5
Dammam	28
Hafar al-Batin	6
al-Hasa	13
Jubail	6
Khafji	7
al-Khobar	18
Leena	5
al-Mubarraz	10
Qatif	8
al-Qudayh	5
Rahimah	5
Safwa	7
Sayhat	7
Tarut	5
Thuqbah	7
Turaif	8
Central	
Afif	5
Badaeh	6
al-Bakairiah	6
Billad	6
Buraydah	19
ad-Dawadimi	5
al-Hariq	5
al-Khabra	5
al-Kharj	8
Layla	6
Midhnab	5
ar-Rass	7
Rimah	5
Riyadh	22
Shaqra	5
as-Sulayyil	5
ʾUnayzah	10
Uqdah	6

3.3.2 Intra-Kingdom Network:

Establish local transit-trunking at ten locations to the 1980 levels summarized below:

Location	*No. of Trunk Lines*	*Location*	*No. of Trunk Lines*
Abha	53	Mecca	242
Hofuf	48	Medina	116
Buraydah	93	Riyadh	366
Dammam	141	Tabuk	30
Jiddah	290	Tayif	117

Provide additional multiplex equipment in Phase One to ensure the 1980 capacity in all major links (this will require 34 projects at as many locations in the Kingdom).

3.3.3 International Service:

Upon completion of the installation of the permanent Earth stations at Riyadh and Tayif, relocate the temporary Earth stations from these locations to Abha and Tabuk.

3.3.4 Record Copy:

Carry out 45 projects at as many locations in the Kingdom to provide additional equipment and personnel in order that record communications will not be a bottleneck in the development of the Kingdom. (The projects include telegraph equipment and engineering, and telex switches and equipment.)

3.3.5 Monitoring and Testing:

Carry out the five relevant projects — monitoring stations located near Mecca, Riyadh, and Dammam, and testing laboratories at Dammam and Jiddah.

3.4 Organization Development

3.4.1 Develop an organization that will provide an efficient framework for guiding and implementing the growth and operation of the Kingdom's telecommunications industry.

3.4.2 Bestow on the new organization full executive responsibility for all aspects of the industry, including the accommodation within its initial executive structure of substantial foreign contract personnel.

3.4.3 Create two completely new information-flow systems, one for vertical flow of decision-making information, the other for lateral flow of information for systems operation, planning, and engineering.

3.4.4 Stress continued planning and updating based on changing conditions, traffic-flow studies, computerized records, monitoring data, and related information; and provide for regular revision of the telecommunications plan, both annually at the detail level and over the long term (15 years).

3.4.5 Implement the construction of a three-building Telecommunications Authority Headquarters complex in Riyadh — for Corporate Executive, Engineering, and Operations — and four Regional Telecommunications Authority Headquarters buildings in the Northern, Southern, Eastern, and Western regions.

3.5 Training

Fulfill the training requirements for Saudi personnel shown in Table VII-7.

Table VII-7
TRAINING REQUIRED FOR SAUDI
TELECOMMUNICATIONS PERSONNEL

(Number of Persons)

Training Level	*1395 -96*	*1396 -97*	*1397 -98*	*1398 -99*	*1399 -1400*
Senior managerial	15	20	25	25	32
Managerial-technical	288	300	324	342	444
Subtotal Managerial	303	320	349	367	476
Craft	346	487	856	913	1,578
Total	649	807	1,205	1,280	2,054

4. Finance

4.1 The total investment that is required to meet the Kingdom's goals in telecommunications is based on a totally integrated network. Because of this integration, any attempt to reduce capital in one type of plant will affect the revenue and capital required in all other plants. If it becomes necessary to reduce the total capital, then new estimates of cash flow will be needed.

4.2 The annual and total financial requirements for recurrent costs, completion of ongoing projects (including studies and planning), and for the expansion projects of the telecommunications sytem over the plan period are estimated as follows (SR millions)[a]:

	Budgeted 1394-95	*1395 -96*	*1396 -97*	*1397 -98*	*1398 -99*	*1399- 1400*	*Plan Total*
Recurrent	151.0	150.5	222.8	234.1	279.5	275.7	1,162.6
Project	900.4	1,121.2	398.5	543.4	638.0	505.3	3,206.4
Total	1,051.4	1,271.7	621.3	777.5	917.5	781.0	4,369.0
Revenue	59.0	82.8	145.6	197.7	304.2	410.0	1,140.3
Net estimated requirements	992.4	1,188.9	475.7	579.8	613.3	371.0	3,228.7

a Estimates of financial requirements and revenues are at 1394-95 prices using the tariff rates as of Shawwal 1394.

VII.B.2. POSTS

1. Present Conditions

1.1 The Postal Service made considerable progress during the first plan period in speeding up mail deliveries within the Kingdom and is now approaching its goal of 24-hour service for inland mail. The morale of postal workers has improved with the implementation of performance reviews. The Service is still handicapped, however, by antiquated facilities and by a shortage of trained manpower.

1.2 The Postal Service and Telecommunications budgets are now separated, but the complete separation of functions called for in the first plan has not been achieved. Partly because of this, pressing needs remain for refining the by-laws, procedures, and instructions that regulate the Service, and defining and coordinating administrative units at each organizational level.

1.3 The sending of all inland mail by SAUDIA required that the Service adopt fixed sorting and delivery schedules which have resulted in a major improvement. Much remains to be done to improve mail handling procedures, especially registered letters, and billing of government agencies. More automation is needed.

1.4 Major targets for improving post office facilities were not achieved during the first plan. These included new post office buildings and equipment for Jiddah, Riyadh, and Dhahran, 20 new post offices in smaller communities, and testing the concept of mobile facilities.

1.5 Significant progress was made on personnel and training programs. Personnel qualifications and pay scales were reviewed and adjusted, recruiting methods and forecasting of personnel needs were studied, and increasing numbers of employees were trained locally and abroad.

1.6 Public confidence in the Postal Service has improved, but the facts that many people still register mail and only a small increase in parcels dispatched has occurred indicate that additional effort is required. Postal facilities are being made more recognizable and the media do inform the public of postal services, but little improvement can be noted in the organization of stamp sales.

2. Objectives and Policies

2.1 The overall objective of the second Development Plan is to provide all parts of the Kingdom with prompt postal service of unquestionable reliability. The guiding policies for postal operations, facilities, personnel and training, public relations, and organization and administration are noted below.

2.2 Improve postal operations by developing new work methods and upgrading mail handling equipment at the postal centers and exchange offices, providing appropriate locations within the centers for handling parcels, introducing franking machines, and expanding the use of mobile post offices.

2.3 Expand the network of postal service buildings with new centers in Riyadh, Jiddah, and Dammam; new exchange offices in cities and new small post offices in other communities with a population of 500 or more; and improvement of existing postal buildings.
2.4 Increase and upgrade the postal work force through recruitment, training programs for all levels, and facilitating promotion of capable employees.
2.5 Establish public relations as a specific function responsible for encouraging and educating the public in the use of postal services.
2.6 Rationalize the organization and administration of the Postal Service so as to avoid duplication of effort, place responsibility at appropriate levels, and facilitate the introduction of modern management methods at all levels.

3. Programs and Projects

3.1 Operations

3.1.1 Provide 24-hour post office service in major cities and 18-hour service in other cities.
3.1.2 Carry out a major expansion of the mail distribution system to houses and commercial establishments by:

- ☆ Dividing cities into distribution zones.
- ☆ Establishing branch distribution offices and post office boxes.
- ☆ Naming streets and assigning address numbers to houses (begin in 1395-96 with the cities of Riyadh and Jiddah).
- ☆ Organizing special employee training and public information programs.

3.1.3 Purchase mobile post offices for use in major cities during rush seasons, and in rural areas. Thirty-eight mobile post offices are planned, to be distributed as follows:

	Central	*Western*	*Southern*	*Eastern*	*Medina*
1396-97	10	10			
1397-98			6	6	6

3.1.4 Establish an express mail system for internal and international mail:

- ☆ Include ordinary as well as registered mail.
- ☆ Hire and train special messengers.
- ☆ Provide for extra charges to customers using express mail.

3.1.5 Introduce franking machines in the major cities.
3.1.6 Carry out special projects in order to:

- ☆ Improve cooperation with the Customs Department in expediting the processing of incoming and outgoing parcels.

☆ Streamline the handling of money orders and transfer.
☆ Improve stamp design.

3.2 Facilities

3.2.1 Construct and equip major postal centers at Jiddah, Riyadh, and Dammam, beginning in 1397-98 and completing by 1399-1400.

3.2.2 Construct and equip 20 main exchange offices in the larger cities (1396-97 to 1399-1400).

3.2.3 Construct and equip branch exchange offices in smaller cities that have villages nearby (such cities as Munduk, Bishah, and Turabah).

3.2.4 Build smaller exchange offices and refurbish existing postal buildings. Construct 30 small offices in Riyadh and Jiddah, and 60 offices in other cities and villages (1395 to 1397).

3.2.5 Incorporate unique color and design features in the facades of all new and existing postal facilities to make them easily recognizable by the general public.

3.3 Personnel

3.3.1 Through recruitment and the training program described below, increase the number of personnel that are qualified to properly perform postal services.

3.3.2 Determine the manpower required for operation and management of postal services and re-evaluate on a sound basis the distribution of employees in post offices.

3.3.3 Obtain approval from the General Personnel Bureau to

☆ Provide an allowance to postal employees for field work.
☆ Make promotion dependent on attendance at postal training courses.
☆ Eliminate the freezing of employees at their grades.

3.4 Training

3.4.1 Construct secondary schools in Riyadh, Jiddah, and Dammam to offer three-year courses in postal training. Include present postal employees in the admissions, and plan for the following numbers:

	1395 -96	*1396 -97*	*1397 -98*	*1398 -99*	*1399-1400*
Students	–	180	360	630	720
Teachers	–	14	28	49	56
Other staff	–	4	6	12	13

3.4.2 Establish postal training centers in Riyadh, Jiddah, and Dammam:

☆ Use modern educational techniques to provide postal staff with theoretical and practical instruction.

☆ Organize training periods of between eight and sixteen weeks, with specialized courses of two to four weeks.

☆ Plan for the following numbers of trainees and staff:

	1395 -96	*1396 -97*	*1397 -98*	*1398 -99*	*1399- 1400*
Trainees	540	540	540	1,020	1,140
Teachers	11	11	14	19	20
Other staff	2	2	2	4	5

3.4.3 Provide funds for scholarships to send Postal Service employees and others abroad for higher studies in postal science.

3.5 Public Relations

3.5.1 Establish a public relations unit in the Directorate General.

3.5.2 Utilize the information media in acquainting the public with the nature and use of postal services.

3.5.3 Publish an informative periodical on postal services and distribute it to the public.

3.6 Organization and Administration

3.6.1 Define the functions and responsibilities of the Directorate General, district, and office levels, to avoid duplication of effort.

3.6.2 Establish an integrated organizational structure for these levels, in order to distribute the work more rationally.

3.6.3 Establish at the Directorate General a projects unit, an organization and management unit, the public relations unit, and a library.

3.6.4 Decentralize executive authority by delegating more responsibility to postal districts and main offices.

3.6.5 Establish three new postal districts — in Tabuk, Qasim (Buraydah), and Jaizan — to facilitate mail handling and expedite delivery.

3.6.6 Establish a central postal store at the Directorate General and one additional store in each postal district to keep supplies both of publications and of postal machines and equipment.

3.6.7 Re-classify postal offices by size and types of service offered.

3.6.8 Use the computer at the National Computer Center to improve statistical and accounting methods.

3.6.9 Establish a specialized financial section to deal with the accounts of foreign post departments. Simplify accounting systems by increased use of automation.

3.6.10 Implement projects to describe and classify postal jobs at all levels, revise postal models and registers in conformance with international postal agreements, develop postal statistics, improve filing, and standardize Postal Service materials.

4. Finance

The annual requirements of the Postal Service for ongoing and new programs and projects are estimated as follows (SR millions):

	Budgeted 1394-95	*1395 -96*	*1396 -97*	*1397 -98*	*1398 -99*	*1399- 1400*	*Plan Total*
Recurrent	87.7	102.1	123.5	136.5	146.1	156.0	664.2
Project	36.5	6.3	35.7	131.0	76.9	82.6	332.5
Total	124.2	108.4	159.2	267.5	223.0	238.6	996.7

C. MUNICIPALITIES

1. Present Conditions

1.1 The progress made in municipal development during the first plan was substantial. The number of settlements endowed with municipality status rose from 54 to 85, with the addition of 16 communities in 1394-95. Of the 16 municipalities created in the final plan year, 9 were previously branches of existing municipalities.

1.2 In several endeavors, the targets set for the first plan were exceeded, as shown in Figure VII-8.

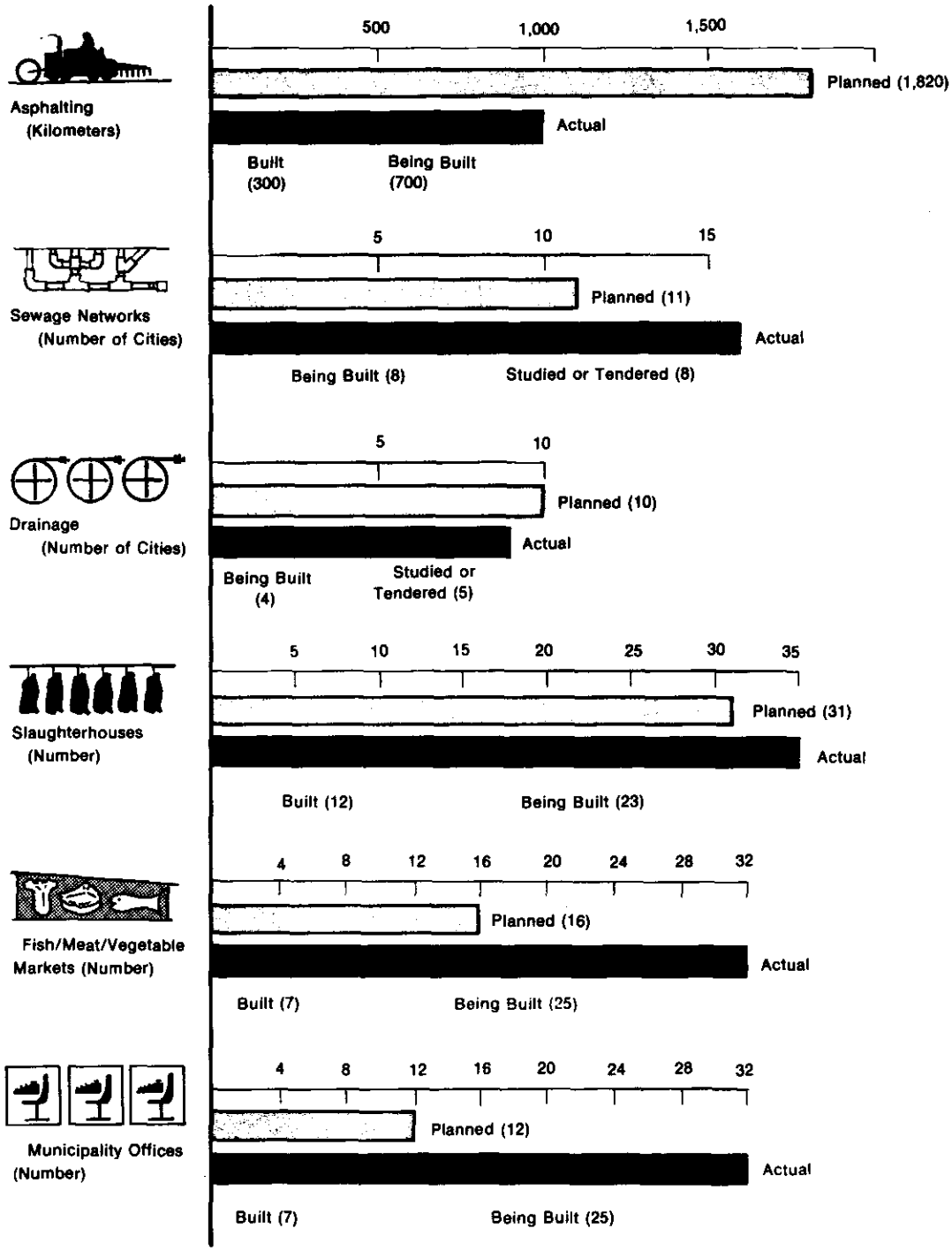
1.3 A number of other municipal facilities — including public parks, public toilets, wind screens, and flood prevention works—were also implemented according to the first plan schedule.

1.4 Several studies were either initiated or completed in the last five years. These include:

- ☆ Physical studies for all five regions, including master plans for their principal cities.
- ☆ A master plan for the city of Riyadh, now under implementation.
- ☆ Beautification studies and final designs for the cities of Mecca, Medina, Jiddah, and Tayif.
- ☆ Study and design of public parks in 11 major cities.

1.5 In spite of this progress, and the fact that budget appropriations during the 1390-95 period were approximately three times greater than originally planned, the Municipalities Department experienced a number of difficulties in the implementation and operation of its programs. These included:

- ☆ Problems in attracting qualified persons to serve in remote areas.
- ☆ Lack of contractors bidding for small or remote projects.
- ☆ A general lack of skilled technical and administrative staff in many municipalities.
- ☆ Lack of clear definitions as to roles and responsibilities within the current five different categories of municipality, and the extent of their autonomy.
- ☆ Lack of maintenance equipment and personnel.


Asphalting (Kilometers)
500
1,000
1,500
Planned (1,820)
Actual
Built (300)
Being Built (700)
Sewage Networks (Number of Cities)
5
10
15
Planned (11)
Actual
Being Built (8)
Studied or Tendered (8)
Drainage (Number of Cities)
5
10
Planned (10)
Actual
Being Built (4)
Studied or Tendered (5)
Slaughterhouses (Number)
5
10
15
20
25
30
35
Planned (31)
Actual
Built (12)
Being Built (23)
Fish/Meat/Vegetable Markets (Number)
4
8
12
16
20
24
28
32
Planned (16)
Actual
Built (7)
Being Built (25)
Municipality Offices (Number)
4
8
12
16
20
24
28
32
Planned (12)
Actual
Built (7)
Being Built (25)

- ☆ Inadequate coordination between the separate organizations responsible for the development of services in urban areas.

2. Objectives and Policies

2.1 The two principal objectives in the second Plan for municipal development are:

- ☆ Making cities, towns and villages healthier, more comfortable, more enjoyable and less costly places in which to live, work and travel.
- ☆ Improving the efficiency of cities, towns and villages as the locations for trade, industry and services.

2.2 Policies to be followed for attaining these objectives are spelled out below.

2.2.1 Expand and strengthen the current range of municipal services in accordance with the following.

2.2.1.1 Water Supply[a]:

- ☆ Assume gradually, from the Ministry of Agriculture and Water, the responsibility for construction and operation of municipal water supply systems.
- ☆ Provide all municipal residents with piped water in sufficient quantity to meet all reasonable needs and of a quality to meet the international standards established by the UN.
- ☆ Install water meters in all households to encourage economic water usage.

2.2.1.2 Rain Water Drainage:

- ☆ Establish integrated rain water drainage networks, separate from sewer networks, in those areas within large cities that suffer from flooding.
- ☆ Expand the development of medium and small municipalities over areas not affected by flooding, and construct water diversions; in extreme cases, relocate settlements.

2.2.1.3 Foul Water Drainage:

- ☆ Install waterborne sewage disposal networks in all municipalities within the 'A' and 'B' categories, and in 'C' and 'D' municipalities where sewage disposal problems are acute.
- ☆ Equip all 'C' and 'D' municipalities with tanker lorries for emptying sewage tanks and cess-pools; provide every municipality with tanker lorries, pending sewage network construction.

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a Details of municipal water supply projects are presented in the plan for Water in Chapter IV.

2.2.1.4 Roads and Street Lighting:

- ☆ Provide a basic network of permanently asphalted roads lit with mercury lamps in all municipalities.
- ☆ Provide temporary asphalting of secondary streets, and for those major and minor arterials that will be dug up for the installation of underground utilities within a short time.
- ☆ Program asphalting and street lighting in accordance with city master plans, where these exist.

2.2.1.5 Refuse Collection:

Introduce house-to-house garbage collection in all municipalities.

2.2.1.6 Sanitation Services:

- ☆ Appoint a qualified public health official to head the sanitation department in each large municipality and group of small municipalities.
- ☆ Establish public health laboratories in all 'A' and 'B' municipalities.
- ☆ Provide spraying machines in all municipalities for the purpose of insect eradication.

2.2.1.7 Municipal Buildings:

- ☆ Provide a municipal office building in each municipality that does not currently have one.
- ☆ Provide markets and slaughterhouses in all municipalities.

2.2.1.8 Electricity:

Transfer responsibility for operation of municipal electrical services to the Electric Services Department.

2.2.1.9 Recreation Areas:

Designate and develop public recreation areas both in and around major cities.

2.2.2 Introduce additional fields of action for municipal authorities, as follows.

2.2.2.1 Public Transportation:

Provide a well-organized public bus system in all large and medium-sized municipalities; wherever possible, assign the operation of the system to the private sector.

2.2.2.2 Creation of Model Communities:

- ☆ In cooperation with the General Housing Department, create new model communities, including housing, in the large and in some of the medium cities of the Kingdom. This action should alleviate local housing problems, upgrade the appearance and standard of the cities, and set an example for private developers.

☆ Create such model communities in accordance with city master plans, where these exist.

2.2.2.3 Cultural Centers:

Construct cultural or community centers for cultural, recreational, and civic activities in each municipality.

2.2.2.4 Guest Houses:

☆ Construct guest houses/motels in medium-sized municipalities, with special emphasis on locations on roads with a high traffic volume.

☆ Rent, and if possible sell, such guest houses to the private sector for operation.

2.2.3 Enlarge the population coverage of the municipalities system by expanding the number of municipalities on the basis of community size and function, population density, and religious importance; upgrade existing branch municipalities to full municipality status.

2.2.4 Improve the efficiency of the municipalities' system at both the central and local levels.

2.2.4.1 Adopt a four-category classification system, based on the population, function, and needs of each municipality and introduce standard organizational structures, administrative procedures, and municipal service levels by category.

2.2.4.2 Delegate increased executive and financial autonomy, especially to the larger municipalities.

2.2.4.3 Expand the number and skills of staff within the Department of Municipalities so as to handle effectively the planned programs and projects.

2.2.4.4 In cooperation with the Ministry of Commerce and Industry, improve contract procedures.

2.2.5 Prepare and subsequently implement master plans for both large and needy towns.

3. Programs and Projects

The coverage of planned municipalities projects is shown in Table VII-8 and described below.

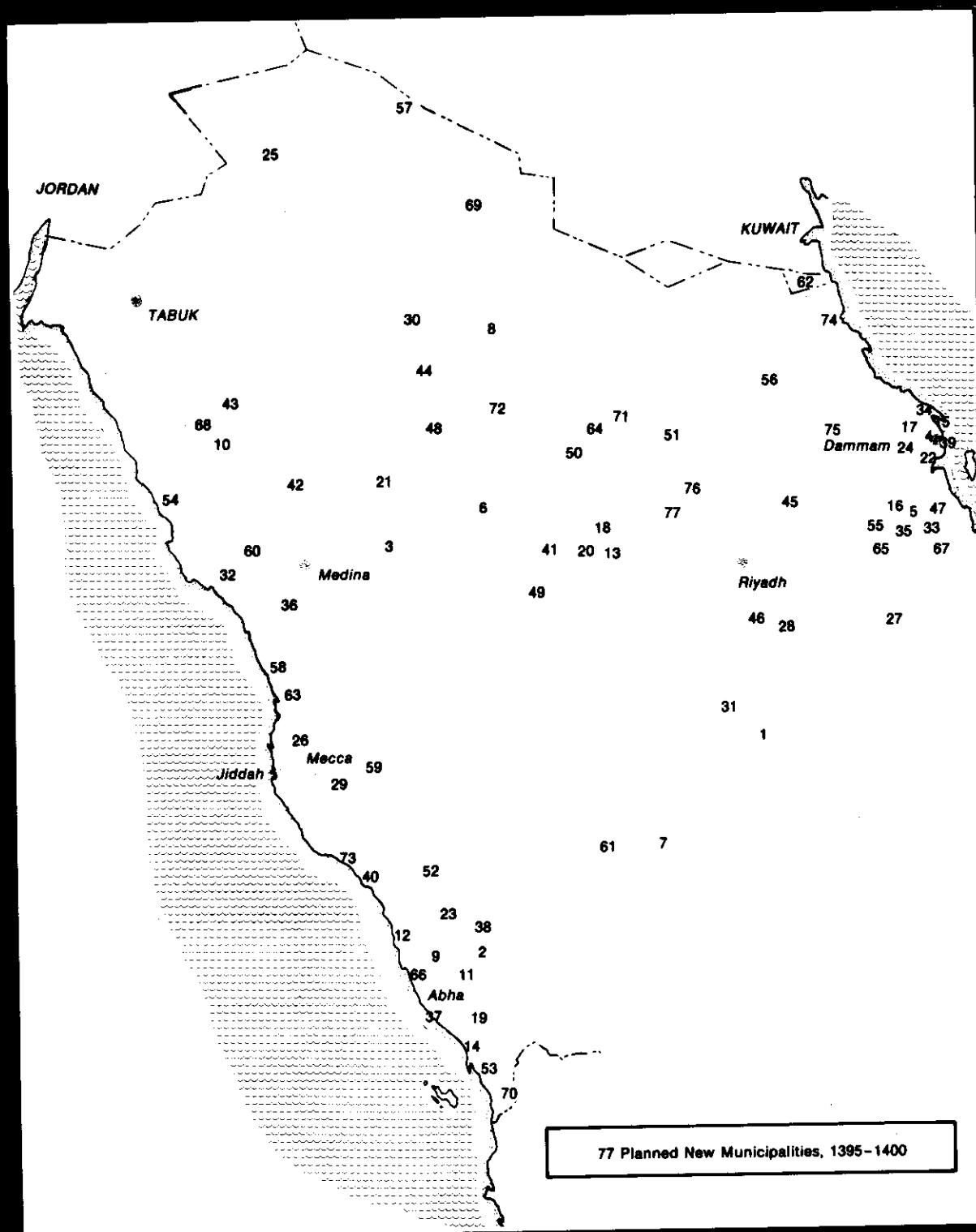
3.1 Increase the number of municipalities by conferring full municipality status on 77 communities, to reach a total of 162 municipalities by the end of the plan period. These municipalities, whose locations are shown in Figure VII-9 (see the key on the subsequent page), will be developed as follows:

1395-96	16
1396-97	14
1397-98	16
1398-99	16
1399-1400	15

Table VII-8
PLANNED MUNICIPAL PROJECTS BY MUNICIPALITY CATEGORY, 1395-1400

Project or Service	*Number and New Classification of Existing Municipalities*				*77 Settlements To Acquire Municipality Status*
	4 'A'	*14 'B'*	*18 'C'*	*49 'D'*	*1395-1400*
Established Municipal Functions					
Permanent asphalting of main streets	4	12	16	41	77
Permanent asphalting of main and local streets	–	2	2	7	–
Temporary asphalting of local streets	4	14	17	49	77
Street lighting with mercury lamps	4	12	17	48	77
Street lighting with ordinary lamps	1	11	11	39	–
Complete sewage systems	4	14	11	1	–
Partial sewage systems	–	–	3	1	–
Complete rainwater drainage	3	13	10	2	–
Partial rainwater drainage	1	1	3	28[a]	–
Municipal offices	1	4	4	24	62
Municipal garages	–	3	5	26[a]	62
Municipal warehouses	1	3	5	26[a]	56
Slaughterhouses	1	3	1	13	62
Markets	1	6	3	15[a]	–
Public toilets	3	11	14	46	40
Laboratories for food testing	4	8	1	–	–
Maintenance equipment	4	14	18	48	77
Sanitation equipment	4	14	18	48	77
Expropriations	4	14	10	40	–
Parks and gardens	4	6	5	2	–
Bridges	2	3	–	2	–
New Municipal Activities					
Public transportation	4	11	2	–	–
Green belts	4	6	4	–	–
Relocation of settlements	–	–	2	4	–
Development of new communities	4	14	7	1	–
Cultural centers	4	14	16	34	–
Guest-house and hostels	–	6	11	17	–
Public Zoos	1	1	–	–	–

a And in one or more branch municipalities.



77 Planned New Municipalities, 1395–1400

Key To New Municipalities

1. al-Badi'
2. al-Barik
3. al-Hanakiyah
4. al-Qudayh
5. al-'Umran
6. an-Nabkhaniyah
7. as-Sulayyil
8. Baq'a
9. Khay
10. Mughayra
11. Musabih
12. Quz
13. Saajir
14. Umm al-Khashab
15. Umm as-Sahik
16. al-'Uyun
17. al-Azam
18. al-Artawiyah
19. al-Darb
20. al-Faydah
21. al-Huwayit
22. al-Jumaymah
23. al-Maqas
24. 'Anik
25. an-Nabq Abu Qasr
26. Hajrah
27. Haradh
28. al-Muhammadi
29. Jirubah
30. Zubbah
31. al-Ahmar
32. al-Jabiriyah
33. al-Jafr
34. al-Jarudiah
35. al-Mansurah
36. al-Missayjid
37. al-Qahmah
38. ar-Rawiah
39. an-Nabiyah
40. Dawqah
41. Dukhan
42. Khaybar
43. Madain Salih
44. Mawqaq
45. Rumah
46. Wusaytah
47. al-Jishah
48. al-Mustajiddah
49. al-Qurayn
50. ar-Rabyi'iyah
51. al-Artawiyah
52. Bani Sar
53. Dhamad
54. al-Hanakiyah
55. al-Hulaylah
56. Jarrarah
57. Judayhat Arar
58. Masturah
59. Judayrah
60. Suq Swayq
61. Tamrah
62. Wafra
63. al-Abua
64. al-Ayn
65. al-Qarah
66. Almudhaylif
67. at-Taraf
68. al-Utheib
69. Duwaid
70. at-Tawal
71. 'Ayn Ibn Fuhayd
72. Fayd
73. Hamdanah
74. Safaniya
75. Sanabis
76. Tumayr
77. Ushaygir

3.2 Classify and operate municipalities under four categories (as shown in the table and in Figure VII-10).

3.2.1 Develop a standardized organizational, management, and manpower structure and regulations for each category of municipality (1395-96).

3.2.2 Implement the structure and regulations accordingly (1396-1400).

3.3 Water Supply Networks

See the discussion of Water in Chapter IV.

3.4 Rain Water Drainage Systems

Establish new drainage systems to serve approximately 377,000 houses, as follows.

3.4.1 Construct rain water drainage systems, complete or partial, in 18 major cities (1395-1400).

3.4.2 Construct complete major drainage systems in 12 municipalities in which the flooding problem is acute (1395-1400).

3.4.3 Construct smaller drainage systems in 31 municipalities (and one branch) with minor flood hazards (1395-1400).

3.5. Sewage Disposal Networks

Construct sewer systems connected to 444,350 houses during the period 1395-1400, as follows.

3.5.1 Expand or construct full sewage disposal networks to cover the total population of all 'A' and 'B' municipalities (1395-1400).

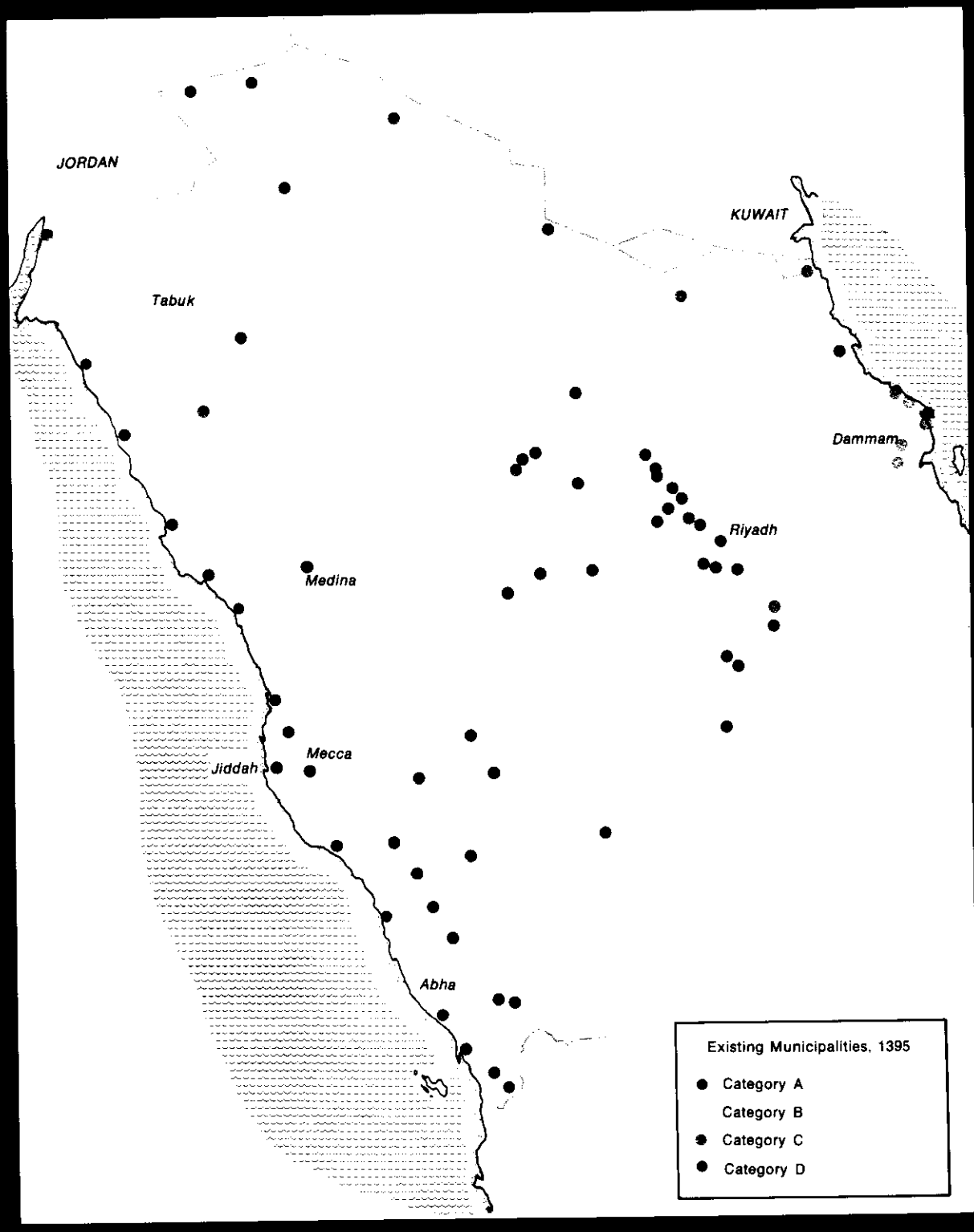
3.5.2 Establish sewage disposal networks in an additional 16 municipalities with acute disposal problems (1395-1400).

3.5.3 Equip all municipalities with tanker trucks for sewage removal pending completion of sewer system construction; 697 such tankers will be provided to municipalities during the plan period.

3.6 Road Network Improvement

3.6.1 Road lengths to be asphalted during the years of the Plan are as follows (kilometers):

	1395 -96	*1396 -97*	*1397 -98*	*1398 -99*	*1399- 1400*	*Plan Total*
Permanent asphalting (and street lighting)	202	346	482	602	705	2,337
Temporary asphalting	1,251	1,406	1,630	1,662	1,819	7,768


JORDAN
KUWAIT
Tabuk
Dammam
Riyadh
Medina
Mecca
Jiddah
Abha
Existing Municipalities, 1395
Category A
Category B
Category C
Category D

3.6.2 Provide permanent asphalting, street lighting, and sidewalks for 2,169 kilometers of roads and streets in existing municipalities (1395-1400).
3.6.3 Provide permanent asphalting, street lighting, and sidewalks for 168 kilometers of streets in the 77 new municipalities to be created during 1395-1400.
3.6.4 Provide temporary asphalting of 5,094 kilometers of roads in existing municipalities (1395-1400).
3.6.5 Provide temporary asphalting of 2,674 kilometers of roads in the 77 new municipalities.
3.6.6 Construct 13 bridges in 7 municipalities (1397-1400).
3.6.7 Construct ring roads around the cities of Riyadh, Mecca, Medina, and Jiddah (1395-1400).
3.6.8 Establish 46 completely equipped asphalting and road maintenance units in 31 municipalities (1395-1400).

3.7 Sanitation and Public Health Services

3.7.1 Establish house-to-house garbage collection in all municipalities: 507 garbage trucks will be provided for this purpose (1395-1400).
3.7.2 Establish 13 public health laboratories in 'A' and 'B' municipalities (1396-1400).
3.7.3 Appoint a qualified public health official as head of the sanitation department in each major municipality as well as for each group of smaller municipalities (1395-1400).
3.7.4 Supply all municipalities with insect spraying equipment; 3,779 spraying machines will be provided in the period 1395-1400.

3.8 Municipal Buildings

3.8.1 Construct municipal buildings as follows:

Building	*1395 -96*	*1396 -97*	*1397 -98*	*1398 -99*	*1399-1400*	*Total*
Municipal offices	3	38	21	18	17	97
Garages	8	31	19	20	18	96
Warehouses	6	29	20	19	18	92
Slaughterhouses	2	21	22	17	18	80
Markets	9	12	14	9	10	54
Public toilets	119	178	156	106	69	628
Public health laboratories	–	8	5	–	–	13
Cultural centers	–	–	3	11	54	68
Guest houses	–	–	13	6	15	34

3.8.2 Build municipality offices, and meat and vegetable (and where applicable, fish) markets in all existing municipalities that do not have them, and in most of the municipalities to be created in 1395-1400.
3.8.3 Establish guest houses or hostels in 34 medium-sized municipalities (1397-1400).

3.8.4 Develop cultural centers in 68 existing municipalities (1397-1400). Coordinate with the Ministries of Education, Labor and Social Affairs, and the General Presidency for Youth Welfare in their operation.

3.9 Electricity

Transfer operation of municipal electric services to the Electric Services Department on a gradual basis (1395-1400).

3.10 Public Transportation Systems

Establish public bus transportation systems in all 'A' and 'B' category municipalities, except Unayzah, and in al-Kharj and az-Zilfi (1395-1400).

3.11 Recreation Areas

3.11.1 Establish green belt recreational areas near major municipalities as follows (square kilometers):

☆ Riyadh	10
☆ Jiddah	12
☆ Mecca	8
☆ Medina	4.5

3.11.2 Establish 34.5 square kilometers of green belt near 11 'B' and 'C' category municipalities.

3.11.3 Establish public parks and gardens in 17 municipalities: 657 hectares will be devoted to this program (1395-1400).

3.11.4 Establish public zoos in Jiddah and al-Khobar (1399-1400).

3.12 Relocation and Development of Settlements

3.12.1 Relocate the following settlements because of serious flooding problems:

☆ Ghat	☆ Layla
☆ az-Zilfi	☆ Haql
☆ Huraymila	☆ Sobya

This program, which has already started in Ghat and Sobya, will last the duration of the plan period.

3.12.2 In cooperation with the General Housing Department, establish 33 model communities, including housing for 7,000 persons in each of 16 municipalities, and 9 smaller communities, with housing for 3,000 persons each, in an additional 9 municipalities (1395-1400).

3.13 Expropriation of Land

Expropriate land for municipal purposes in 68 of the existing 85 municipalities; approximately 506 hectares will be expropriated in the period 1395-1400.

3.14 Master Plan Preparation and Implementation

3.14.1 Formulate, in cooperation with the Central Planning Organization, a national urban policy to guide town planning and development policy (1395-96). This will include specification for a land-use classification system, building codes, traffic control, and land development policy.

3.14.2 Prepare comprehensive master plans for 66 municipalities, 8 to be completed by the end of 1395-96, 47 by the end of 1396-97, and the remainder by the end of 1397-98.

3.14.3 Implement individual master plans as soon as they are completed (1396-1400).

3.15 Studies Program

3.15.1 Assign the studies required prior to execution of projects to outside consultants in 71 of the 85 existing municipalities. Studies in other municipalities will be undertaken by the technical departments of the municipalities.

3.15.2 Undertake the Following Studies:

- ☆ Problems and needs of 'A' and 'B' category municipalities (1397-98).
- ☆ Village development requirements (1395-98).
- ☆ Municipal programs for the third development plan (1397-1400).

3.16 Planning, Coordination, and Follow-up

3.16.1 Establish a development authority in each of the 'A' and 'B' category municipalities to coordinate the rapid and effective implementation of municipal projects and to ensure the efficient operation of municipal services (1395-1400).

3.16.2 Appoint a permanent advisor within the Municipalities Department for re-evaluation, adjustment, coordination, and follow-up of the programs within the Plan and for the preparation of the third municipalities development plan (1395-1400).

3.16.3 Establish a computerized central data bank for the Town Planning Office and the Municipalities Department (1395-96).

3.17 Administrative and Operational Improvements

3.17.1 Adopt a standard format for the organization, staffing, and procedures to be established in each category of municipality (1395-96).

3.17.2 Delegate increased executive and financial autonomy to the 'A' and 'B' municipalities (1395).

3.17.3 Prepare a Municipalities code defining the organization, responsibilities, and authority of municipalities for promulgation by the Council of Ministers in 1395-96.

3.17.4 Where practical, consolidate the utilization of common services and personnel by groups of smaller municipalities in close proximity (1395-1400).

3.17.5 Increase the technical and administrative staff of the Department of Municipalities (1395-1400).

3.17.6 Introduce improved incentives for employees to fill positions in remote or hardship locations (1395).

3.17.7 Encourage, as far as possible, the private sector operation of municipal services; priorities are garbage collection, insect spraying, public transportation, and guest house operation (1395-1400).

3.17.8 Develop, in cooperation with the Ministry of Commerce and Industry, simple and timely procedures for contractor registration (1395).

3.17.9 Assign projects, as far as practicable, on a package basis to contractors or consortiums in order to improve coordination and speed up implementation (1395-1400).

3.17.10 In cases when projects are of a long duration or where other circumstances make cost estimating difficult, adopt the system of cost-plus contracts (1395-1400).

3.18 Training

3.18.1 Increase the number of Municipalities Department trainees in non-technical courses within the Institute of Public Administration (1395-1400).

3.18.2 Establish an Institute of Training for Municipal Affairs in Riyadh (1395-96) by expanding the Department's existing training center: the initial capacity will be 150 students, expanding to 300 by the end of the year 1400.

3.18.3 In the older and better organized municipalities, include on-the-job training in the curricula for students at the Institute of Training for Municipal Affairs:

- ☆ Building and construction supervision
- ☆ Town planning
- ☆ Basic town planning
- ☆ Public health and sanitation
- ☆ Mechanics
- ☆ Personnel and administration

4. Finance

The estimated financial requirements of the Department of Municipalities are as follows (SR millions):

	Budgeted[a] *1394-95*	*1395 -96*	*1396 -97*	*1397 -98*	*1398 -99*	*1399-1400*	*Plan Total*
Recurrent	610.1	870.0	1,150.0	1,410.0	1,720.0	2,040.0	7,190.0
Project	3,628.4	7,194.0	8,647.4	9,333.1	10,228.2	10,735.1	46,137.8
Total	4,238.5	8,064.0	9,797.4	10,743.1	11,948.2	12,775.1	53,327.8

a Project (and total) excludes SR 55.4 million for water projects, which are included in the financial data for Water presented in Chapter IV.

The projected figures for the plan period do not include the requirements for the development of model communities or municipal water projects; these are included in the financial estimates for Housing and Water, respectively.

D. HOUSING

1. Present Conditions

1.1 As the direct by-product of rapid urban growth, and the shortages or rising costs of labor, land, and materials for residential buildings, housing in the Kingdom's cities has generally grown worse during the period 1390-91 to 1394-95. Approximately 75,000 standard or better urban dwellings were constructed during this period, compared with an estimated need for new houses and replacements of 154,000 units. Since demand in recent years for new and replacement housing has been approximately double the supply, overcrowding and shanty towns have resulted. The present urban housing stock that is standard or better is therefore declining in proportion to total housing need. Moreover, thousands of households may eventually lose their meager investments in shanties whose locations do not conform to urban growth patterns.

1.2 Resources for planning, building, and maintaining housing are in short supply, as are resources for the construction sector as a whole. In general, the nascent residential building industry has met with rapidly rising costs or actual shortages of land, labor, technology, capital and materials — and institutions to improve the flow of these resources to housing construction are lacking.

1.2.1 Prices of residential land in the cities have more than doubled in recent years and land speculation is accelerating. This has contributed to a leapfrog pattern of urban development under which cheaper land on the perimeter of urban areas, beyond the utilities networks, is developed before more expensive land closer to existing places of work, education, and marketing.

1.2.2 Labor prices have increased dramatically, reflecting the real shortages of unskilled, skilled, and managerial labor for construction. Technologies for increasing output per worker have not been applied, nor have vital construction management skills been developed that would help avoid the costly delays of poorly programmed sequences of tasks.

1.2.3 Capital for residential building is in short supply. Nearly all new residences are financed through savings or incomes of the owners. Without any dependable and readily-available sources of construction financing, builders are unable to pay for materials, land, and labor from their own accounts. Without any long-term mortgage lending and secondary-mortgage system, demand from middle- and moderate-income

households is being eliminated because of the inability of these families to save rapidly enough to stay abreast of rising house prices.

1.2.4 Materials are in short supply and have increased in cost tremendously. Many construction jobs have been halted for lack of cement or steel. The supply of cement, finally under government regulation, has become all too dependent on continual importation, with accompanying delays in port and customs clearance. Even locally available raw materials, such as sand, aggregate, and crude oils used in the production of concrete or asphalt, are not always available because of the lack of, or malfunction of, local technologies and equipment to produce them.

1.2.5 Private-sector institutions to plan, finance, build, and manage housing have not developed. The Kingdom has no recognizable housing industry, but rather a proliferation of small firms operating on a cash-in-hand basis for individual clients. Banks or financial institutions make almost no residential mortgage loans, and there are few corporations solely engaged in the sale, rental, and management of residential real estate. Few corporations make loans to employees for the construction or purchase of housing (the notable exception has been Aramco).

1.3 Significant progress has been made since 1390 in the development of institutions to express and organize the public will in housing. A General Housing Department was organized in 1391 under the Ministry of Finance and National Economy. This department has implemented a public housing program whereby the Government takes responsibility for:

- ☆ Design and construction of housing projects for low and moderate income households.
- ☆ Selection and administrative processing of candidate recipients.
- ☆ Collection of payments on hire-purchase, interest-free loans repayable over a 25-year period.
- ☆ Maintenance of public spaces and services of the projects during a three-year period after completion of construction. The Real Estate Development Fund was established in 1394 to enable individuals to implement real estate projects both for personal use and commercial exploitations.

While the Department has several projects under construction, it and the Fund are both still too largely engaged in formulating plans and in organizing technical and managerial skills to implement their programs.

1.3.1 The Department at present has a total of 2,500 public housing units under construction in Dammam, Jiddah, Riyadh, and al-Khobar. These projects were authorized in 1391. The houses will be assigned to qualified low- and moderate-income households during 1395-97. The Department has also:

- ☆ Begun construction of 1,000 serviced plots in Dammam for immigrant households and those displaced by urban renewal.
- ☆ Completed preliminary designs and is now preparing to let contracts for the construction of 31,000 housing units in eight municipalities throughout the Kingdom; land for 25,000 of these units has already been acquired.
- ☆ Advertised abroad for pre-qualification statements from firms capable of building a minimum of 100,000 housing units by prefabricated or mechanical means, within three years of award of contract.

1.3.2 The Real Estate Development Fund has been empowered to lend to individuals and corporate entities who want to build or purchase housing, to enter into joint agreements with municipalities for the development of profitable residential or commercial projects, and to assist employers in the construction of housing for their employees.

1.4 A series of studies has been undertaken to determine residential building needs in the period 1395-1400, as summarized below.

1.4.1 Studies completed for the General Housing Department in 1392 indicated a need for 324,200 urban dwelling units to be constructed in 1395-1400.

1.4.2 Five recent regional socio-economic studies for the Central Planning Organization indicate that the Kingdom's urban housing need for the second development plan period will be approximately 329,000 units, as follows:

- ☆ Central Region: 54,000 in Riyadh alone.
- ☆ Eastern Region: over 125,000 units in the coastal-zone cities, resulting from government-induced industrial growth.
- ☆ Northern Region: approximately 5,200 units.
- ☆ Western Region: over 129,000 units.
- ☆ Southwestern Region: approximately 9,000 units, to stay abreast of the shifts from rural to urban areas, in spite of the region's net loss of population.

1.5 For purposes of the second Development Plan, the Kingdom's total need for standard or better urban dwellings is set at approximately 338,000 units. New urban households will need 181,000 of this total; housing that should be replaced owing to natural or accidental loss will account for 40,000; and the present stock of 117,000 sub-standard or improvised dwellings should be considered candidates for replacement.

2. Objectives and Policies

2.1 The primary objective for housing development is to enable every household in the Kingdom to have a decent, safe, and sanitary dwelling of a standard consistent with its level of income. Because of technical constraints and long lead-times between program

initiation and housing occupancy, it will be some years after 1400 that this goal can be achieved.

2.2 A second main objective is to ensure that enough housing, both permanent and temporary, is built during the plan period to accommodate the additional manpower needed to implement the Plan.

2.3 A third main objective is to develop housing within orderly urbanization patterns, that accord with the employment, social, and environmental requirements of residential settlements.

2.4 A fundamental objective — without which none of the others can be achieved — is to develop the institutional capability and financial and legal structures needed to implement and support a continuing effort of housing development.

2.5 Targets for housing construction set for the period 1395-1400 are shown in Table VII-9 and are summarized below.

Table VII-9
PLANNED CONSTRUCTION OF HOUSES AND SERVICED PLOTS
COMPARED WITH ESTIMATED NEED, 1395-1400
(Thousands of Units)

	1395 -96	*1396 -97*	*1397 -98*	*1398 -99*	*1399-1400*	*Total*
Private-sector						
Housing	20.3	21.9	24.0	26.5	29.4	122.1
Public-sector						
Housing						
Phase I	1.2	1.3	5.0	10.0	15.0	32.5
Phase II	–	–	–	5.0	10.0	15.0
Phase III	–	–	–	–	5.0	5.0
Serviced Plots	–	2.2	5.1	11.4	25.6	44.3
Subtotal	1.2	3.5	10.1	26.4	55.6	96.8
Project housing (temporary)	1.0	5.0	10.0	15.0	20.0	51.0
Total supply	22.5	30.4	44.1	67.9	105.0	269.9
Need for new and replacement housing	38.2	40.8	43.9	47.2	50.9	221.0
Supply minus Need	(15.7)	(10.4)	0.2	20.7	54.1	48.9
Sub-standard units remaining[a]	133.0	143.4	143.2	122.5	68.4	[b]

a 117.3 thousand in 1394-95.
b Not applicable.

2.5.1 Through the Real Estate Development Fund, the private sector will be encouraged to expand its construction of housing units from the present (1394-95) level of 17,500 units to 29,400 units in 1399-1400. The total plan target for private-sector construction is 122,100 units.

2.5.2 The public sector, through the General Housing Department, will assume responsibility for the construction of 32,500 houses in accordance with the Phase I program already initiated. Additional targets for the public sector include second and third phase programs, each for 30,000 houses, in total, which will be initiated in the second and third years of the Plan and will start producing houses in the fourth and fifth years respectively, completing a total of 20,000 houses during the Plan. The public-sector program includes the preparation of 44,300 serviced plots to be allocated to low-income households for the orderly self-help construction of housing.

2.5.3 The Government will call on contractors for major development projects to assist in meeting housing demand, in two ways. First, it will fund the construction of permanent housing planned as integral parts of major development projects, such as military bases, industrial complexes, hospitals, and some educational institutions. This construction is included in the targets already noted for the private sector. Second, the Government will require contractors to construct temporary housing for the labor required to implement such projects. A target of 51,000 temporary housing units has been set for this program, on the assumption that it will be adjusted upward or downward in the light of actual requirements.

2.6 Production of housing and serviced plots in accordance with the above targets will exceed estimated demand for new and replacement housing by 48,900 units and will reduce sub-standard housing in unserviced settlements by over 40 percent by the end of the Plan.

2.7 The following supplementary objectives and policies will guide implementation of the planned housing programs.

2.7.1 Housing for Low-and Moderate-Income Families:

- ☆ Public-sector activity will be directed toward housing low- and moderate-income households.
- ☆ Public-sector resources will be used to make home ownership possible for at least 75 percent of urban households.
- ☆ Financial subsidies will be developed for builders and householders so that no household has to spend more than 20 percent of its income on rents, loan repayments, or hire-purchase agreements; or more than 25 percent for the above, plus maintenance and utilities.
- ☆ Provisions will be developed to assure households which lose their

income-earner through death or accident will not lose their house if it has been financed with government assistance.

- ☆ Provisions for periodic review of householders' incomes will be made to assure that government housing resources are being directed to low- and moderate-income householders. The results of these reviews will be legally binding, and will provide for appropriate increases of rents or repayment schedules.

2.7.2 Standards of Housing:

- ☆ Public-sector resources will be used only for investment in residential subdivisions and housing of standard or better quality.
- ☆ All residences built with government assistance must meet or exceed minimum residential space and building standards.
- ☆ All land subdivisions for residential development must meet or exceed town planning regulations concerning plot sizes, set-backs, density ratios, and vehicular access.

2.7.3 Security of Tenure:

- ☆ Every household will be secure from illegal eviction.
- ☆ Conformance with strict and standardized tenure agreements will be demanded for all government-assisted or constructed dwellings.
- ☆ Householders will be counseled on their obligations and rights under relevant tenure agreements prior to occupancy of a house constructed or improved by any form of government assistance.

2.7.4 Location of Housing:

- ☆ Public-sector resources will be allocated to those regions and municipalities where there will be stable employment and high demand for housing.
- ☆ Housing financed with government assistance will be built within, and in conformance with the physical planning guidelines of the city in which it is located.

2.7.5 Housing Finance:

- ☆ Private-sector housing will be financed in part from direct loans made by the Real Estate Development Fund and in part by funds channelled through the REDF to private financial institutions engaged in financing housing and real estate development.
- ☆ Public-sector housing will be financed from public funds and income from rents, loan repayments, and hire-purchase agreements.

2.7.6 Housing Services:

- ☆ Capability will be developed to provide householders with technical and legal advice and services relating to building, purchasing, renting, and maintaining their houses.
- ☆ These services will be extended first to households allocated serviced plots under the program for developing such plots, and subsequently to other low- and moderate-income householders who are investing in permanent housing.

2.7.7 Housing Institutions:

- ☆ The existing General Housing Department will be strengthened into a Housing Organization and will be provided with the capability to implement the housing plan. It will be linked to the Real Estate Development Fund which will be concerned with the development of financial services and incentives for private-sector housing.

3. Programs and Projects

3.1 Private-Sector Housing (Real Estate Development Fund)

3.1.1 Prepare in 1395-96 institutional and legal measures and operating programs for making housing finance available to private-sector companies and individuals at two levels:

- ☆ For low- and moderate-income dwellings — direct loans from the Real Estate Development Fund on concessionary terms.
- ☆ For higher income housing — finance from the Fund to corporate and private developers of housing through banks and other commercial channels.

3.1.2 Design these programs to finance the following percentages of total private-sector housing development:

1395-96	*1396-97*	*1397-98*	*1398-99*	*1399-1400*
–	*10%*	*20%*	*35%*	*50%*

3.2 Public Sector Housing (General Housing Department)

3.2.1 Construct 32,500 houses in accordance with the Phase I targets noted earlier.

3.2.2 Formulate detailed programs for constructing houses to meet the targets for Phases II and III, in coordination with other agencies concerned (1395-96 and 1396-97).

3.2.3 Also, in coordination with other agencies concerned, formulate a detailed program for developing serviced plots in accordance with the targets shown earlier (1395-96).

3.3 Project Housing (Various Agencies)

Construction of permanent and temporary housing for major development projects constitutes part of these projects, so is not included in the programs and projects of the housing plan.

3.4 Institutional Development (High Committee for Administrative Reform)

3.4.1 Review the existing organizational structure for development of housing, taking into consideration institutional responsibility for the following:

- ☆ Urban planning and residential zoning.
- ☆ Public utilities and services.
- ☆ Land acquisition and registration.
- ☆ Housing development, both public and private.
- ☆ Housing finance, both public and private.
- ☆ Real estate services.

Based on the results, define the institutional requirements for implementing the housing plan. Complete these tasks by the end of 1395. A provisional program for institutional development follows.

3.4.2 Strengthen the existing General Housing Department into a Housing Organization (hereafter referred to as the Organization) headed by a Board of Directors representing the various government, financial, economic, and social interests related to housing. Provide it with the authority, budget, and responsibility for implementation of the housing plan and coordination of its implementation with the projects and policies of other authorities.

3.4.3 Include on the Board of Directors a Secretary General of the Board charged with submission of policy matters to the Board and implementation of the decisions of the Board. In order to ensure the feasibility of the decisions of the Board and their effective implementation, the Secretary General of the Board should also be the Director General of the agency charged with implementation of the housing plan.

3.4.4 Accord Agency status to the General Housing Department and make it reponsible for implementation of all public sector housing programs and support for the Housing Organization. Provide it with the specialized staff necessary to control the implementation of projects and build up the expertise required to ensure realization of the housing plan.

3.4.5 Establish by the end of 1398 regional branches of the Organization in the largest city of each region, headed by a regional director vested with the authority to implement the Organization's programs in the region.

3.4.6 Assign all activities relating to the development of financial services and incentives — including home mortgage loans, financial aid to developers, loan

redemption and insurance, and funding of private sector housing finance institutions — to the Real Estate Development Fund.

3.4.7 Undertake, through the agency charged with implementation of the public sector housing plan, the following activities:

3.4.7.1 Land Purchase and Development:

- ☆ Identify, acquire, develop, and install utilities for the sites needed to accommodate 52,500 housing units and 44,300 serviced plots (1395-99).

3.4.7.2 Public Housing Construction:

- ☆ Coordinate the construction of 52,500 housing units, lease them to tenants on a hire-purchase basis, and manage them after construction (1395-1400).

3.4.7.3 Legal Services:

- ☆ Introduce and obtain approval of a standardized residential land-titling and registration contract and legally-binding, standardized agreement contracts for rental, hire-purchase, sales, and provisional sales to be used in all government housing programs (1395-96).

3.4.7.4 Architectural Services:

- ☆ Enforce minimal residential space and building standards for all government-assisted housing following approval of standards in 1397.

3.4.7.5 Finance:

- ☆ Assist in creating a financial services network to manage debt servicing arrangements for all public sector housing programs. This network should be functioning in all municipalities where public sector housing is being constructed by the end of 1398.
- ☆ Develop and obtain approval of a series of tables and scales for housing subsidies based on housing prices, household incomes, and the policy of Government to have no household spend over 20 percent of its income on mortgage payments or rents (1395-96).
- ☆ Develop and obtain approval of rules and an enforcement mechanism concerning delinquency, default, foreclosure, and eviction of households which fall behind in their payments for public sector housing (1395-96).
- ☆ Develop and begin to enforce rules and codes for periodic recertification of household incomes in public sector housing projects (1396-97).

3.4.7.6 Housing Services:

- ☆ Develop and obtain approval of minimum space and residential building standards for all public sector housing programs (1396-97).
- ☆ Develop and obtain approval of land-subdivision regulations, residential-subdivision design standards, provisos for the enforcement of municipal master plans, and standards to ensure access to places of worship, education, and shopping (1396-97).
- ☆ Undertake the registration and certification of all site-development and residential-construction companies, land developers, building materials and supplies, and building technologies. This Office will also undertake or commission research directed toward improving the technology of residential construction in Saudi Arabia.
- ☆ Develop and begin to disseminate during 1396-97 a series of public communications — such as posters, pamphlets, and mass media announcements — concerning each of the housing programs of the Organization, as well as general information about the Organization.
- ☆ Develop and begin to institute in 1397-98 a home-ownership and rental counseling service. A series of technical-assistance bulletins for householders desiring to contract for building their own homes should be made available by the end of 1396 at all offices of the Organization as well as in other public buildings. The technical assistance should by the end of 1398 include, free of charge, plans and designs of houses and other detailed information on home construction and maintenance.
- ☆ Identify actual and potential constraints in residential construction which would inhibit production of the targeted housing, and bring these problems to the attention of the Board of Directors of the Housing Organization with recommendations for their solution.

3.4.7.7 Staff Functions:

- ☆ Develop, in cooperation with the Central Department of Statistics, the research capability by the end of 1396 to report accurately on the number of public and private units occupied and under construction; on the materials, land, and labor costs in the 25 largest municipalities of the Kingdom; on the general cost of housing paid by different income groups; and on the labor productivity and output of the residential construction sector.
- ☆ Develop in 1395-96 capability to define the manpower requirements of the Organization and to formulate and implement manpower recruitment and training programs for its staff.

3.4.8 Undertake, through the Real Estate Development Fund, the following activities:

- ☆ Draft and obtain approval of amendments to the legislation establishing the Real Estate Development Fund, so that it may channel funds to private-sector financial institutions on commercial terms as well as to private developers and individuals on concessionary terms.
- ☆ Develop programs that will stimulate entry into the real estate market of individual and corporate developers to enable the private sector to increase construction of housing units to 29,400 annually in 1399-1400 (continuing).
- ☆ Develop and secure the establishment of a General Insurance Fund (1396-97). This fund will cover such contingencies as death or disability of the head of household, and destruction or abandonment of the house owing to natural or accidental circumstances.

4. Finance

A preliminary planning forecast of the government funding required to implement the above programs is as follows (SR millions):

	1395 -96	*1396 -97*	*1397 98*	*1398 -99*	*1399- 1400*	*Plan Total*
Private sector	-	364.0	797.0	1,540.0	2,440.0	5,141.0
Public sector						
Housing	168.0	182.0	700.0	2,100.0	4,200.0	7,350.0
Serviced plots	-	88.0	204.0	456.0	1,024.0	1,772.0
Total[a]	168.0	634.0	1,701.0	4,096.0	7,664.0	14,263.0

a Based on average costs per unit — including land, land development, and building construction (where applicable) — of SR 166,000 for private-sector housing, SR 140,000 for public-sector housing, and SR 40,000 for serviced plots.

E. THE HOLY CITIES AND THE HAJJ

1. Present Conditions

1.1 In the five years of the first development plan, the Kingdom has welcomed and accommodated at the Haram, the sanctified area which encompasses the Holy City of Mecca, an average of 100,000 additional pilgrims each year:

	Number of Pilgrims Arriving		
Year	*From Saudi Arabia*	*From Other Countries*	*Total*
1390	541,650	431,270	972,920
1393	412,590	607,760	1,020,350
1394	454,220	918,780	1,373,000

More than 100,000 residents of Mecca also perform the Hajj each year, bringing the total number of pilgrims close to 1.5 million in 1394.

1.2 At least half of the pilgrims from outside the Kingdom now travel most of the way by air:

	Pilgrims from Other Countries Arriving				
Year	*By Road*	*By Sea*	*By Air*	*Total*	*Percent By Air*
1390	138,060	84,550	208,660	431,270	48.4
1393	120,240	130,570	356,950	607,760	58.7
1394	277,750	177,390	463,640	918,780	50.5

Almost all the pilgrims coming by sea or air enter the Kingdom at Jiddah; in 1394 they numbered nearly 450,000 air travelers and nearly 175,000 sea travelers. Expansion of the new pilgrim terminal at Jiddah airport is already being planned. Regulations require that pilgrims must leave Jiddah very soon after arrival; thus within a few days in 1394 over 600,000 pilgrims must have traveled either the 70 kilometers to Mecca by road, or 420 kilometers by road or by air to the holy city of Medina.

1.3 Several transportation studies have included the Jiddah-Mecca-Medina triangle. One of the resulting recommendations is a mass transit system — either rail or express buses using exclusive bus lanes — between Jiddah and Mecca. Another possibility is the development of Tayif airport into a second major entry point for pilgrims traveling by air. Tayif airport, about 100 kilometers from Mecca, is at present classified as "main domestic."

1.4 Although not strictly part of the Hajj, a visit to the Prophet's Mosque and other holy sites in Medina is made by many pilgrims before or after the 8th to 13th Dhul-Hijjah, the six days of the Hajj proper. Data from a socio-economic survey — carried out as part of a "Special Action Area Survey" for the Regional and Town Planning Department of Municipal Affairs, Ministry of Interior — indicate that over half of the pilgrims on the 1391 Hajj visited Medina at least once:

34 percent before the Hajj
32 percent after the Hajj
12 percent both before and after.

1.5 The same study, relating to a sample of nearly 14,000 pilgrims, offers other findings of importance in the Kingdom's planning for the Hajj:

☆ The occupational status of the pilgrims was fairly uniform, even when the various nationalities were considered separately. The proportions found were as follows:

Occupational Category	*Percent of Total*
Professional and managerial	16
Clerical	11
Agricultural	16
Sales and service	21
General	18
Not actively employed	18

☆ Males accounted for 63 percent of the pilgrims, females for 37 percent. Proportions according to age group were:

Age Group	*Percent of Total*
Under 16	10
16-30 years	23
31-50 years	38
51-70 years	24
Over 70	5

1.6 Data on the 1391 Hajj from the Central Department of Statistics and on the 1394 Hajj from the Ministry of Interior show some shifting in the proportions of pilgrims from different countries:

Countries of Origin	*Percent*	
	1391	*1394*
Arab	55	51
Asian non-Arab	29	38
African non-Arab	15	10
European	1	0.5
American	0.03	0.01

Nearby countries, such as Yemen, Syria, and Pakistan, account for the largest groups of pilgrims over the years, but the Hajj has been made by an increasing number of pilgrims from Indonesia and other distant countries in the last few years.

1.7 All the data above indicate that the Hajj is the world's largest regular gathering of human beings and probably the most varied, considering the pilgrims' nationalities and languages, cultural habits, and ages.

1.8 Animals and vehicles add to the pressures on many of the Government's services during the Hajj period. In 1391 the number of animals sacrificed was estimated at over 600,000 and the total sales value of these animals at over SR 30 million — one of the most important factors then in the economy of the Western Region. Given the much larger number of pilgrims on the Hajj in 1394, the number of animals sacrificed that year probably approached 820,000.

1.9 The number of automobiles rotating between Hajj locations has totaled between 60,000 and 70,000 in each of the last five years, with nearly as many used on the 9th of Dhul-Hijjah alone, for the Attending at Arafat. In addition to automobiles there is the considerable traffic of motorcycles, trucks, and buses.

1.10 As host to hundreds of thousands of pilgrims each year and guardian of the holiest sites of Islam, Saudi Arabia must provide a very wide array of temporary and permanent services. A special High Committee for the Hajj, headed by the Emir of Mecca, coordinates activities of many of the agencies concerned. The Ministry of Hajj and Waqfs supervises services for pilgrims in Jiddah as well as in the holy cities. The consulates of the Ministry of Foreign Affairs work at peak levels to process visa applications. Agencies within Communications, Interior, Health, Information and other ministries, as well as private organizations such as the Saudi Red Crescent Society must all spend many man-hours and apply other resources in taking care of the pilgrims.

1.11 Some of the total area of the sacred precinct of the Haram is consecrated forever to the holy sites of Islam in Mecca, Mina, Muzdalifah, and the Plain of Arafat. Much of the rest of the area is mountainous with rocky outcrops, difficult terrain on which to build the accommodations and public facilities needed by the pilgrims.

1.12 Around Mina, in a relatively flat area roughly three kilometers long and one kilometer wide, the pilgrims stay for three days. A hierarchy of committees has been established to obtain and evaluate different plans to accommodate the pilgrims at Mina, some of which would use the hillsides as well as the valley floor. Detail design of this massive physical development will take approximately two years, and a further six to eight years may be needed for actual construction. Thus, the present planning estimate of two million pilgrims may have to be increased even before the design stage is complete. Because the Hajj falls a little earlier in each solar year, any permanent

facilities for the pilgrims must take account of both the high heats of summer and sudden rains of winter typical of the Mecca area.

1.13 The holy city of Mecca has grown without planning over the centuries around the Ka'bah, the focal point of all Islam. In the densely built-up area of narrow streets, unique architectural structures are lost among old and new buildings of no distinction. In spite of regulations requiring landlords of new buildings to provide adequate parking spaces, the number of automobiles in the city has led to chaotic parking and congested traffic.

1.14 The holy city of Medina, one of the most beautiful in the Kingdom, is also under pressure from the growing number of residents, visitors, and automobiles. Only good city planning and stern application of restrictions on building developments and traffic will preserve its open spaces and important architectural features for the inspiration and pleasure of all Muslims in the years ahead.

2. Objectives and Policies

A basic long-range objective of Saudi Arabia is to develop physical infrastructure and services that will enhance the spiritual experience of pilgrims on the Hajj and visitors to the holy city of Medina. In pursuit of this objective, the Government will be guided by the following policies.

2.1 Preserve with utmost care the specific holy sites of Islam.

2.2 Conserve and enhance all other areas of special religious importance within the Haram and Medina.

2.3 Develop safe, comfortable, and efficient transportation systems for pilgrims as alternatives to use of private automobiles.

2.4 In plans to accommodate the growing number of pilgrims, provide for the highest possible standards of public health and convenience while conserving the essential characteristics of the natural environment.

2.5 Encourage Saudi citizens and other Muslim residents of the Kingdom who have already made the Hajj to abstain from repeated pilgrimages so that their fellow-Muslims from other countries may more readily fulfill this basic requirement of Islam.

3. Programs and Projects

3.1 Preservation and Conservation

3.1.1 Analyze all studies made to date that are relevant to the holy areas, to develop specific policies and regulations for their preservation or enhancement (1395-96).

3.1.2 Perform a special review of all regulations now applying to the physical aspects of the Haram and the holy city of Medina, and change and expand them as necessary to safeguard in perpetuity the holy sites (1395-96).

3.1.3 Increase the capacity of the appropriate authorities to enforce all regulations concerning site preservation and conservation, and development of Mecca and Medina as communities. Under the supervision of the Governor in each area, specify the direct responsibilities of the Governors, Presidents of municipalities, and Town Planning offices (continuing).

3.2 Transportation

3.2.1 Analyze the implications of previous relevant transportation surveys, including the Special Action Area Study and the Saudi Arabia National Transport Survey, at three levels:

- ☆ The total transportation requirements of the Jiddah-Mecca-Medina area (Ministry of Communications, Central Planning Organization, and Ministry of Hajj and Waqfs).
- ☆ The potential for mass transportation systems within and between the three cities (same agencies as above).
- ☆ The separation and flow of vehicular and pedestrian traffic within the Haram (Municipalities Department, Ministry of Hajj and Waqfs, and local authorities).

3.2.2 In light of the swift increase expected in the number of pilgrims from other countries, initiate immediately detailed feasibility studies of known mass transit systems with high potential for meeting the special purposes of the Hajj (1395-97).

3.3 Accommodation of Pilgrims

3.3.1 In cooperation with representative pilgrim guides (the mutawwifs), leading citizens of Mecca and Medina, and other knowledgeable persons and concerned agencies, survey the year-round accommodations now available in the holy cities and study ways to increase their quantity and quality for the pilgrims (1395-97).

3.3.2 Expedite with all means available the planning, design, and construction of accommodation at Mina (1395-1400).

3.4 Muslim Conference

Under the Ministry of Hajj and Waqfs, plan to hold a Muslim conference-at-large annually near the time of the Hajj, to provide a positive role for Muslims in human welfare and world peace.

3.5 Health Services

3.5.1 In cooperation with the governments of other Muslim countries, continue to enforce vaccination programs and other health measures appropriately taken before the pilgrims leave their own countries (continuing).

3.5.2 To further ensure prevention of communicable-disease outbreaks, increase as necessary the Kingdom's own vaccination and hygiene services provided for the pilgrims (continuing).

3.5.3 Facilitate the plans of the Saudi Red Crescent Society and other private organizations, as well as government health agencies, to provide first aid and other curative health services (continuing).

3.5.4 Review and improve as necessary the physical arrangements for the sacrifice of animals, including means for processing the animal remains so as to minimize any health hazards and waste associated with the sacrifice (1395-96).

4. Finance

Because so many government agencies are called upon to provide physical infrastructure and services for the holy cities and the Hajj, the financial requirements of these activities are not separately identified. It has been estimated that physical infrastructure development may require up to SR 5,000 million over the plan period.

VIII. PLAN MANAGEMENT AND IMPLEMENTATION

VIII. Plan Management and Implementation

The first section of this concluding chapter discusses the size of the Plan in terms of its financial, manpower, and construction requirements, and the problems of implementation that will arise due to the magnitude of the total requirements.

Plans for providing the statistics, maps, meteorological data, and standards and specifications needed to support development planning are then presented, followed by a strategy for developing science and technology to support progress toward national goals.

The remaining sections are concerned with central planning, measures to expand the capability of the public and private sectors to implement the Plan and steps being taken to enlist international cooperation in the development of the Kingdom.

A. SIZE OF THE PLAN

The increase in revenues from oil has provided Saudi Arabia with the financial resources to implement a development plan far larger, by any measure, than could possibly have been contemplated a few years ago, and far larger than has ever been possible for any country of comparable population at an early stage in its development into a modern industrial society.

This fortunate circumstance offers the Kingdom an unprecedented opportunity to improve the prosperity, security, health, education, and general well-being of both present and future generations of its people. It also offers the challenge to demonstrate that abundant financial resources can be successfully used to transform the society into a modern nation capable of sustaining a high standard of living for all its people through the development of its human skills and material resources.

Inherent in this opportunity and challenge is the risk that achievement will fall far short of expectation. The expected growth of the economy and the plans for achieving that growth have been described in previous chapters. This section presents some measures of the magnitude of the plan that has been formulated and draws conclusions from these indicators about the problems that will be encountered in its implementation.

1. Financial Requirements

1.1 Table VIII-1 compares the first and second development plans in terms of the finance required from the public budget for their implementation. While problems have inevitably been encountered in obtaining comparability of data, the table shows that the second Development Plan calls for public expenditure of about SR 498,000 million, almost nine times that projected for the first plan. Revenues at their present level of approximately SR 100,000 million at the end of 1394-95, and additional revenues from foreign investment and taxes on foreign enterprises and employees will be sufficient to meet the total appropriations required for the Plan even with significant inflation in costs.

1.2 The four development sectors shown in the table account for SR 318,000 million or 64 percent of total public expenditures. Public expenditures proposed for these sectors in the second Development Plan are over nine and a half times those projected for the first plan.

Table VIII-1
COMPARISON OF ESTIMATED FINANCIAL REQUIREMENTS
OF FIRST AND SECOND PLANS[a]
(SR Millions)

	First Plan		*Second Plan*		*Ratio: Second Plan to First Plan*
	Amount	*Percent*	*Amount*	*Percent*	
Economic Resource Development	6,033.3	10.7	92,135.0	18.5	15.3
Human Resource Development	10,198.7	18.1	80,123.9	16.1	7.9
Social Development	2,443.0	4.4	33,212.8	6.7	13.6
Physical Infrastructure Development	14,086.8	25.1	112,944.6	22.7	8.0
Subtotal, Development	32,761.8	58.3	318,416.3	63.9	9.7
Administration	10,466.5	18.6	38,179.2	7.7	3.7
Defense	12,994.7	23.1	78,156.5	15.7	6.0
External Assistance, Emergency Funds, Food Subsidies, and General Reserve	–	–	63,478.2	12.7	–
Subtotal, Other	23,461.2	41.7	179,813.9	36.1	7.7
Total Plan	56,223.0	100.0	498,230.2	100.0	8.9

First plan values have been adjusted to 1394-95 prices (used uniformly for the second Plan except for certain long-term projections that included inflation factors.)

1.3 In addition to the overall increase in the magnitude of the plan, there is a significant change in the direction of public finance, as summarized below.

1.3.1 Provision for economic resource development is over fifteen times larger than in the first development plan and ranks second after physical infrastructure in its financial requirements. This reflects the emphasis in the Plan on economic diversification.

1.3.2 Provision for human resource development is almost eight times larger than in the first development plan, reflecting both continued emphasis on educating and training the future manpower of the Kingdom and the relatively high share of this sector in the total allocation of public finance under the first development plan.

1.3.3 Social development is allocated thirteen and a half times the amount allocated under the first plan, reflecting the second Plan's objective of increasing real incomes and accelerating the provision of social services.

1.3.4 Physical infrastructure is again accorded the highest share in total allocations, and the eightfold increase in its allocation reflects the continuing need to develop the transportation, communications, municipalities, and housing infrastructure needed to support the development of all sectors.

1.3.5 Administration is accorded a less than fourfold increase in allocations to meet the requirements of the agencies concerned with planning and management information

discussed later in this chapter, and to provide for an annual increase of ten percent in other administrative costs.

1.3.6 Provision for defense is six times larger than in the first plan, reflecting an assumed 20 percent annual increase in the defense budget.

1.3.7 The last item — external assistance, emergency funds, food subsidies, and general reserve — accounts for 13 percent of total requirements and is based on an annual increase of ten percent in the provisions for these items in the 1394-95 budget. It thus includes substantial unallocated provisions to provide additional financing for anti-inflationary measures, for regional agricultural development, and for corporations, companies, and funds recently established, such as the Supplies Corporation, the hotel, inland transportation, and non-oil shipping companies, and the contractors' fund, for which the financial needs have not yet been determined.

1.4 Table VIII-2 shows the division of the Plan's financial requirements between recurrent and project costs. Provision for projects accounts for 75 percent of financial requirements for development and 67 percent overall. The costs of the main development programs are tabulated below (SR millions):

Water and Desalination	34,065
Agriculture[a]	4,685
Electricity	6,240
Manufacturing and Minerals	45,058
Education	74,161
Health	17,302
Social Programs and Youth Welfare	14,649
Roads, Ports and Railroads	21,283
Civil Aviation and SAUDIA	14,845
Telecommunications and Post	4,225
Municipalities	53,328
Housing	14,263
Holy Cities and the Hajj	5,000
	309,104
Other Development	9,312
Subtotal Development	318,416
Defense	78,157
General Administration	38,179
Funds	63,478
Subtotal Other	179,814
Total Plan	498,230

a Does not include provision for regional development.

Table VIII-2
THE PLAN'S ESTIMATED RECURRENT AND PROJECT COSTS
(SR Millions)

	Recurrent Costs[a]	*Project Costs*[b]	*Total*
Economic Resource Development	4,518.5	87,616.5	92,135.0
Human Resource Development	43,907.3	36,216.6	80,123.9
Social Development	18,148.8	15,064.0	33,212.8
Physical Infrastructure Development	12,530.8	100,413.8	112,944.6
Subtotal, Development	79,105.4	239,310.9	318,416.3
Administration	18,010.6	20,168.6	38,179.2
Defense	14,652.8	63,503.7	78,156.5
External Assistance, Emergency Funds, Food Subsidies, and General Reserve	54,857.9	8,620.3	63,478.2
Subtotal, Other	87,521.3	92,292.6	179,813.9
Total	166,626.7	331,603.5	498,230.2

a Covers items under Chapters I, II, III of the annual budget except as noted below.
b Covers items under Chapter IV of the annual budget together with public corporation project costs and public financing of private-sector and joint-venture investments normally carried in Chapter III of the annual budget.

1.5 The allocations of public finance summarized above reflect only part of the total allocation of national resources to development. They do not include the following:

- ☆ Investment by the private sector in agricultural development apart from that financed by agricultural credit.
- ☆ Investment by the oil companies in expanding oil production capacity.
- ☆ Investment by the private sector and joint-venture partners in industry, apart from the amounts to be financed by industrial credit.
- ☆ Investment by the private sector in commerce, transportation, and services.
- ☆ Investment in private-sector housing not financed by the Real Estate Development Fund.

2. Manpower Requirements

A second measure of the size of the Plan is the manpower required to implement it. Details of manpower requirements have already been given in earlier chapters. The projections of the total work force required to implement the Plan, compared with current manpower, are summarized below (thousands):

	1395	*1400*	*Percent Increase*
Private Sector	1,353.3	1,977.9	46
Public Sector	168.8	352.7	109
	1,522.1	2,330.6	53

A net increase of 498,600 foreign workers is required to make up the difference between the increase in the Saudi work force — 309,900 — and the total increase in the work force of 808,500 workers.

3. Construction Requirements

Construction activity included in the Plan also provides a measure of its size. It is estimated in an earlier chapter that the total value of construction in 1394-95 is about SR 10,000 million and that the total volume of construction called for in the Plan may exceed SR 300,000 million in 1394-95 prices. To complete the construction component of this investment — about 80 percent of fixed capital investment — will require an average annual rate of increase of about 60 percent in construction, which means a ten-fold increase by the end of the Plan.

4. Constraints

4.1 It is clear from the above that the financial cost of the Plan is not the critical measure of its size.

4.2 The conclusion to be drawn from the projections of manpower requirements is not so clear. The forecast of private sector requirements is drawn mainly from estimates of the manpower that would be required given the projections of growth in value added in constant prices. These projections were based on an overall assessment of the highest rates of growth sustainable over the period of the Plan, taking into account the absorptive capacity of the economy. On the other hand, the public sector projections reflect the manpower estimated by government agencies as needed for the implementation of their plans. Hence the manpower projections already reflect to a considerable degree the limitations on absorptive capacity; nevertheless, even the increase in the work force specified above may prove exceedingly difficult to satisfy.

4.3 It is recognized that to achieve an average annual rate of growth of 60 percent in construction volume will be extremely difficult however much success is achieved in improving construction methods and supplies. In view of this potential constraint on plan implementation, it may be necessary to reschedule construction programs from year to year in accordance with development priorities and in the light of the impact of growing construction volume on prices, wages, contract bids, services, supplies, and housing.

4.4 Work has already started on assessment of physical constraints on plan implementation. High priority must now be given to developing central planning capability to define priorities in relation to manpower and construction requirements and to rescheduling of lower priority projects and programs in the light of these constraints.

B. PLANNING AND MANAGEMENT INFORMATION

VIII.B.1 STATISTICS

1. Present Conditions

1.1 Substantial progress has been made in achieving the targets set for the development of the Kingdom's statistics under the Central Department of Statistics (CDS) during the first plan period.

1.1.1 A comprehensive census of population and housing was taken on 27-28 Shaban 1394 (14-15 September 1974) and it was expected that data on population by sex and administrative areas could become available a few months later. Complete results covering all characteristics and major correlations will be available after 18 to 24 months. Final publication of the full report is scheduled for Rabi II, 1396 (April 1976).

1.1.2 Field work on the demographic sample survey, consisting of a series of quarterly sample surveys to obtain vital statistics data from which natural population growth rates can be calculated, has been completed and the necessary tables are being compiled.

1.1.3 The Ministry of Agriculture and Water carried out surveys on production of both summer and winter crops for the years 1390-91, 1391-92, and 1392-93. The results of the 1390-91 survey have been published. The 1391-92 survey results have been tabulated, and final processing and publication of these data should be accomplished in 1395. Processing of the data obtained from the 1392-93 survey is under way. A census of settled agriculture was completed in 1394, and preliminary results should become available by the end of 1395.

1.1.4 Annual surveys of establishments have improved the available data on manufacturing, gas and electricity, construction, trade and services, communications, insurance, and real estate. The results of the 1392 survey, conducted in 1393, are being processed. (No survey was conducted in 1394 owing to preoccupation with the census of population and housing.) Construction activity is only partially covered by these surveys, and the results are inadequate. The survey samples were based on the frame provided by a census of establishments completed in 1391; the census was carried out in urban centers only and did not cover the rural areas.

1.1.5 Data-base improvements have also resulted in expansion of the national accounts and development of new statistical series for the period 1386-87 to 1392-93. These include gross domestic product, gross national expenditure, national income, and capital formation. Time-series on wages and employment are not yet available.

1.1.6 Data on actual government expenditures have just become available for the years 1384-85 through 1392-93. Analysis of these data will yield substantial improvement in the national accounts — product, income, expenditure, and capital formation.

1.1.7 The final report on the family budget expenditure surveys, undertaken in Riyadh, Jiddah, and Dammam in 1390-91, has been published. The cost of living index up to 1973 has also been published.

1.1.8 Administrative reporting of statistics to the CDS by other ministries and departments also continues to improve. Post office, telephone, and telegraph statistics have been streamlined by the CDS, and the process will be extended throughout the Government as rapidly as possible.

1.2 Construction of suitable offices, equipment rooms, and library for the CDS is in progress.

1.3 It has not been possible to strengthen the CDS staff as planned. A large number of vacancies could not be filled, and a number of staff members left for better opportunities elsewhere.

1.4 A great deal of delay still takes place between the time that data are collected and a report on them is prepared. There is also usually a long delay between the time the report is prepared and actually printed and distributed.

2. Objectives and Policies

2.1 In addition to improving the quality of all existing statistical series, a major objective for the period of the Development Plan 1395 is to provide information that is not now available, but is required by planners, decision-makers, managers, and appraisers. The type and scope of information sought is detailed in the table entitled "Statistical Series for the Period 1395-1400" which appears at the end of this section of the Plan.

2.2 The collection, collation, analysis, and publication of economic and social data of all types will be accelerated.

2.3 The above objectives will be achieved by implementing the following supporting policies.

2.3.1 Provide adequate incentives to attract and retain well-qualified statistical personnel.

2.3.2 Utilize foreign consultants to the extent needed to meet program schedules and to provide on-the-job training.

2.3.3 Establish the machinery needed to coordinate the policies and programs of statistical agencies throughout the Government, and to provide for timely compilation and dissemination of data of all types.

3. Programs and Projects

3.1 Statistical Analysis

Create a Statistical Analysis Section to evaluate all published statistics and to make recommendations for improving their quality and scope (1395-96).

3.2 Census and Surveys Organization

Establish a Census and Surveys Organization to provide, on a continual basis, current data on demographic characteristics, health, consumption, housing conditions and facilities, educational characteristics and cultural activities, employment, and economic levels of households. This organization will also:

- ☆ Maintain all material relevant to its tasks, such as census and survey frames, and records and maps.
- ☆ Assist other ministries and agencies in planning and conducting surveys of all types.
- ☆ Extend the Census of Establishments to rural areas.
- ☆ Develop time-series on wages and employment.
- ☆ Conduct surveys of current mining and quarrying activities.
- ☆ Assist the Ministry of Health in establishing a registration system to provide a record of vital statistics.

3.3 National Accounts

Expand the National Accounts series to include:

- ☆ Economic and functional classifications of actual expenditures.
- ☆ Relation of GNP and national income.
- ☆ Relation of national income and personal income.
- ☆ Disposition of personal income.
- ☆ Presentations of all series in constant prices.
- ☆ Capital formation by economic category.
- ☆ Breakdown of private consumption by type of expenditure.
- ☆ Income and outlay, and capital finance accounts.
- ☆ Input-output tables.
- ☆ Regional accounts of products and expenditures.
- ☆ New statistical series on prices, wages, transportation, construction, and trade margins.

3.4 Administration

3.4.1 Reorganize field offices, strengthen and up-grade central staff, and acquire control of reproduction units so as to facilitate publication.

3.4.2 Obtain the financial support required to carry out all programs, including the completion and equipping of new building; recruiting, training, and promoting of personnel; and development of an adequate library and data bank.
3.4.3 Hire teams of consultants and foreign experts to help carry the expanded work load.
3.4.4 Create a technical committee to coordinate the policies and programs of all statistical agencies on a national basis.
3.4.5 Establish standing panels for various statistical fields as an organized means for discussing all the different programs, as a technique for participation by all interested ministries and agencies, and as a method of avoiding duplication of work.
3.4.6 To provide continuity, require all ministries and agencies to have a permanent statistical unit.
3.4.7 Prepare, code, and key-punch all data for computer processing.
3.4.8 Develop a library of statistical publications and arrange for exchange of publications with other countries and various international organizations.

3.5 Training

3.5.1 Establish training programs in the CDS, the Institute of Public Administration, and in the universities where practical applications can be taught and practiced.
3.5.2 Send qualified employees abroad for training.

4. Finance

The financial requirements of the Central Department of Statistics are estimated as follows (SR millions):

	Budgeted 1394-95	*1395 -96*	*1396 -97*	*1397 -98*	*1398 -99*	*1399-1400*	*Plan Total*
Recurrent	49.3[a]	15.9	18.0	20.1	21.7	23.2	98.9
Project	7.3	3.0	5.0	-	-	-	8.0
Total	56.6	18.9	23.0	20.1	21.7	23.2	106.9

a Includes extraordinary expenditures incurred in conducting the Census of Population and Housing.

Table VIII-3
STATISTICAL SERIES FOR THE PERIOD 1395-1400

Program and Scope	*Source/Frequency and Agency Responsible*
1. *Population*	
A. Number of persons classified by economic activity, marital status, educational level, size of household, sex, age, nationality group; employment status and duration of stay by place of normal residence and birth.	Census/decennial. Conducted by the CDS/Ministry of Interior in Shaban 1394, results expected to be available by 1395-96.
B. Births and deaths, rates of births and deaths, natural increase of population.	Sample survey/annual. CDS to conduct until the civil registration system is fully developed.
C. Civil registration system. Phase I (demonstration areas around Riyadh).	
Phase II (demonstration areas on sample basis in the settled parts of the country).	
Phase III (demonstration areas in all the settled parts).	
Births and deaths.	Registration/as and when. Undertaken by Ministry of Health.
D. Number of immigrants and emigrants by sex, age, and occupation.	Admin. Reporting/annual and quarterly.
II. *Housing*	
Number of houses by type, rooms, occupants, type of utilities, building material, and floors.	Census/decennial. Conducted by CDS within the framework of the population census, results are expected to be available by 1395-96.
III. *Labor*	
Number in the labor force by kind of economic activity, occupation, levels of skills, sex, age, nationality, wages and salaries paid, and hours of work.	Sample survey/biennial. Results are available on the 1392-93 survey conducted by the Ministry of Labor and Social Affairs/CDS. The next is scheduled for 1395-96.
IV. *Agriculture*	
A. Number of agricultural holdings by size, kind of tenure, irrigation and power, workers, capital formation, and fertilizers and insecticides used.	Census/quinquennial. Conducted by the Ministry of Agriculture/CDS in 1394, results are expected to be available by 1395-96. The next is planned for 1397-98 with full results published in 1398-99.
B. Estimates of area sown and yields (selected crops): number of fruit trees/vines by kinds and yields.	Sample survey/annual. Ministry of Agriculture/CDS.
C. Number of livestock by kind, sex and age; number slaughtered; quantity and value of products.	Sample census/bi-annual. Ministry of Agriculture/CDS.
D. Forests: area, density, fellings and growth; quantity and value of timber extracted.	Sample census/quinquennial. Ministry of Agriculture/CDS, scheduled for 1394-95.
E. Fishing: catch by kind and value.	Sample survey/annual. Ministry of Agriculture/CDS.
F. Agricultural prices in markets and those received by farmers, with prices of inputs.	Sample survey/quinquennial. Scheduled for 1398-99 by Ministry of Agriculture.

Continued

Table VIII-3 (continued)

Program and Scope	Source/Frequency and Agency Responsible
G. Survey of agricultural lands.	Sample survey/biennial. Planned by Ministry of Agriculture to commence in 1396-97.
H. Index number of agricultural products.	Annual. Planned by the Ministry of Agriculture/CDS to commence in 1397-98.
V. *Mining, Manufacturing, and Production of Gas and Electricity*	
A. Industrial establishments.	Census/quinquennial. Scheduled for 1395-96 by CDS.
B. Number of establishments, key inputs and products, value-added by kind of economic activity and size of establishment; legal organization; value of fixed assets; number of workers; and capacity of installed power equipment.	Sample survey/annual. Ministry of Commerce/CDS.
C. Estimates of employment and value-added by kind of economic activity; gross capital formation; average prices paid and received for key outputs.	Sample survey/annual. CDS/Ministry of Commerce.
D. Index number for industrial products.	Admin. Reporting/annual. Ministry of Commerce/CDS.
E. Survey of minerals.	Sample survey/annual. Scheduled by the Ministry of Petroleum/CDS for 1395-96.
VI. *Construction*	
Total value and value-added by type of construction and employment, with details of new starts and completions.	Sample survey/biennial. Scheduled by the CDS/Ministry of Interior for 1394-95.
VII. *Wholesale, Retail, and Service Trades*	
A. Number of establishments, kind activity, employment size, legal/economic organization.	Census/quinquennial. Scheduled by the CDS/Ministry of Commerce for 1395-96.
B. Number of workers, value of sales, gross margins, inventories, capital formation, investments, and turnover.	Sample survey/annual. Ministry of Commerce/CDS.
C. Wholesale and retail prices (selected commodities).	Sample survey/annual, quarterly, monthly, weekly. CDS/Ministry of Commerce.
D. Trade margins.	Sample survey/annual. By the CDS/Ministry of Commerce and Industry.
VIII. *External Trade*	
A. Imports, exports, and re-exports of goods by commodity and country.	Admin. Reporting/annual, quarterly. CDS/Customs and Ministry of Finance. Present classification based on BTN and needs to be replaced by SITC.
B. Index numbers and unit costs for imports and exports.	Admin. Reporting/annual. CDS.
IX. *Transportation*	
A. Roads: length by type, number and carrying capacity of commercial vehicles, value-added and gross capital formation, number of workers.	Admin. Reporting/annual. Ministry of Communications.

Continued

Table VIII-3 (continued)

Program and Scope	*Source/Frequency and Agency Responsible*
B. Rail: net freight ton/passenger/kilometer; revenue; capital formation; rolling stock; number of workers.	Admin. Reporting/annual. Ministry of Communications.
C. Sea: gross tonnage of goods loaded/unloaded: revenue: value-added by ports; capital formation; number of workers; capacity of ports.	Admin. Reporting/annual. Ministry of Communications.
D. Air: passenger-kilometer; cargo, mail, ton-kilometer; revenue; value-added, capital formation; number of aircraft, number of passengers embarked/disembarked; cargo loaded/unloaded for domestic and international flights.	Admin. Reporting/monthly. Ministry of Defense (Civil Aviation).
E. Transport: origin and destination of commodities by type of transport.	Sample survey/annual. Ministry of Communications.
F. Traffic: intensity of vehicle traffic at selected spots.	Sample survey/annual. Ministry of Communications.
X. *Communications*	
A. Post Offices: number of post offices, letters/parcels cleared; revenue; value-added and capital formation; number of workers.	Admin. Reporting/annual. Ministry of Communications.
B. Telephones: number of exchanges; subscribers; calls registered; revenue; value-added and capital formation; number of workers.	Admin. Reporting/annual. Ministry of Communications.
C. Telegraph: number of telegraph offices, telegrams cleared; revenue; value-added and capital formation; number of workers.	Admin. Reporting/annual. Ministry of Communications.
D. Radio/TV: number of broadcasts/telecasts; stations; value-added and capital formation; number of radio/TV sets; number of workers.	Admin. Reporting/annual. Ministry of Information.
XI. *Money, Banking, Insurance, Finance*	
A. Banks: number of banks, branches and workers; current and time deposits; loans and advances; gross capital formation and value-added.	Admin. Reporting/annual. SAMA/CDS.
B. Insurance Companies: number of companies/agencies; premiums received by kind of business, benefits paid, and costs incurred; number of workers.	Mail inquiry/annual. CDS.
XII. *Education*	
Number of public and private schools by level of education; teachers by nationality	Admin. Reporting/annual. Ministry of Education.

Continued

Table VIII-3 (concluded)

Program and Scope	*Source/Frequency and Agency Responsible*
and level of education; students by sex, level of education enrolled, examination results (appeared and passed); value-added and capital formation; drop-outs.	
XIII. *Health*	
Number of hospitals, dispensaries and health centers; number of beds and their utilization; in-patients and out-patients by type of medical care/diseases; doctors and other medical personnel by sex, nationality and specialization; departmental statistics; value-added and capital formation; and number of drug stores.	Admin. Reporting/annual. Ministry of Health.
XIV. *Household Surveys*	
Demographic characteristics, health, food consumption, housing conditions and facilities, educational and cultural activities, employment, and economic level of the household.	Sample survey/annual. This will replace a number of present surveys, such as family living, demographic, and cost of living.
XV. *Government*	
Economic classification of receipts and disbursements, economic and functional classifications of expenditures.	Admin. Reporting/annual. CDS/Ministry of Finance.
XVI. *Hajj*	
Survey of local/foreign pilgrims; transportation; slaughtered animals.	Survey/annual. CDS/Ministry of Hajj.
XVII. *National Income*	
By region.	Admin. Reporting/bi-annual. Scheduled by CDS to commence 1396-97.

VIII.B.2. NATIONAL COMPUTER CENTER

1. Present Conditions

1.1 In accord with the first development plan, a National Computer Center has been established in the Ministry of Finance and National Economy under the direction of the Central Department of Statistics. The computer, an IBM 370-135, is temporarily installed in a rented building pending completion of permanent quarters, now being constructed. Testing of the equipment has been completed. Three groups of Saudis have been trained in computer operations and programming, and are now being given practical training.

1.2 The major initial task, in which the Center is now engaged, is the processing of the data obtained from the Census of Population and Housing conducted on 27-28 Shaban 1394 (14-15 September 1974).

1.3 Preliminary work has begun on computerizing the government budget, personal income taxes, a personnel application for the Ministry of Education, and foreign trade statistics

1.4 Some of the other government agencies that have computers are the University of Petroleum and Minerals (IBM 370-145); the Ministry of Defense and Aviation (IBM 360-20); and SAUDIA (IBM 370-135).

2. Objectives and Policies

2.1 During the second Development Plan, the primary mission of the National Computer Center (NCC) will be to make computer processing available to all ministries and agencies, and to private sector users, as rapidly as feasible in an order of priorities that reflects national development requirements.

2.2 The applications to be undertaken during the plan period include the following.

Program	*Client*
Census of population and housing	Central Department of Statistics
Budgeting	Ministry of Finance
Taxation	Zakat and Income Tax
Education (personnel, facilities, students, statistical analyses)	Ministry of Education
Health (personnel, facilities, patients, supplies, statistical analyses)	Ministry of Health
Foreign Trade	Central Department of Statistics
Payrolls	Government and private
Personnel	General Personnel Bureau and other agencies
Pensions	General Personnel Bureau
Customs	Ministry of Finance
Water resources	Ministry of Agriculture
Visa accounting	Ministry of Foreign Affairs
Work permits	Ministry of Labor
Company registration	Ministry of Labor and Ministry of Commerce
Civil registration	Ministry of Interior

2.3 A further objective will be to improve the planning, management, and control of all activities requiring the processing and manipulation of large quantities of data.
2.4 Data processing operations will be centralized and standardized in order to prevent the proliferation of non-compatible computer systems and the dilution of scarce technical skills among competing government agencies.
2.5 The time lag between data collection and availability of results will be shortened while accuracy will be improved.
2.6 The above objectives will be implemented with the following supporting policies:

- ☆ Establish the National Computer Center as an independent public corporation.
- ☆ Convert all government statistical data into forms suitable for computer processing as rapidly as possible.
- ☆ Computerize tasks that consume large quantities of clerical time.
- ☆ Utilize foreign consultants and contract personnel as needed to meet program development schedules and to provide on-the-job training.
- ☆ Expand operations to four six-hour shifts as rapidly as feasible, increase Saudi participation, and up-grade equipment as aids to meeting the computer program schedules.
- ☆ Discourage the development of independent computer facilities in government agencies except for security and national defense purposes.

3. Programs and Projects

3.1 Program Development

3.1.1 Assist ministries and agencies in preparing their data collection formats and the results obtained for adapting to computer application, as follows:

- ☆ Encourage development of the required data transferal capabilities throughout the Government.
- ☆ Establish data submission schedules for ministries and agencies.

3.1.2 Develop programs and models for analyzing stored data, describing relationships, and yielding statistical summaries:

- ☆ Survey users to determine requirements.
- ☆ Purchase or lease "canned" software application packages when suitable.

3.1.3 Provide terminals in offices of principal government users for transmission of data to and from the NCC and, when applicable, video terminals for rapid retrieval and display of information for government officials.
3.1.4 Expand storage and processing capability so that a national data base is created, managed, and maintained which is responsive to government requirements for information and statistical analyses.

3.1.5 Develop programs of common utility throughout the Government to release individuals from the repetitive performance of routine tasks.
3.1.5.1 Computerize government payrolls and pay by check.
3.1.5.2 Develop program budgeting.
3.1.5.3 Computerize accounting, inventory record-keeping, and personnel records.
3.1.6 Establish mandatory schedules for all major data collection tasks covering time of collection, preparation for computer processing, and submission to the NCC.

3.2 Facilities

3.2.1 Complete the construction of NCC's permanent building and acquisition of equipment.
3.2.2 Monitor new developments in computer-related equipment so that NCC's capability can be continually upgraded in anticipation of growing demand for services.
3.2.3 Conduct investigatory studies of Jiddah and Dammam as potential sites for regional computer centers.

3.3 Organization

3.3.1 Establish the National Computer Center as a public corporation through authorizing legislation and specify its board of directors, before 1395-96 if possible.
3.3.2 Develop criteria for priority scheduling and prepare a tentative schedule of the programs to be undertaken during the next five years.

3.4 Staffing and Training

3.4.1 Develop programs for attracting and retaining qualified personnel, undertaking in particular an extensive recruiting program in Saudi Arabia.
3.4.2 Develop programs for specialized education and training of Saudis in data transferal, programming, mathematics, statistics, and computer operations and maintenance to be taught in secondary schools, universities, and various institutes.
3.4.3 Provide on-the-job training and also allowances for qualified Saudis to take special study programs in foreign countries.
3.4.4 Contract with foreign consulting firms and individuals to provide continuing support and expertise both to meet program development schedules and to conduct on-the-job training.

4. Finance

In 1394-95, the budget of the Central Department of Statistics included funds for the initial development of a computer center. The estimated financial requirements of the National Computer Center itself during the period 1395-1400 are summarized below (SR millions):

	1395 -96	*1396 -97*	*1397 -98*	*1398 -99*	*1399- 1400*	*Plan Total*
Recurrent	5.3	8.2	8.8	10.2	11.8	44.2
Project	4.0	2.0	–	–	–	6.0
Total	9.3	10.2	8.8	10.2	11.8	50.2

VIII.B.3. AERIAL SURVEY AND MAPPING

1. Present Conditions

1.1 The Aerial Survey Department has completed most of the targets set by the first development plan.

1.2 The first-order National Geodetic Network, extending into the northeast of the Empty Quarter, and a gravity network have been completed.

1.3 The preparatory phase for topographic mapping is complete for 80 percent of the Kingdom, thus exceeding the plan target. However, actual mapping now covers only about 30 percent of the planned area. Working maps were prepared for the 1394 population census. The time spent on census mapping — as well as technical, climatic, contractual, and staffing problems — are the main causes in falling behind the mapping targets.

1.4 A central data bank for surveying maps and aerial photographs has been established but has not been professionally staffed or organized as a separate administrative entity.

1.5 The lack of trained Saudis has led to a heavy reliance on foreigners for a large portion of the surveying work undertaken.

2. Objectives and Policies

The primary objective of the Aerial Survey Department in the period 1395-1400 is to provide comprehensive mapping services for the Kingdom in response to the requirements of the national Development Plan. Seven specific objectives have been defined, as follow.

2.1 Maintain the National Geodetic Network.

2.2 Incorporate existing local networks into the Kingdom's primary gravity and magnetism network.

2.3 Provide topographic maps for the entire Kingdom.

2.4 Provide hydrographic maps for marine navigational purposes.

2.5 Provide thematic maps from data furnished by government agencies.

2.6 Provide large-scale maps for use in town planning, road design, and other purposes.

2.7 Improve the organization and administration of the Department to render it more responsive to the survey and mapping needs of ministries, agencies, and the private sector.

3. Programs and Projects

3.1 Mapping Operations

3.1.1 National Geodetic Network

3.1.1.1 Establish 6,000 km of first-class geodetic net lines (1395-1400).

3.1.1.2 Complete the connection with the Empty Quarter (1395-1400).

3.1.1.3 Establish survey nets for six small towns or villages each year (1395-1400).

3.1.1.4 Maintain 2,260 traverse and paving stations (1395-1400).
3.1.2 Topographic Mapping
3.1.2.1 Complete the preparatory stage of topographic mapping for all parts of the Kingdom.
3.1.2.2 Prepare topographic maps for 70 percent of the Kingdom's area (1395-1400).
3.1.3 Maritime Mapping
3.1.3.1 Establish a section for maritime navigational mapping (1395).
3.1.3.2 Prepare three maritime maps per year of the Kingdom's coasts (1395-1400).
3.1.4 Cadastral Mapping
3.1.4.1 Renew the cadastral maps for big towns every three years (1395 onwards).
3.1.4.2 Renew the cadastral maps for small towns every six years (1395 onwards).
3.1.5 Thematic Mapping
3.1.5.1 Produce thematic maps of various parts of the Kingdom based on the 1394 census (1395-1400).
3.1.5.2 Produce thematic maps as requested by other government agencies.

3.2 Facilities and Equipment
3.2.1 Design and construct a photogrammetric building and a garage for field cars (1395-1400).
3.2.2 Establish a computer center (1395-1400).
3.2.3 Provide required equipment and cars (1395-1400).

3.3 Organization and Administration
3.3.1 Conduct a study to recommend organizational and administrative changes that will increase the Department's responsiveness to the needs of ministries, agencies, and the private sector for survey and mapping services (1395).
3.3.2 Implement the recommendations of the above study (1396).

3.4 Training
Establish and implement a managerial and technical training program (1395-1400).

4. Finance
4.1 The financial requirements of Aerial Survey Department projects are estimated to total SR 201.1 million for the period 1395-1400, as shown below:

	Budgeted 1394-95	*1395 -96*	*1396 -97*	*1397 -98*	*1398 -99*	*1399-1400*	*Plan Total*
Recurrent[a]	–	–	–	–	–	–	–
Project	35.3	32.3	36.5	44.7	42.3	45.3	201.1
Total	35.3	32.3	36.5	44.7	42.3	45.3	201.1

a Included under recurrent costs for the Ministry of Petroleum.

VIII.B.4. METEOROLOGY

1. Present Conditions

1.1 The first plan period witnessed the expansion of the Department of Meteorology to its current total of twenty surface and six upper-air observation stations. The Department now utilizes the latest techniques, including satellite imagery, and maintains a sophisticated communications system that links the stations, transmits and receives facsimile weather data, and records internal and external meteorological reports.

1.2 While the Department has implemented a major portion of the projects set forth in the first plan, progress has been seriously hampered by the shortage of technical and professional manpower. The result is that programs such as climatology, agro-meteorology, and marine meteorology, which will contribute valuable services to various sectors of the economy, are still in the initial phases.

1.3 It has been agreed that the Meteorological Institute for the training of observers should be attached to the King Abdul Aziz University. It will start operation during 1395-96. The Department will continue coordinating with the Ministry of Education to send Saudi nationals abroad for specialized training in meteorology.

1.4 The Department has negotiated working agreements with its principal user agencies specifying the duties and obligations of each party. In agro-meteorology, the accord reached with the Ministry of Agriculture and Water recognizes the requirement for parallel organizations and ensures coordination to enhance the collection and analysis of data.

1.5 Climatological Weather Summaries of daily, monthly, and yearly data from meteorological stations were distributed to local and international users throughout the first plan period.

1.6 While need for a national meteorological center is apparent, a realistic appraisal of manpower availability and priorities led to deferment of this project.

2. Objectives and Policies

Four basic objectives will guide the Department of Meteorology in the period of the second Plan, as follows.

2.1 Improve the present services provided to civil aviation, the armed services, and the general public by expanding operations and facilities.

2.2 Contribute to the economic activities of the Kingdom through applied meteorology by supplying information and advice relating to agriculture, transportation, construction, public health, and environmental protection.

2.3 Undertake an extensive education and training program to promote the technical and professional expertise required in the field of meteorology.

2.4 Make a positive contribution to the Global Research Program of the World Meteorological Organization, and expand cooperation in the World Weather Watch program and regional programs.

3. Programs and Projects

3.1 Basic Operations and Facilities

3.1.1 Increase the number of surface stations to 31 (1395-1400).

3.1.2 Increase the number of upper-air stations to 12 and equip 10 stations for high altitude data collection (1395-1400).

3.1.3 Install 3 automatic (unmanned) weather stations at selected isolated locations (1395-1398).

3.1.4 Establish a weather satellite ground station at Dhahran (1395-1398).

3.1.5 Establish forecasting offices at Khamis Mushayt, and Tabuk (1395-1397).

3.1.6 Establish forecasting stations at Riyadh, Tayif, Medina, Abha, and the new Jiddah International Airport; provide computerized and electronic meteorological equipment at all forecasting stations (1395-98).

3.1.7 Study the establishment of a national meteorological center at Riyadh and proceed with design and construction accordingly (1395-1400).

3.1.8 Commence automated publication of a single, all-inclusive climatological record, starting with current data, then available back-data; build up distribution to about 500 recipients (1395-96).

3.2 Applied Meteorology

3.2.1 Establish a network of maritime meteorological stations along the Arabian Gulf and Red Sea coasts with forecasting centers at Dammam and Jiddah. Upgrade Jiddah to an oceanographic center (1395-1400).

3.2.2 Establish agro-meteorological components at the surface synoptic stations and auxiliary agro-meteorological stations at suitable locations, in consultation with the Ministry of Agriculture and Water (1395-1400).

3.2.3 Develop the climatological section to World Meteorological Organization standards (1395-1400).

3.2.4 Establish additional special-purpose stations at Mecca, Mina, Tayif, and Riyadh to monitor and study air pollution and human environment (1397-1400).

3.2.5 Establish 17 limited-purpose automatic stations at selected locations for studying atmospheric conditions and human environment (1395-1398).

3.2.6 Install storm-warning weather radar (1395-1398).

3.2.7 Establish a research program to evaluate the feasibility of cloud seeding and other rain-making techniques in selected areas of the Kingdom (1395-1400).

3.2.8 Following consultation with agencies requiring meteorological services, provide such services to meet their needs (1395-1400).

3.3 Training

3.3.1 Coordinate with the Ministry of Education to obtain intermediate graduates for the Meteorological Institute program and send at least 5 secondary graduates each year for specialized meteorological training in foreign countries (1395-1400).

3.3.2 Upgrade the Meteorological Institute to ultimately provide professional and technical training at the university level (1395-1400).

3.3.3 Provide training abroad for selected university science graduates and departmental candidates in maintenance, engineering, and specialized meteorological fields (1395-1400).

3.3.4 Use the fellowship program of the World Meteorological Organization for selected candidates in the fields of hydrology, agro-meteorology, marine meteorology, and oceanography.

3.3.5 Obtain advanced training capability through mutual aid agreements with friendly developed countries (1395-1400).

3.3.6 Establish refresher courses for all forecasters and observers (1395-1400).

3.3.7 Provide classroom and on-the-job training for technicians and communications operators (1395-1400).

3.3.8 In the short term, employ non-Saudis on a contract basis to fill vacancies after exhausting all sources of capable Saudi nationals (1395-1400).

3.4 Administration

Enhance the manning of these sections, both in quality and quantity, to cope with the rapid expansion of the technical sections (1395-1400).

4. Finance

The financial requirements of the Department of Meteorology are estimated as follows (SR millions):

	Budgeted 1394-95	*1395 -96*	*1396 -97*	*1397 -98*	*1398 -99*	*1399-1400*	*Plan Total*
Recurrent	26.6	16.9	20.4	23.8	28.6	29.9	119.6
Project	33.9	104.5	101.4	109.0	79.6	31.2	425.7
Total	60.5	121.4	121.8	132.8	108.2	61.1	545.3

VIII.B.5. STANDARDS AND SPECIFICATIONS

1. Present Conditions

1.1 The Saudi Arabian Standards Organization (SASO) was established by Royal Decree in 1392 to (a) develop product standard specifications for quality control of imported and domestically produced materials and products, (b) administer an inspection system to ensure conformance to such standards, and (c) administer a system of national trademarks and certification of manufacturers so that customers can recognize quality products in the market.

1.2 SASO's core staff has been recruited, and several standards have been completed to date. Initial emphasis is being placed on products with potential health and safety hazards, such as foodstuffs, construction materials, pressure vessels and pipes, and electrical equipment.

1.3 A contract for consulting assistance was arranged with the British Standards Institution.

1.4 Full-scale implementation of the organization is dependent upon completion of a central testing laboratory and branch administrative offices. The Public Works Department is preparing plans for these projects, and construction is scheduled for completion in the latter years of the second Development Plan.

1.5 The inspection system is in the planning stage, and the trademark and certification program must await completion of the central laboratory for its implementation.

2. Objectives and Policies

A primary objective has been defined for each of SASO's four major development programs — standards, trademark and certification, facilities, and recruitment and training — for the period 1395-1400. These are as follows.

2.1 Develop the standards program as rapidly as possible, with the following priorities:

- ☆ Goods involving health and safety.
- ☆ These and other products with relatively high significance in the national economy.
- ☆ Products that have quality problems in present use.
- ☆ Products to be manufactured by major industrial enterprises now in the planning stage.
- ☆ Domestic manufactures requiring protection from competition with low quality imports.
- ☆ Exported products that should meet international quality standards.

2.2 Implement the trademark and certification program to provide the means for public recognition of quality products and also to promote importer, manufacturer, and merchant interest in such products.
2.3 Complete design plans for the necessary administrative and laboratory facilities and construct these facilities.
2.4 Continue a vigorous recruitment and training program for development of staff to optimum operational levels, utilizing foreign personnel and training facilities as necessary.

3. Programs and Projects

3.1 Standards

3.1.1 Complete the preparation of standards for the following products by 1400:

Product Category	*Number of Standards*
Foodstuffs	80
Construction materials and products	45
Electrical equipment	35
Mechanical equipment	50
Chemical and petroleum products	50
Textiles	10
Miscellaneous	30
Total	300

3.1.2 Strengthen procedures and capabilities for developing standards by the following means:

- ☆ Studies of products on the domestic market and products made for export, to assign proper priority in selecting products for preparation of standards.
- ☆ Reviews of existing international standards, to take full advantage of prior work in other countries.
- ☆ Laboratory tests of products to provide the base for determining standards, and to establish appropriate testing and inspection practices, and the associated equipment.

3.1.3 Expedite development of the control function within the Standards Organization, to enforce quality conformance for the selected products (1395-97).
3.1.4 Refine procedures for the dissemination of approved standards and revisions thereof, to ensure full understanding of the standards and of the enforcement mechanisms.
3.1.5 Continue to participate in international forums of standards organizations.

3.2 Trademark and Certification

3.2.1 Prepare the procedures and regulations for approving the use of the trademark by qualifying organizations, the fees to be imposed, and the inspection control practices to monitor performance (1395-1400).

3.2.2 Develop staffing plans to support the trademark and certification program, including administrative, inspection, and laboratory personnel (1395-1400).

3.2.3 Implement the program upon completion of the central laboratory.

3.3 Facilities

3.3.1 Complete in 1396 the Public Works engineering studies of the headquarters office, and schedule construction to be finished by 1398.

3.3.2 Complete the engineering plans for the central laboratory by 1396, and schedule construction to be finished in 1398.

3.3.3 Proceed with studies of branch requirements for efficient administration of the SASO programs, and complete such plans by 1397.

3.4 Recruitment

3.4.1 Expand internal training programs to include use of other laboratories and industrial plants within the Kingdom for such training.

3.4.2 Develop the skills of selected staff members by assigning them to training positions abroad, especially with other standards organizations.

3.4.3 Execute plans for expanding the assistance foreigners can provide, including their use in training Saudi manpower.

4. Finance

The estimated financial requirements of the Saudi Arabian Standards Organization for the plan period are as follows (SR millions):

	Budgeted 1394-95	*1395 -96*	*1396 -97*	*1397 -98*	*1398 -99*	*1399- 1400*	*Plan Total*
Recurrent	4.2	7.1	9.2	11.4	13.0	14.8	55.5
Project	–	4.5	12.2	15.5	12.2	5.4	49.8
Total	4.2	11.6	21.4	26.9	25.2	20.2	105.3

C. SCIENCE AND TECHNOLOGY

1. Present Conditions

1.1 Available Technology

1.1.1 In the development of science and technology in the Kingdom, the emphasis has and will continue to be on the selection, transfer, and management of existing foreign technology. However, much of the transferred foreign technology was actually created to meet needs and conditions different from those existing in Saudi Arabia.

1.1.2 Initial efforts are now being made to find solutions that fit the unique requirements and conditions of Saudi Arabia.

1.1.3 These efforts to modify and to control the quality of transferred technology correspond to, or already exceed, what most other countries at the same stage of development can afford, but such countries do not have the extraordinary financial resources of Saudi Arabia.

1.2 Non-Available Technology

1.2.1 Several conditions that are unique to Saudi Arabia and of great importance to its well-being have not yet been studied in detail by the industrialized countries.

1.2.2 If research and development (R&D) were applied to certain of these problem areas, the potential pay-off would be high. For example:

- ☆ Solar Energy — The climatic conditions and the great expanses of unused land make Saudi Arabia one of the most privileged countries for harnessing solar energy. These considerations, and the ultimate depletion of oil as a source of energy and revenue, justify a broad-based research effort in the field of solar energy.
- ☆ Agriculture — The adaptation of new crops and development of new production methods suitable for Saudi conditions offer the possibility of improving the diet of the people and lessening the nation's dependence on food imports.
- ☆ Fisheries — The resources of the surrounding seas have not been appraised as a basis for a major fishing industry.

☆ Water Resources — The availability of water is a growth-determining factor for agriculture and for many industries and communities, thus justifying a broad-based research program on all aspects of water resources.

Other R&D possibilities may be identified in industry, health, and housing.

1.3 Constraints

There are several constraints to research and development within Saudi Arabia at present:

1.3.1 Lack of a Plan

The R&D problems of national importance are, in general, interdisciplinary, interministerial, and interacting. Nevertheless, no national R&D policy or plan has been formulated to guide investment of financial and human resources into R&D.

1.3.2 Lack of local Manpower

There are very few Saudis trained in research, and those experienced in research management are extremely scarce or totally lacking.

2. Objectives and Policies

2.1 The two basic objectives for Science and Technology, and the policies required to meet these objectives within the constraints already noted, are as follows.

2.1.1 Available Technology

2.1.1.1 The basic objective is to enhance and expedite transfer and application of appropriate existing technology to Saudi Arabia in accordance with the priorities of the national Development Plan.

2.1.1.2 The transfer and application of existing technology will continue to be the responsibility of the relevant agencies and private companies. Their main difficulty in implementing programs and projects in their respective fields is the lack of Saudi staff with management experience in science and technology. To overcome this shortage it is the policy of the Kingdom to ensure ready access to expert foreign advice and support.

2.1.2 Non-Available Technology

2.1.2.1 The basic objective is to select priority problems in accordance with the Development Plan, and to effect solutions through sponsoring research at those institutions that are in the best position to resolve the selected problems.

2.1.2.2 Projects have to be carried out by foreign laboratories, or by laboratories in Saudi Arabia staffed primarily and managed entirely by foreigners.

2.1.2.3 Exceptions to administrative and customs procedures have to be granted in order to motivate and to retain desired foreign staff, and to obtain results within a reasonable time period.

2.1.2.4 Financial commitments have to be long-term and massive, corresponding at a minimum to support of some dozen research professionals per major program or laboratory.

2.1.2.5 Tangible returns on these investments in R&D have to be viewed as distant and uncertain; no results can be expected during the first five years, and in some areas results of major practical importance will never be achieved.

2.1.2.6 Major compromises on the above points will not lead to desired results but rather to chaotic, ineffective operations that would be more of an embarrassment than a credit to the instigators.

2.1.3 Planning and Control of Science and Technology

2.1.3.1 The creation and application of new science and technology in the Kingdom will be the responsibility of an authority to be established which will have the following functions.

2.1.3.2 Formulate and continuously update a Science and Technology Plan setting the priorities for various R&D targets. The plan should be based on and contain:

- ☆ Continuous identification and appraisal, in accordance with the national Development Plan, of priority areas for the future application of science and technology in the Kingdom.
- ☆ Assignment of priority to research targets with potential for increasing value-added to exported oil products or decreasing the Kingdom's dependence on revenues from export of low value-added hydrocarbons. Such research targets could include the following:
  - Economically upgrade saline, brackish, or sewage water through utilization of energy resources, including solar energy.
  - Develop economical, controlled-environment methods of producing fruits and vegetables.
  - Further develop micro-biological methods of producing proteins from hydrocarbons for animal feed or for supplementing the present, low-protein diet of Saudis.
  - Estimate in each research area the probability of technical success, the time schedules for attainment of specific targets, the availability of scarce resources such as trained manpower, and the socio-economic impact of applying the results.
- ☆ Formulation of broad plans for attaining the research targets: for example, by joint venture R&D agreements with foreign organizations abroad, by inviting foreign organizations to set up laboratories in Saudi Arabia, or by inviting scientists to work in laboratories to be established in Saudi Arabia.

2.1.3.3 Initiate a grant program for support of research on priority problems set forth in the Science and Technology Plan.

- ☆ Grants should be awarded foreign organizations on a competitive basis in accordance with best estimates of which approach and which organization are most likely to achieve set goals. Later, when Saudi organizations have been established, they should be awarded grants in competition with foreign laboratories.
- ☆ Grants awarded to foreign laboratories should, when appropriate, carry the stipulation that the laboratory staff will include a certain number of Saudi scientists, engineers, and technicians to work directly on the project.
- ☆ The program of government grants in research areas of importance to Saudi Arabia should be viewed as a precursor to the establishment of major Saudi laboratories in these areas.

2.1.3.4 Establish major laboratories devoted to research on the priority problems set forth in the Science and Technology Plan.

- ☆ Each laboratory should be devoted to a research area (a) in which the industrialized nations have not yet achieved unattainable leads, and (b) which corresponds to some basic need or condition of Saudi Arabia.
- ☆ Each laboratory should be set up from the beginning so that it has the potential of eventually becoming an internationally accepted center of excellence in its field. This objective implies foreign management and staffing in the initial stages.

2.1.3.5 Coordinate and take action on broad policy matters that transcend the interests or jurisdictions of individual institutions.

- ☆ Take appropriate action to enhance the education and further development of Saudi research scientists and engineers.
- ☆ Take appropriate action to minimize or abolish the present constraints to research within the Kingdom.
- ☆ Lend support to agencies and organizations concerned with research in the private sector.

2.1.3.6 Provide the Council of Ministers and government agencies with advice on matters concerned with new science and technology. If the needed experience is not available within the country, it should be the duty of this authority to secure high quality, neutral expertise from abroad. (In this context, "neutral" refers to individuals and organizations that are not concerned with selling technology.)

2.1.3.7 Represent the Government in its contacts with foreign scientific and technical organizations, for example, in discussing and pursuing technical and scientific cooperation with foreign countries.

3. Programs and Projects

3.1 Available Technology

3.1.1 Overcome the shortage of Saudi staff with the technical management experience needed in the successful selection and transfer of foreign technology through the following uses of foreign experts.

3.1.1.1 Government Agencies

Each agency is responsible for securing the best available expertise in its area of jurisdiction; the CPO will continue to assist in this regard and to further increase its awareness of available competent foreign experts.

3.1.1.2 Petroleum and Mining

Petromin has access to foreign experts through its cooperation with foreign, technically-advanced organizations. This expertise is augmented by the increasing capability of the University of Petroleum and Minerals. In view of the overriding national importance of early awareness of possible competitive threats to petroleum as an energy and raw materials source, the University of Petroleum and Minerals will give immediate attention to establishing a major research institute concerned with techno-economic and technical aspects of all potential energy and raw-material sources that can influence the position of petroleum on the world markets. One of the principal aims of this institute will be to have in Saudi Arabia a cadre of experts that can provide the Government and industry with competent advice based on personal experience with relevant technical and economic problems.

3.1.1.3 Private Industry

The Industrial Studies and Development Center is responsible for providing the private sector with expert advice. Within the next two years, ISDC will establish a testing and quality control laboratory for the benefit of industries that cannot afford such facilities themselves. ISDC's plan to add four foreign experts to its staff will substantially increase its capability to offer sound technical advice.

3.2 Non-Available Technology

3.2.1 Establish a Council for Science and Technology.

3.2.1.1. A central Council for Science and Technology (CST), responsible for achieving the objectives described above through the policies noted, will be established no later than six months after the approval of the national Development Plan 1395.

3.2.1.2 CST will be independent of any ministry and will report directly to the Council of Ministers, or to a person or organization reporting directly to the Council of Ministers.

3.2.1.3 The governing body of CST will have the following composition:

- ☆ A majority of Saudis who are distinguished scientists and engineers practicing in their respective fields.
- ☆ Officers of universities and government departments directly concerned with science and technology.
- ☆ Representatives of technology-based industry.

3.2.1.4 The actual size of the first governing body will depend on the availability of truly qualified persons.

3.2.1.5 Recommendations on the composition of CST's first governing body will be formulated by the Central Planning Organization for approval by the Council of Ministers.

3.2.1.6 The following working procedures are visualized for the CST.

- ☆ Form working groups and task forces for the purposes of appraising specialist areas and assuring professional supervision of the major laboratories; these groups will be permanent or temporary, depending on the nature of the particular research program.
- ☆ Form a foreign advisory board composed of top research managers and research leaders to advise the governing body on the choice of research priorities, and on the accomplishments and the management of the major laboratories.
- ☆ Delegate daily business of the CST to a permanent secretariat.

3.2.1.7 CST will submit for the approval of the Council of Ministers a preliminary Science and Technology Plan one year after the approval of the national Development Plan.

3.2.1.8 CST will initiate a program of research grants immediately after the Council of Ministers has approved the preliminary Science and Technology Plan.

3.2.1.9 In order to meet these deadlines for the preliminary Science and Technology Plan and the programs of research grants, preparatory work will be carried out by the Central Planning Organization until the governing body of CST has been established.

3.2.1.10 After the governing body has been established, it can continue to use CPO for its support but it will be free to choose another support organization and its own consultants.

3.2.2 Encourage Private Industrial R&D

3.2.2.1 The Ministry of Commerce and Industry will take action leading to drafting and enacting a patent law to provide protection of innovations in line with international patent practices.

3.2.2.2 A program of financial inducements will be initiated to encourage investment in innovation; for example, matching government funds could be offered to help private

organizations meet the expenses of major research efforts. The details of the program will be worked out by the ISDC for the approval of the Council of Ministers.

3.2.2.3 The testing and quality control laboratory for industry to be established by ISDC will be expanded to include pilot and other development facilities appropriate to the growing needs of industry. This laboratory is viewed as the beginning of a major industrial development facility, eventually capable of serving the R&D needs of technically-advanced companies in Saudi Arabia and in other, primarily Arab, countries.

3.2.3 Assess the need for an Institute of Technology.

4. Finance

Because the planned development of Science and Technology in the Kingdom is at a very preliminary stage, it is not yet possible to estimate its financial requirements.

D. CENTRAL PLANNING

1. Present Conditions

1.1 Five years of progress under the first development plan have demonstrated the effectiveness of national planning as an instrument for guiding and coordinating economic and social development, for concentrating resources on priority programs and projects, and for evaluating success in achieving objectives and targets. Details of this progress are published in the annual reports of the Central Planning Organization.

1.2 Revenues began to increase spectacularly in the early 1390s, and the plan for the period provided a sound framework within which to accelerate development while preparing a new development plan to take advantage of the new and massive resources to finance economic and social progress.

1.3 In spite of increased revenues, implementation of the first development plan was not easy. However, annual follow-up of progress under it has been effective in identifying obstacles to implementation, the measures which should remove these obstacles, and the areas in which more rapid progress than was originally planned could be achieved.

1.4 With the cooperation of other ministries and agencies, the Central Planning Organization accomplished the following during the period 1390-95:

- ☆ Completion of a national transport survey and formulation of a plan for the transport sector.
- ☆ Completion of socio-economic surveys and plans for the five regions of the Kingdom.
- ☆ Formulation of programs for manpower development.
- ☆ Preparation of an initial plan for the development of the infrastructure to support industrial development in the Eastern Region.
- ☆ Annual review of progress and problems related to implementation of the first development plan.
- ☆ Establishment of a documentation center.
- ☆ Initiation of a computerized management–information system to support plan management and follow-up.
- ☆ Initiation of a study to define physical constraints on plan implementation and measures to relieve them.
- ☆ Preparation of the *Development Plan 1395-1400.*

1.5 Less progress has been made in other important planning activities, many of which call for close cooperation between central planning and the ministries and agencies concerned. These include:

- ☆ Developing the statistical and information base for planning.
- ☆ Publishing an annual report on national development.
- ☆ Improving the institutional and administrative structure to support plan implementation.
- ☆ Improving program and project planning and implementation at the ministry and agency level.
- ☆ Improving manpower and training planning and implementation at the ministry and agency level.
- ☆ Defining short-term plans to guide budgeting for plan implementation.

1.6 The structure of the national planning process is illustrated in Figure VIII-1. Preparation of the current development plan began with the submission of planning guidelines to His Majesty King Faisal in Shawwal 1393. Sectoral planning was subsequently undertaken by the respective agencies in consultation with the Central Planning Organization. Following the sectoral planning phase, the CPO, under the policy direction of the Ministerial Planning Committee, was responsible for plan coordination and follow-up.

2. Objectives and Policies

2.1 Accelerate the economic and social development of the Kingdom in accordance with the objectives, priorities, and targets defined in the *Development Plan 1395-1400.*

2.2 Expand the capability of the Kingdom to absorb rapid development by mobilizing and augmenting scarce managerial, manpower, construction, and other resources and directing these resources to priority activities.

2.3 Eliminate physical and organizational constraints on plan implementation by forecasting where such constraints may appear and taking action to prevent them from occurring.

2.4 Develop the statistical and information base for improved planning and plan implementation.

2.5 Strengthen ministry and agency capability to plan, schedule, and follow up implementation of programs and projects of economic and social development.

2.6 Ascertain the degree of success achieved in meeting plan targets and the extent to which national objectives are being fulfilled.


PLAN
APPROVAL
PLAN POLICY
DIRECTION
PLAN COORDINATION
MINISTRY AND AGENCY PLANNING
PROGRAM AND PROJECT PLANNING
DATA COLLECTION AND ANALYSIS

3. Programs and Projects

3.1 Improve Institutional Structures and Administrative, Personnel, and Financial Procedures.

3.1.1 Prepare an analysis of institutional changes needed at the high policy level to strengthen the managerial structure for implementing the Plan. Submit to the High Committee for Administrative Reform (1395-96).

3.1.2 Identify administrative, personnel, and financial shortcomings with widespread and significant impacts on plan implementation; with the ministries or agencies responsible for implementing these procedures, prepare plans for eliminating or reducing their adverse impacts on plan implementation. Submit these plans to the High Committee for Administrative Reform (1395-96).

3.1.3 Call on ministries and agencies responsible for implementing specific development programs and projects to formulate measures for strengthening their internal administrative structures and expanding their capacity to implement the programs and projects. Following review, support approval and funding of these measures before the authorities concerned (1395-96).

3.2 Improve Manpower Resource Allocation

3.2.1 Establish a manpower planning department to formulate and coordinate manpower allocation and development policies, as described in Chapter V (1395-96).

3.2.2 Analyze the population census and manpower and employment surveys to define optimum utilization of manpower resources between and within each sector (1395-96).

3.2.3 Analyze employment in the different sectors of private enterprise to determine prospects for increasing productivity (1395-97).

3.2.4 Analyze demand for additional manpower in the different sectors and in the regions of the country, and formulate detailed measures for obtaining this manpower from domestic and foreign sources (1395-97).

3.2.5 As a guide in formulating manpower development programs, undertake sample surveys of a cross-section of the younger participants in the labor force to determine their attitudes, motivations, educational level, training, and work experience.

3.2.6 Work with the appropriate departments in the Ministry of Labor and Social Affairs on developing programs for increasing productivity in the different private economic activities, for training and re-deployment of manpower into occupations of higher productivity, and for recruitment of manpower from foreign countries (1395–1400).

3.2.7 Work with the General Personnel Bureau, the Central Organization and Management Department, and the Institute of Public Administration in coordinating the manpower requirements of the public sector and in formulating programs for developing the productivity and skills of public-sector employees (1395-1400).

3.2.8 Coordinate with the new manpower training organization in its formulation of training programs required to meet projected manpower demand.

3.3 Strengthen Ministry and Agency Manpower and Training Planning

3.3.1 Work with the manpower and training planning units of ministries and agencies on developing their capability to define manpower requirements, improve utilization of existing manpower, and formulate and implement training programs (1395-1400).

3.3.2 Follow up with these units each year the progress made with plan implementation in the preceding year (1395-1400).

3.3.3 Define with these units each year the short-term (annual) manpower plan that should guide budgeting for plan implementation in the following year (1395-1400).

3.4 Improve Construction Resource Allocation

3.4.1 Survey the construction sector to assess the availability and utilization of its existing capabilities in planning and design as well as actual construction (1395-96).

3.4.2 Determine critical constraints on expansion of construction capacity, and formulate measures and programs for expanding this capacity and increasing the productivity of the construction industry (1395-96).

3.4.3 Review construction programs in the light of the potential increases in construction capacity, and re-order priorities for construction in accordance with this potential (1395-96).

3.4.4 Maintain continuous surveillance over the development of construction capacity, and expand construction programs as capacity permits (1396-1400).

3.5 Eliminate Physical Constraints on Plan Implementation

Investigate and make recommendations concerning the elimination of physical constraints in transport and storage; construction materials and equipment; housing; water; electricity; communications; hotels; maintenance; banking services; and supply of foodstuffs.

3.6 Develop the Statistical and Information Base for Planning

3.6.1 Work with the Central Department of Statistics and the National Computer Center in expanding the flow of statistical data, improving the reliability and relevance of the data, and reducing the time between data collection and publication (1395-96).

3.6.2 Publish the annual CPO report on national development (continuing).

3.6.3 Publish papers and monographs on important topics of economic and social development (1395-1400).

3.6.4 Bring into operation the CPO's computerized management-information system (1395-96).
3.6.5 Formulate a series of indicators to provide regular and up-to-date information on both domestic and overseas sources of inflationary pressures.
3.6.6 Based on population and other data, prepare long-term economic and social forecasts for the Kingdom's prospective development.

3.7 Strengthen Ministry and Agency Program and Project Planning
3.7.1 Work with the program and project planning units of ministries and agencies on developing their capability to define the detailed requirements and schedules for implementing programs and projects and following up their implementation (1395-1400).
3.7.2 Review with these units each year the progress made with plan implementation in the preceding year (1395-1400).
3.7.3 Define with these units each year the short-term (annual) plan that should guide budgeting for plan implementation in the following year (1395-1400). See Figure VIII-2.

3.8 Review Implementation of the Development Plan 1395-1400
3.8.1 Prepare a follow-up report each year (continuing).
3.8.2 Coordinate and follow-up implementation of regional development plans by the ministries and agencies concerned.
3.8.3 Undertake a sample survey of a cross-section of the population in the third year of the Plan to determine the social impacts of rapid development and what action needs to be taken to foster social stability under circumstances of rapid change.

3.9 Prepare the Third Development Plan (1400-1405)
3.9.1 Hold a series of planning seminars for ministry and agency planning groups prior to 1st Muharram 1398.
3.9.2 Finalize planning guidelines, with ministry and agency cooperation, by 1st Shawwal 1398.
3.9.3 Finalize the third development plan by 1st Rabi II, 1399.

4. Finance.

The financial requirements of the Central Planning Organization are estimated below (SR millions):

	Budgeted 1394-95	*1395 -96*	*1396 -97*	*1397 -98*	*1398 -99*	*1399- 1400*	*Plan Total*
Recurrent	25.9	63.6	75.2	87.8	102.9	121.4	450.9
Project	7.5	18.0	2.0	2.0	2.0	2.0	26.0
Total	33.4	81.6	77.2	89.8	104.9	123.4	476.9

E. PUBLIC SECTOR

1. Present Conditions

1.1 The rapid increase in budgetary allocations for economic and social development over the period of the first plan has severely strained the capacity of the public administrative system, which was already encumbered by over-centralization and not enough delegation of managerial, financial, and personnel responsibilities to executive levels.

1.2 In preparing the second Plan, working groups, sectoral studies, and regional studies have repeatedly emphasized the weakness of the administrative structure for implementing development programs. Implementation of the plans presented in the preceding chapters will require the immediate strengthening of this structure.

1.3 The High Committee for Administrative Reform is the authority specifically charged with effecting improvements. An analysis of its decisions made over the period from the start of the first development plan to 12 Safar 1395 shows that out of a total of 48 decisions, only 4 were concerned with important aspects of administration relating to economic and social development — namely, food supply, youth welfare, water desalination, and re-organization of the Ministry of Commerce and Industry. Most of the others were concerned with minor changes in employee regulations and related subjects.

1.4 Improvements made under the first development plan include better procedures for processing visas and for clearance of goods through customs, publication of a personnel law defining the structure and conditions of employment in the public service, and separation of telecommunications from postal services. Despite these improvements, visa procedures and customs clearance formalities continue to rank high in causes given for delay in implementing both public and private sector programs and projects; many ministries and agencies continue to report large numbers of vacant posts; and lack of flexibility in remunerating Saudi public servants of proven competence is frequently reported as a major obstacle to building up a strong cadre of experienced staff.

1.5 Areas in which little progress has been made include budgetary and accounting procedures; classification of posts and preparation of job descriptions; delegation of increased managerial, financial, and personnel responsibilities to heads of ministries and agencies, and through them to individuals in charge of programs and projects; and implementation of a standard structure of administrative regions and provinces.

2. Objectives and Policies

2.1 The overall objective for public administration is to improve its flexibility and effectiveness in implementing the programs and projects set out in the Plan. Policies to achieve this objective include:

2.1.1 Delegation of increased managerial, financial, and personnel responsibilities to heads of ministries and agencies, and through them to individuals in charge of programs and projects.

2.1.2 Improvement of programing, budgeting, and accounting procedures to provide the organized flow of information that is an essential element of good financial management and control and a pre-requisite for effective and realistic planning.

2.1.3 Decentralization of the functions of executive ministries and agencies to the regional and district levels.

2.1.4 Change in the structure or form of ministry and agency functions only in response to a clearly defined need for more effective performance of a major economic or social function of government.

2.1.5 Streamlining of official procedures affecting the conduct of business by the private sector.

3. Programs and Projects

Because of the magnitude of the task of plan implementation, the following programs for administrative reform — no more than first steps — should all be undertaken in the first year of the Plan.

3.1 Policy Management

3.1.1 Analyze all categories of decisions at present requiring the approval of the Council of Ministers (or a Committee of the Council of Ministers) and decide to what extent further delegation of powers to ministries and agencies should be made.

3.1.2 Review the machinery for improving management of public affairs — in particular the High Committee for Administrative Reform, the Central Organization and Management Department, and the Institute of Public Administration — and decide what changes should be made to produce an effective and innovative mechanism for guiding the development of public administration.

3.2 Financial Management (Ministry of Finance and National Economy)

3.2.1 Analyze all categories of decisions requiring Ministry of Finance approval and decide to what extent further delegation of responsibility to ministries, agencies, and lower executive levels should be made.

3.2.2 Review existing programing and budgeting procedures and prepare a plan for effecting improvements.

3.2.3 Design an accounting and financial-record-keeping system that will provide up-to-date data on actual expenditures and commitments and allow prompt publication of an annual report of government expenditure and accounts.

3.3 Personnel Management (General Personnel Bureau)

3.3.1 Analyze all categories of decisions requiring General Personnel Bureau approval and decide to what extent further delegation of responsibilities to ministries, agencies, and lower executive levels should be made.

3.3.2 Ask ministries and agencies concerned with economic and social development to report on the numbers and categories of vacancies, and the reasons for posts being unfilled. On the basis of these reports, initiate investigations to verify the reports and determine measures for remedying the situation.

3.4 Field Administration (Ministry of Interior)

3.4.1 Define regional and provincial boundaries and administrative centers as soon as possible.

3.4.2 Call on executive ministries to submit plans for restructuring their field administrations to conform with the regional and provincial administrative structure.

3.5 Decentralization (Executive Ministries)

Prepare plans for the further decentralization of executive functions to the regional and provincial levels.

3.6 Functional Change and Coordination (High Committee for Administrative Reform)

3.6.1 Require the ministers and agency heads concerned with functional changes called for in the Plan to submit analyses of the reasons for change and programs for defining and introducing the changes proposed. Such changes include:

- ☆ Water: Gradual assumption by the Municipalities Department of responsibility for municipal water-supply systems.
- ☆ Electricity: National electricity body.
- ☆ Construction: Body to coordinate and monitor construction activity.
- ☆ Manpower: Manpower training organization.
- ☆ Education: Polytechnic institutes.
- ☆ Ports: Ports authorities for the East and West coasts.
- ☆ Telecommunications: Organization for developing and operating the telecommunications system.
- ☆ Housing: Organization for housing development.

3.6.2 Define coordination requirements in response to needs identified by ministries and agencies.

3.7 Visas (Ministry of Interior)

Implement procedures for simplifying issue of work permits for foreign workers.

3.8 Customs (Ministry of Finance)

Investigate claims that customs procedures continue to contribute to delays in port clearance and act on conclusions.

F. PRIVATE SECTOR

1. Present Conditions

1.1 The private sector occupies an important position in all development programs of the Kingdom including: construction of buildings and civil engineering works for all sectors of the economy; all commercial activity including trade, finance, transport, real estate development, and services; manufacturing, agriculture, utility operations, quarrying and other pursuits. The economic sectors which are mainly in the private sphere together contribute 82 percent of non-oil Gross Domestic Product and have been growing at an average annual rate of 12.3 percent over the past five years.

1.2 The private sector in many activities, such as contracting, manufacturing, commerce, and agriculture, takes all responsibilities normally associated with private entrepreneurs, including capital risk, operating management, and product and market development — with the expectation of a fair return on invested capital. In other activities, the private sector operates as a consultant to government or as a management contractor for operation of government establishments.

1.3 To encourage the private sector to increase its productivity and participate as much as possible in the process of development, the Government has introduced a wide range of measures to stimulate and support its growth. These include:

- ☆ Input subsidies to encourage the use of improved farm technology; output subsidies to draw more resources into agriculture; provision of short-, medium-, and long-term agricultural credit; and operation of agricultural research and extension services.
- ☆ Revision of the Mining Code to encourage mineral exploration and development.
- ☆ Publication of a statement of Saudi Arabian Industrial Policy setting forth the many incentives offered to promote industrialization; issue of a comprehensive Guide for Industrial Investments; changes in the provisions for protection of domestic industries and encouragement of foreign capital participation; launching of the Industrial Development Fund to provide capital loans of up to 50 percent of investment costs to industrial ventures; provision of industrial extension services; implementation of industrial estates at Jiddah, Riyadh and Dammam where serviced land for industry can be obtained at nominal rents; and initiation of planning of an industrial complex at Jubail to accommodate joint-venture undertakings in hydrocarbon-based industry.

- ☆ Establishment of a Supplies Corporation to cooperate with the private sector in assuring adequate supplies of staple foods and building materials; formation of companies to participate with the private sector in operating hotels and tourist centers, transport services, and non-oil shipping.
- ☆ Creation of a Real Estate Development Fund to provide loans of up to 70 percent of costs for housing for individuals and loans of up to 50 percent for development of hotels and residential and commercial properties.

2. Objectives and Policies

2.1 The Governments's objective is to create the conditions that will enable the private sector to both undertake the construction called for in the Plan quickly and effectively and provide the supplies and business services to support the expected rapid economic growth.

2.2 Two broad policies will guide the attainment of this objective.

2.2.1 The private sector will be free to operate without restriction except where such operation conflicts with social objectives or inhibits the development of more efficient and productive enterprises.

2.2.2 The public sector will operate or participate in productive and commercial enterprises only when the private sector has proved unable to provide the resources or managerial capacity to implement economically feasible enterprises, and will divest itself of such enterprises as soon as private-sector interests are ready to assume ownership and management.

3. Programs and Projects

Programs and projects relating to the expanding role envisaged for the private sector are set out in detail in other sections. Their main features are summarized below.

3.1 Agriculture

Regional programs — to be defined on the basis of studies recently completed — will identify areas with suitable soil and adequate water supplies and implant the agricultural infrastructure required to support small-, medium-, and large-scale commercial farming enterprises. Initiation of such enterprises will be stimulated by subsidies, credit, and technical services.

3.2 Mining

Geological survey and mineral exploration by the Directorate General of Mineral Resources will continue to provide information about minerals that may be exploited commercially as construction materials or industrial supplies.

3.3 Electricity

Development of an integrated electricity network will require restructuring to accommodate both public and private enterprise within the integrated system.

3.4 Construction

A series of measures is planned to improve contracting procedures and enable the contracting industry to expand capacity rapidly to meet the construction requirements of the Plan.

3.5 Manufacturing

Through the construction of an industrial complex at Jubail in the Eastern Region and at Yanbu' in the Western Region, the conditions will be created for the joint-venture development of hydrocarbon-based industry in participation with foreign technology and capital. Expansion of activities, incentives, and institutions for the development of industry not based on hydrocarbons is also planned.

3.6 Commerce

Programs provide for strengthening the Commerce and Supplies Division of the Ministry of Commerce and Industry to enable it to stimulate and support the development of more efficient wholesale and retail traders, transport and storage enterprises, and financial and business services.

3.7 Housing

Rapid expansion of credit by direct loans and through banks and commercial channels is planned to support housing and real estate development.

3.8 Ports

Besides construction of new berths, programs are planned for speeding-up handling and customs procedures. Delays caused by port congestion are already serious. Studies are in hand to determine emergency measures for preventing the ports from becoming a constraint on implementation of the Plan.

3.9 Labor

Measures for eliminating delays in the import of foreign workmen will shortly be announced.

G. INTERNATIONAL COOPERATION

1. Present Conditions

1.1 Saudi Arabia recognizes the onerous responsibility of demonstrating that its abundant financial resources can be used successfully to transform a developing country into a modern industrial society capable of sustaining a high standard of living for all its people through the development of human skills and resources. It has therefore sought the cooperation of international agencies and both developed and developing countries in meeting this challenge.

1.2 Agencies of the United Nations have contributed for many years to the development of Saudi Arabia under the United Nations Development Program, and the International Bank for Reconstruction and Development has recently resumed active participation in the development of the Kingdom.

1.3 Discussions are in progress with developed and developing countries as to the means by which they can contribute to the development of Saudi Arabia on terms advantageous to both parties. Cooperation agreements have been signed between the Government of Saudi Arabia and other governments as follows:

Lebanon	: commercial and economic
Qatar	: economic
Morocco	: cultural
Denmark	: economic and educational
Italy	: cultural and educational
Syria	: commercial and economic
Tunisia	: economic
Republic of Korea	: economic and technical
Japan	: commercial and economic
Brazil	: economic and technical
Finland	: commercial and technical
Kuwait	: technical and economic
Malaysia	: economic
United Kingdom	: technical and economic
Turkey	: trade
United States	: technical

In addition, the following cooperation agreements are under discussion:

Sweden	: economic
Philippines	: economic
India	: technical and economic
Belgium	: technical and economic

Various joint commissions have also been established to discover areas of joint benefit.

2. Objectives and Policies

The objectives of Saudi Arabia in seeking international cooperation are, on the one hand, to benefit from the experience and technological and human resources of international agencies and friendly nations in meeting its development goals and, on the other, to assist in the recycling of international resources to the benefit of oil consuming nations, and in the interest of continued expansion of international trade and investment.

3. Programs and Projects

The programs and projects specified earlier in this document define the paths which Saudi Arabia intends to follow in the pursuit of its development goals. The cooperation of international agencies and friendly countries will be welcomed whenever such cooperation can contribute to the attainment of these goals.

Art Work and Supervision

FOR ADVERTISING, PUBLIC RELATIONS AND MARKETING STUDIES

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SECOND DEVELOPMENT PLAN

1395 - 1400 [A.H.]

1975 - 1980 [A.D.]

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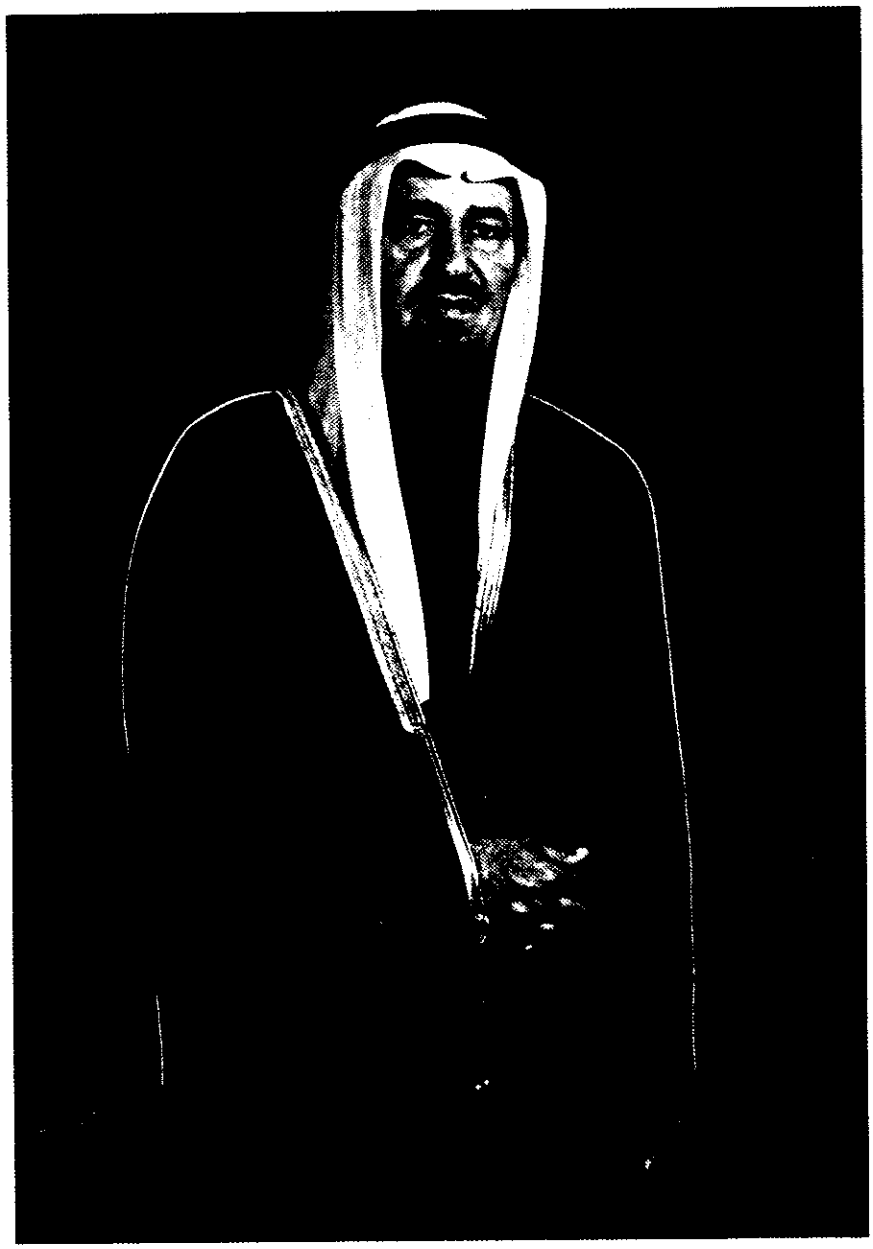
THE KINGDOM OF SAUDI ARABIA
MINISTRY OF PLANNING

1396 A.H. — 1976 A.D.



HIS MAJESTY KING KHALID IBN ABDULAZIZ

In the name of God the merciful the compassionate

Riyadh 16/4/1395 AH
27/4/1975 AD

His Majesty King Khaled Ibn Abdul Aziz
President of the Council of Ministers

Your Majesty,

I am honored to submit to Your Majesty the Second Development Plan for the Kingdom of Saudi Arabia prepared by the Central Planning Organization in accordance with the Council of Minister's Resolution No. 1464 dated 30/11/1393 A.H. (24/12/1973 A.D.).

This Plan reflects the effort and cooperation of all ministries, agencies, and government departments concerned with the development of the economy and society of the Kingdom. I look forward to their continuing support and cooperation in the tremendous task of implementing the Plan.

Please accept my highest regards and respect.

Minister of State and President
Central Planning Organization

Hisham Mohiddin Nazer

SPECIAL NOTE

On 8 Shawal. 1395 (13 October, 1975) by Royal Order No. A-326. the Central Planning Organization was elevated to the Ministry of Planning. Accordingly, all references to the Central Planning Organization contained in the development paln now refer to the Ministry of Planning.

Council of Ministers Resolution No. 565
dated 10.5.1395 A.H. (21.5.1975)

The Council of Ministers,

having considered the letter of H.E. the Minister of State and President of the Central Planning Organization No. 0/256 dated 18.4.1395 A.H. (29.4.1975) under which the second five year development plan was submitted, decides the following:

1. Approves the Second Development Plan: its objectives, programs and projects.

2. All ministries and independent agencies shall comply with the contents of the Plan in preparing their annual budgets to achieve the targets set therein.

3. The Budget Department of the Ministry of Finance and National Economy shall each year allocate the required funds for the projects and programs included in the Plan through optimum cooperation and coordination with a joint committee to consist of the Deputy Minister of Finance and Budget Affairs, the Vice President of the Central Planning Organization, and the Deputy Minister of the concerned ministry or independent agency.

In case of disagreement, the matter will be settled by a decision taken by the Minister of Finance and National Economy, the Minister of State and President of the Central Planning Organization, and the Minister or agency head concerned.

4. The Minister of State and President of the Central Planning Organization, the Minister of State for Financial Affairs and National Economy, the President of the Control and Investigation Organization, and the Chairman of the Advisors Section at the Council of Ministers shall formulate a follow-up system for plan implementation to be considered by the Council of Ministers.

5. All ministries, departments, and independent and semi-independent government corporations shall conduct the studies for programs and projects that fall within their jurisdiction of the plan and the Central Planning Organization shall conduct such studies should those agencies fail to do so as scheduled in the Plan.

6. The inplementation of the Second Development Plan commences from 1 Rajab, 1395 A.H.

Preface

Certain definitions and conventions used in this document are described briefly below to assist the reader.

Rounding of Numbers

Items and totals in tabulated material have been independently rounded in order to retain accuracy. Therefore slight discrepancies in the arithmetic are due to rounding; 0.5 has been rounded upward.

Fiscal and Calendar Years

On the next page are listed equivalent dates in the Saudi fiscal year, the Hijra (lunar) year, and the Gregorian (solar) year.

The Saudi fiscal year (from 1 Rajab through 30 Jumad II) is the basic unit of time used in planning and is shown with a hyphen, for example, 1394-95. The first national development plan covered the five fiscal years 1390-91 through 1394-95 but this period is sometimes shown for convenience as 1390-95. Similarly the period of the present Plan (a capital "P" is used to distinguish it) is often denoted as 1395-1400, although it covers the five fiscal years 1395-96 through 1399-1400.

The few exceptions made in using the Saudi fiscal year as the basic time-period are due to different practices in data collection and analysis. These exceptions include petroleum production and sales, international airline operations, and telecommunications, much of the data for which refer to Gregorian years and are so shown. The other major exception is the information on education: here the enrollment and other non-financial data are based on the Saudi academic year but are shown in the same manner as the fiscal year.

SAUDI FISCAL AND HIJRA YEAR DATES AND GREGORIN EQUIVALENTS

Saudi Fiscal Year (1 Rajab to 30 Jumad II)	*Starts on**	*Hijra Year*	*Starts on**	*Hijra months†*
1385-86	25 Oct 1965	1385	1 May 1965	Muharram
86-87	16 Oct 66	86	21 Apr 66	Safar
87-88	4 Oct 67	87	11 Apr 67	Rabi I
88-89	23 Sep 68	88	30 Mar 68	Rabi II
89-90	12 Sep 69	89	19 Mar 69	Jumad I
				Jumad II
1390-91	2 Sep 1970	1390	9 Mar 1970	Rajab
91-92	22 Aug 71	91	26 Feb 71	Shaban
92-93	10 Aug 72	92	15 Feb 72	Ramadhan
93-94	30 Jul 73	93	4 Feb 73	Shawwal
94-95	19 Jul 74	94	23 Jan 74	Dhul-Qi'dah
				Dhul-Hijjah
1395-96	9 Jul 1975	1395	13 Jan 1975	
96-97	28 Jun 76	96	2 Jan 76	
97-98	16 Jun 77	97	22 Dec 76	
98-99	6 Jun. 78	98	11 Dec 77	*Gregorian*
99-1400	26 May 79	99	30 Nov 78	*months†*
				January
1400-01	15 May 1980	1400	19 Nov 1979	February
01-02	4 May 81	01	9 Nov 80	March
02-03	23 Apr 82	02	28 Oct 81	April
03-04	12 Apr 83	03	17 Oct 82	May
04-05	2 Apr 84	04	7 Oct 83	June
				July
1405-06	22 Mar 1985	1405	27 Sep 1984	August
06-07	11 Mar 86	06	27 Sep 85	September
07-08	28 Feb 87	07	4 Sep 86	October
08-09	17 Feb 88	08	24 Aug 87	November
09-10	7 Feb 89	09	14 Aug 88	December

* Dates are approximate for future years.
† See *Statistical Yearbook*, Ninth Issue (1393 A.H., 1973 A.D.), pp. 13-14, for starting dates of Hijra and Gregorian months in past years.

Estimates and Units of Measures

Unless otherwise noted, the base year for estimates and projections is the fiscal year before the plan period being discussed, that is, 1389-90 or 1394-95. Again unless otherwise noted, estimates of financial al requirements or growth are given in 1394-95 prices — no factor for inflation has been built in. However, for projects taking several years to complete, 1394-95 prices estimated in that year, include inflation over the period to completion.

The metric system prevails in Saudi Arabia and is therefore used for measures of distance (1 kilometer = 0.62 miles), land area (1 hectare = 2.47 acres), volume (1 cubic meter = 1.31 cubic yards), and mass (1 metric ton = 1.1 short tons).

"Development Plan 1395-1400"

This document is in essence a drawing together of many plans prepared by ministries and agencies of the Government of Saudi Arabia, and has behind it a vast amount of information gathered from periodic or special studies carried out by or for different parts of the Government. It must be understood as a summary whose basic purpose is to coordinate the many agency plans rather than to present all the information gathered during the planning process.

Chapters IV through VIII are concerned mainly with the specific sub-sectoral plans to develop the Kingdom's economy and society in the years 1395-1400. These discussions are purposefully presented in a brief and practical form, complete with a coding system to facilitate the continuing review, implementation, and follow-up of the various components of the national Plan.

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