CHAPTER 1

PLANNING AND DEVELOPMENT IN SAUDI ARABIA

1. PLANNING AND DEVELOPMENT IN SAUDI ARABIA

With the implementation of the Fifth Development Plan, the Kingdom has completed twenty-five years of balanced and comprehensive development planning. The resulting growth and structural change in all sectors of the economy have led to a unique mix of material and social progress, whose fruits have spread to all regions of the Kingdom. Throughout this process, development has been guided by Islamic values and teachings.

From the outset of the First Development Plan in 1390/91, the main role of planning has been to provide an appropriate conceptual, practical and organizational framework for the development process, with all of its economic, social and institutional dimensions. In the economic field, there was an early determination by the government to construct a national physical infrastructure of the highest quality (particularly with respect to industry, agriculture, ports, roads and electricity) and to start the industrialization effort with large public investments in basic industries, while extending to agriculture a comprehensive system of support. In the social field, the development plans have always considered the desires, aspirations and capabilities of the Saudi Arabian people. Free education has been created and expanded to promote equality of opportunity in attaining the skills required for sustained development. An elaborate system of free health and social welfare services has been established, giving protection to the old and disabled and those on limited income. The government also provided the institutional framework needed for economic and social development by establishing new ministries and agencies and by upgrading the existing administrative bodies, thus facilitating expansion in the absorptive capacity of the Kingdom's economy and greater economic efficiency.

1.1 PRINCIPAL DIRECTIONS OF DEVELOPMENT

The First Development Plan formally established the broad strategic goals for the Kingdom's longer term development, to provide a guiding foundation for future development efforts over a thirty-year planning horizon. Although some changes in emphasis have characterized the medium term strategy of the individual plans in line with prevailing local and international conditions, successive Five-Year Development Plans have sustained these long term goals, reflecting both the essential continuity and the staged nature of the Saudi development process. These long-term strategic goals and some of the major achievements realized during the period 1389/90 to 1414/15 are described below.

1.1.1 ECONOMIC GROWTH AND SOCIAL STABILITY

In its development plans, the Kingdom has always pursued the macroeconomic objectives of economic growth, full employment, stable prices and the avoidance of sharp fluctuations in economic activity. As international experience has shown, however, the simultaneous achievement of all these

objectives, particularly the attainment of full employment with price stability, is not easy. Nonetheless, the Kingdom can be justly proud of its achievements in these areas:

- over the first five development plans, between 1389/1390 and 1414/1415, the real average annual growth in non-oil GDP has been 6 percent;
- average annual inflation between 1389/1390 and 1414/1415 (measured by the private consumption deflator) amounted to 5.3 percent, and to less than 1 percent during the last ten years, which is significantly lower than international levels;
- total employment of Saudis has risen from about 1.2 million in 1389/1390 to almost 2.4 million in 1414/15.

Rapid economic growth and modernization have led to social instability in many countries, particularly when the benefits of development have been unevenly distributed and traditional values have been abandoned. The Kingdom has been keen to avoid such adverse impacts, however. The provision of opportunities for all members of Saudi society to participate in the development process has been a permanent goal of the Kingdom's development plans. The most distinguishing feature of Saudi development in this regard has been the inspiring and formative role of Islamic values and teachings that have helped to bring about such a unique blend of material and social development. Although the same institutional forces of government regulation and the market economy apply in the Kingdom as in other societies, such values keep the requirements for individual initiative and social responsibility in a morally acceptable and creative balance.

1.1.2 DIVERSIFYING THE ECONOMIC BASE AND REDUCING DEPENDENCE ON CRUDE OIL

Central to the Kingdom's overall development strategy has been the recognition that sustainable long term development requires a reduced dependence on the exploitation of depletable crude oil resources as the main source of national income. Thus, each development plan put a high priority on establishing other strong economic sectors and income sources to meet the needs of a rapidly growing population. While the statistical measurement of the diversification achievements is difficult, the Kingdom has recorded some notable successes:

- Non-oil GDP increased more than fourfold between 1389/1390 and 1414/1415, measured in constant 1409/1410 prices;
- The non-oil sectors' contribution to GDP rose from 53 percent in 1389/90 to about 67 percent by the end of the Fifth Plan (1414/1415);
- The contribution of non-oil revenues to total government revenues increased from 16 percent in 1389/1390 to 22 percent in 1414/1415;

- As a share of the Kingdom's total exports, non-oil exports rose from 8 percent in 1389/90 to about 21 percent in 1414/15;
- Value added by manufacturing industry grew at an average annual rate of 7.4 percent between 1389/1390 and 1414/1415, in constant 1409/1410 prices;
- Driven mainly by the huge growth in petrochemicals exports of the past ten years, non-oil merchandise exports have risen from almost nothing in 1389/1390 to more than SR 15 billion in 1414/1415;
- Agricultural output rose six-fold between the beginning of the First Plan and the end of the Fifth Plan, and the Kingdom has moved significantly towards achieving self-sufficiency in food.

1.1.3 DEVELOPING HUMAN RESOURCES

The real wealth of the Kingdom ultimately lies in the productive skills of its labor force. Accordingly, the development plans have placed great importance on human resources development through continuous advances in primary, intermediate, secondary and higher education, as well as in technical education and vocational training. The result has been a great increase in the productive employment of Saudi citizens and a steady upgrading of the skill levels and occupational achievements of the Saudi labor force. The following indicators point to the quality and scale of achievement in developing the Kingdom's human resources:

- The total number of schools at all levels rose from 3,283 in 1389/1390 to about 22,000 in 1414/1415, while enrollment in all educational institutions increased from around 600,000 in 1389/1390 to about 3.3 million in 1414/1415 -- an average annual growth rate of 7.1 percent;
- Seven universities and fourteen girls' colleges have been established, while the total number of students at these higher education institutions has risen from 8,000 in 1389/1390 to about 170,000 in 1414/1415, i.e. an average annual growth rate of 13.0 percent;
- Enrollment in vocational training centers rose from 578 in 1389/1390 to over 10,000 in 1414/1415 -- an average annual growth rate of 12.6 percent -- while enrollment at technical schools and institutes increased from 848 in 1389/1390 to over 28,000 in 1414/1415, or at an average annual rate of around 16 percent.

1.1.4 DEVELOPMENT AND PRESERVATION OF PHYSICAL INFRASTRUCTURE

The first three development plans laid the groundwork for the rapid development and expansion of the physical infrastructure needed for a modern economy and society, while the Fourth and Fifth

Plans concentrated on the completion and enhancement of such infrastructure. The quality, scale and speed of investment in Saudi Arabia's infrastructure have been historically unique and have provided an outstanding base for future economic and social development. Some of the major infrastructural achievements of the first five development plans can be summarized as follows:

- The paved road network grew from 8,000 kms in 1389/1390 to about 43,000 kms in 1414/1415;
- The number of airports rose from 16 in 1389/1390 to 25 in 1414/1415, including the three international airports which are capable of accommodating the latest types of aircraft; the number of passengers entering and leaving the Kingdom exceeded 25 million in 1414/1415;
- The number of berths at the Kingdom's main seaports rose from only 11 in 1389/1390 to 179 berths in 1414/1415, while the volume of cargo handled by all sea ports has increased from 1.8 million tons to 89 million tons over the same period;
- Usable electricity generating capacity increased from 344 megawatts in 1389/1390 to 18,238 megawatts in 1414/1415 -- an average annual growth rate of 17.2 percent;
- Desalination plants increased their capacity from 19,400 cubic meters per day in 1389/1390 to about 1.9 million cubic meters per day in 1414/1415, or at an average annual rate of 20.1 percent;
- The number of working telephone lines has grown from 29,000 in 1389/1390 to 1.53 million in 1414/1415, or at an average annual rate of 17.4 percent.

The large-scale construction of infrastructure carried out through the development plans has supported the very rapid economic and social development of the Kingdom. However, the high demand resulting from a rapidly growing population and the requirements of an industrializing society have renewed the need to expand and modernize the Kingdom's physical infrastructure.

1.1.5 RAISING THE STANDARD OF LIVING AND IMPROVING THE QUALITY OF LIFE

The development plans have always aimed to distribute the benefits of economic growth throughout the population and to provide opportunities for all members of Saudi society to participate effectively in all aspects of the development process, while at the same time minimizing the negative impacts of rapid social and economic change. As a result, citizens now enjoy a quality of life that is equal to that of many people living in some advanced countries. The following indicators affirm the Kingdom's success (within 25 years) in providing its citizens with a standard of living that compares favorably to the achievements of many countries within a similar period:

- Private consumption of goods and services -- the best measure of living standards -- has risen at an average annual rate of 9.2 percent over the period 1389/1390 to 1414/1415;
- Infant mortality has fallen from 148 per 1,000 live births in 1389/1390 to about 30 in 1414/1415;
- The number of physicians in the Kingdom has risen from 1,172 in 1389/1390 to more than 28,000 in 1414/1415, while the number of hospital beds has grown from 9,039 to over 42,000 over the same period.

1.1.6 EXPANDING ROLE OF THE PRIVATE SECTOR

From the outset of development planning in the Kingdom, the adoption of free market principles ensured that private enterprise would always be the main focus of economic activity. Although the expansion of oil revenues in the first three plan periods necessarily accorded to the government the leading role in guiding and stimulating economic development, the rapid transformation of financial resources into productive physical assets during this period also required the active participation of the private sector in undertaking the necessary construction, operation and maintenance of these facilities.

By the beginning of the Fourth Plan, a suitable climate had emerged for greater integration between the government and the private sector. Most of the infrastructural projects had been completed and the priorities for development had shifted towards structural change and economic diversification. Through a wide range of financial and regulatory measures, the government encouraged the private sector to engage in joint ventures with foreign firms and to invest in new output-generating capacities using the latest available capital-intensive technology, mainly in agriculture and manufacturing industry. As a result, the private sector became less dependent than in earlier plans on government expenditure.

The growing maturity of the private sector and its resilience to declining oil revenues and government expenditure began to show in the Fourth Plan years and were reaffirmed in the Fifth Plan also, as the number of private sector companies continued to rise, along with the volume of private capital investment and the range of private manufacturing activity. The growing strength of the private sector and its important role in effecting structural change in the Kingdom's economy are evident in the following indicators:

- Private investment rose from SR 1 billion in 1389/90 to about SR 46 billion in the last year of the Fifth Plan;
- The private sector's contribution to GDP rose from 21 percent in 1395/96 to 45 percent in the last year of the Fifth Plan, while its contribution to non-oil GDP reached about 72 percent in 1414/15;
- Private sector employment rose by 4.7 million between 1389/1390 and 1414/1415;

- The number of operating (Saudi/foreign) joint ventures reached 352 in 1413/14, with total capital invested amounting to SR 81.5 billion;
- The stock market has grown rapidly in recent years, as the number of shares traded rose from less than 15 million in 1408/1409 to more than 60 million in 1413/1414, while the value of transactions over this period increased from about SR 760 million to over SR 17 billion.

1.2 CHANGING FOCUS OF THE DEVELOPMENT PLANS

The specific focus, targets and priorities of each of the five development plans have been established in the context of the Kingdom's long term goals and strategic objectives, which have been maintained consistently over the past 25 years, although their emphasis on economic, social and institutional aspects has varied in each Plan.

The **First Development Plan** laid the foundation for the Kingdom's rapid transformation into a modern industrializing nation by focusing on the provision of essential basic infrastructure and government services and the establishment and expansion of supporting institutions. From today's perspective it was modest in scale, with government expenditure amounting to SR 78 billion. This was funded mainly by higher revenues resulting from the oil price increase from $1.80 per barrel to around $10.70 over the course of the Plan.

The government placed special emphasis on the expansion of water supply and electricity generation. In the transport sector, road construction, airports and sea port development projects were implemented. The oil sector was expanded and a new refinery was constructed in Riyadh. Many new schools and hospitals were built. Social programs, including social insurance, were revised and broadened. The capabilities of government agencies were strengthened. The private sector was encouraged to expand, especially in agriculture and manufacturing.

Rapid economic and population growth generated a dramatic increase in the demand for infrastructure, services and housing during the **Second Development Plan** period. At the same time, rapidly rising oil revenues enabled these needs to be met and the creation of jobs in both government and private sectors. Government expenditure reached SR 658 billion in the Second Plan, an increase of more than eight-fold over the First Plan.

The focus of government expenditures in the Second Plan was on the provision of physical infrastructure to support the Kingdom's rapid development and to overcome barriers to economic growth, such as the "bottlenecks" that occurred in the transportation system and shortages in housing, water supply, electricity and ports. The Plan also aimed to expand social services, especially in education, health and social security. The private sector concentrated primarily on the construction and trade

sectors. To assist in achieving the objective of economic development and diversification, the government created many major institutions, including the specialized credit funds, the Saudi Ports Authority, SABIC (Saudi Arabian Basic Industries Corporation), the Ministry of Industry and Electricity, and the Royal Commission for Jubail and Yanbu, whose mission was to develop two large new industrial cities.

With many large projects already under way, the **Third Development Plan** concentrated on the completion of those major infrastructural projects that provided the foundation for a more diversified economy and on meeting the rapidly increasing demand for improved educational, health and social services. The volatility of oil revenues re-affirmed the need for the private sector to expand and for the economy to become less dependent on government activity and the oil sector.

The government encouraged economic diversification through large public sector investments in capital-intensive industries linked to the Kingdom's petroleum resources. In the private sector, manufacturing industries became more prominent and agriculture emerged as a high growth sector in response to government incentives and funding. The rapid pace of economic development required a large number of foreign workers, thus highlighting the need to develop Saudi human resources and gradually reduce the reliance on expatriate labor.

As the Kingdom embarked on the **Fourth Development Plan,** its development priorities were to continue the diversification of the economy by encouraging the growth of the private non-oil sector and to expand government services to meet social needs. The virtual completion of most of the country's physical infrastructure enabled the government to shift its expenditure priorities towards other important areas and needs.

Table 1.1 shows the major focus of the first four development plans and the amounts spent on the major sectors. During the First and Second Development Plans, expenditure on infrastructural development accounted for 41.4 percent and 49.3 percent of total expenditure respectively. In the Third Development Plan, 41.1 percent of expenditure was devoted to the completion of physical infrastructure, while 30.7 percent was directed towards the development of economic resources. Because of the Fourth Plan's concentration on qualitative development and improvements in economic performance, human resources development accounted for 33 percent of total expenditure, while expenditure on health and social development amounted to 17.7 percent of the total. Thus, these two sectors accounted for more than half of total expenditure during the Fourth Plan.

Table 1.1

Expenditure of Development Agencies in the first Four Development Plans (1390-1395 to 1405-1410)

Plan	First		Second		Third		Fourth	
Development Sector	SR million	%	SR million	%	SR million	%	SR million	%
Economic Resources	9,469	27.7	97,279	28.0	192,185	30.7	71,193	20.4
Human Resources	7,034	20.6	51,035	14.7	115,007	18.4	115,133	33.0
Health and Social	3,515	10.3	27,600	7.9	61,237	9.8	61,882	17.7
Infrastructure	14,116	41.4	171,298	49.3	256,795	41.1	100,738	28.9
Total	34,134	100.0	347,212	100.	625,224	100.0	348,946	100.0

The **Fifth Development Plan** enhanced and broadened the main objectives of the previous development plans. At the same time, through appropriate regulatory policies and support measures, it gave the highest priority to the private sector's role in accelerating the process of economic diversification. Another aspect that gave the Fifth Plan its own unique features was the increasing emphasis on new long-term initiatives. Other priorities included the acceleration of the Saudiization process through strengthening the capabilities of the labor force and the improvement of health, education and a wide variety of other social services.

The Fifth Plan emphasized the importance of private sector expansion and the need to improve its competitive position in world markets. It also stressed the need for a greater private sector role in economic activities (such as the utilities and transport sectors) where the government had traditionally been the main provider of services. Other important development initiatives included measures to improve the technological base in many economic sectors, and the introduction and development of innovative technologies that are uniquely suited to Saudi needs.

The Gulf crisis interfered with the orderly implementation of the Fifth Plan, as the government modified its expenditure priorities and the environment for private investment changed. Despite the uncertainties of the period, however, substantial progress was made towards achieving the Fifth Plan's objectives.

The **Sixth Development Plan** will continue to enhance and broaden the main objectives of the previous development plans and will meet the Kingdom's development needs through: maximizing

the private sector's contribution in the provision of jobs; diversifying the economy to lessen its dependence on oil revenues; building new physical infrastructure to meet the needs of the growing population; achieving a growth rate that is commensurate with the expansion of job opportunities for the Saudi labor force; improving social services, such as education and health; raising per capita incomes; and maintaining a balanced budget over the Plan period.

To obtain maximum benefit from new budget expenditures, the Sixth Plan places special emphasis on improving economic efficiency by raising labor productivity through training, by using the latest technology, by other measures aimed at accelerating the Saudiization of the work force, and by implementing programs and management techniques for the fuller utilization of existing infrastructural capacity. For example, in the case of electricity generation and distribution, appropriate measures may be introduced to reduce peak load demand. In the transport sector, new traffic management techniques may be introduced to increase the volume of traffic that can be handled on existing roads. Such efficiency measures will help to slow down the rising costs of providing services and to expand the useful life of facilities. Thus, new infrastructural investments will be extended over a longer period, thereby reducing annual capital expenditure on these facilities.

The substantial domestic and foreign resources of Saudi individuals, businesses and financial institutions can be invested in infrastructural development and other activities, as appropriate financing mechanisms are introduced. A key focus of the Sixth Plan is on privatization and other initiatives for the private sector to provide some facilities and services that have traditionally been supplied by the government. Thus, the private sector is expected to play an increasing role in financing, building and operating key facilities in the fields of basic infrastructure, economic and social services, thereby reducing the financial burden of the government. A wide range of privatization methods may be employed, from the selling of stock in public companies so that a majority of ownership becomes privately held, to a variety of configurations for build/operate/transfer schemes. Such privatization initiatives will open up new opportunities for many Saudis to invest in, benefit from, and participate in the future development of the Kingdom.

Strong encouragement will be given to the private sector to expand in domestic and international markets, especially in the GCC and other trade areas. Expanding domestic markets and the emergence of privatization opportunities are expected to attract the private investment that is needed to generate growth in the national economy.

Another key focus of the Sixth Plan period will be the replacement of non-Saudi manpower by Saudis (referred to as "Saudiization"). This will be achieved by the provision of appropriate training programs to improve the skills and capabilities of Saudis in various occupations, and by appropriate steps to implement the related policies.

With the completion of the Sixth Development Plan by 1419/1420, the Kingdom will have made substantial progress towards achieving its ambitious objectives, developing its social and economic resources and ensuring the welfare of present and future generations.

1.3 PLANNING AND THE LONGER TERM DEVELOPMENT OF THE SAUDI ECONOMY

The Sixth Development Plan was prepared with a long term view of national economic development that is both ambitious and optimistic. Persistent changes and developments in the global environment make clear and accurate predictions of the future difficult. However, long-term economic forecasts for the next 20 years suggest positive growth for the oil sector and expanding potential for the development of the non-oil sectors. Such forecasts are supported by the private sector's steadily expanding role in the development process and by continuous efficiency improvements in its investment activities, production techniques and organizational structures.

Certain key structural factors will influence future Saudi development:

- Saudi Arabia's proven oil reserves constitute one quarter of total global reserves, which ensures the continuity of its leading role in stabilizing world oil markets, particularly in the face of rising world oil demand, on the one hand, and the limited supply of alternative energy sources on the other. Over the longer term, the combination of higher Saudi oil prices and export volumes can be expected to raise oil revenues at a faster rate than the growth in the Kingdom's population.
- The Kingdom possesses a wide range of other mineral resources that have not yet been fully explored or exploited. These natural resources will further enhance the Kingdom's long-term development potential.
- The Kingdom's population is growing rapidly and this high growth rate has important positive implications for the development process in the longer term. First, the relative shortage of Saudi manpower, which has been a feature of the development process in the past, will gradually become less important, as the development plans have always assigned a high priority to the expansion and development of the Kingdom's education and training systems. Second, the rising population will gradually expand the domestic market and thereby facilitate the growth of newly established Saudi industries and their contribution to the long term diversification of the economic base.
- The scope of the existing Offset Programs can be extended to cover more civilian contracts along with military contracts, through the compliance of foreign companies in re-investing 35 percent of the contract value in advanced technology joint venture projects with the Saudi private sector. Thus, the successful operation and expansion of the Offset Programs will enhance optimism about the future potential of the long run economic development process in the Kingdom.
- The Kingdom has had continuous monetary stability and has steadfastly maintained the internal and external purchasing power of the national currency. Furthermore, a new

dimension has been added to the Kingdom's long term development aspirations by the scope and potential that now exist for private sector investment, through the gradual introduction of privatization programs and the planned development of the domestic financial markets. These new initiatives and investment incentives will provide an encouraging climate for the repatriation of Saudi private capital and its investment inside the Kingdom.

Undoubtedly, such an optimistic long term development perspective requires the continuous implementation of an integrated and effective set of economic policies. In this respect, the government will give priority to policies that have direct positive impacts on the state budget, on manpower development, on enhancing the role of the private sector in the development process, and on increasing productivity. At the same time, however, there are many important positive indicators that support this optimistic perspective of the Saudi economy, such as:

(i) The Saudi hydrocarbons sector will gradually encourage more foreign participation, which will accelerate future growth in the national economy.

(ii) Appropriate methods of privatization will be implemented in some of the government's commercial activities.

(iii) Saudi ARAMCO is expected to play a major role, not only in the development of oil production capacities, but also in consolidating its complementary refining and distribution activities in the importing countries, with a view to reducing its sensitivity to volatile world oil markets. Long term forecasts indicate that ARAMCO is expected to sell only 50 percent of its oil in crude form in the international markets, while the remainder will be refined and marketed by ARAMCO inside the Kingdom and abroad.

(iv) The Kingdom enjoys a comparative advantage in capital-intensive industries that use advanced technology and are capable of achieving the maximum possible value added per worker. Such industries will be supported by the Kingdom's intensified efforts in the fields of general, higher and technical education and vocational training.

Considering these long term objectives, the priorities of the future development strategies of the Kingdom can be summarized as follows:

- developing Saudi manpower in line with the requirements of development plans and implementing Saudiization programs;
- maximizing use of the Kingdom's long term comparative advantages; developing the production capacities and improving the competitiveness of national products in domestic and world markets within the context of intensified efforts to diversify the economic base;

- preparing the private sector for leadership of the development process;
- rationalizing government spending through improved administrative efficiency and productivity in government agencies, through the privatization of some government-owned commercial activities, and through private capital participation in some government projects, provided that such measures will reduce government spending without adversely affecting the quality and availability of public services.
- achieving balanced budgets by adopting a fiscal policy that matches government revenues and expenditures, while devoting intensive efforts to the development of non-oil revenues, provided that no undesirable social and economic impacts will result;
- enhancing the foreign reserves of the Kingdom, while promoting continuous monetary stability by maintaining the purchasing power of the national currency at the national and international levels, as well as creating the appropriate investment climate to attract private Saudi and foreign capital;
- maintaining the standard of living and welfare of citizens;
- expanding the fields of technological development and environmental protection;
- boosting regional and international economic cooperation.

1.4 PLAN MANAGEMENT AND IMPLEMENTATION

1.4.1 THE PLANNING SYSTEM

Planning has been the primary instrument of development in the Kingdom. As conceptual frameworks, the Five-Year Development Plans represent structural designs for economic, social and institutional development, while as organizational frameworks they provide guidelines for implementation.

The Five-Year Plans are prepared according to the General Objectives and Strategic Bases as approved by the Council of Ministers. Specifically, they include the **Plan Document,** which outlines the medium-term economic objectives, policies and development strategy for the national economy during the Plan period, as well as sectoral trends in output, investment and expenditure, and the detailed **Operation Plans** for each Ministry and public agency, which set all government expenditure, development programs and annual schedules for the implementation and costs of projects. Hence, the documents (the national Plan Document, the agency Operation Plans and the Regional Reports) integrate the main elements of development: the structural priorities and directions of the economy, and the development and expenditure programs of government. The latter then become the guidelines for the annual budgets, which, as the first stage of Plan implementation, function as the main annual instruments of economic policy. The individual **Regional Reports,** describing existing socioeconomic conditions and future strategies and development needs of the regions, are also an important element of the overall planning system.

For the *private sector,* the planning system defines the regulatory and economic framework in which to operate. In a broader sense, the Five-Year Plans also provide orientation for the private sector on the likely course of the economy, on related government policies, and on potential business opportunities. The private sector is influenced by the set of policies adopted by the government, particularly privatization, the activities of the specialized funds, and the range of support measures and incentives.

Although the planning process involves all government agencies, the key role is assigned to the Ministry of Planning, which is responsible for the preparation and coordination of all sectoral plans at the national level.

1.4.2 COORDINATION BETWEEN THE FIVE-YEAR PLANS AND THE ANNUAL BUDGETS

Since its inception, development planning in the Kingdom has had inseparable links with the annual preparation of the State budget. The Plan could always be seen as annual budgets combined, while each annual budget could be regarded as the finalization of its earlier corresponding parts in the Plan. In the past, therefore, the combined system of Five-Year Plan and annual budget determined the level and pattern of expenditure for the various government agencies, with all the associated implications for the progress and direction of sectoral development. The most frequent problem associated with this relationship was the way in which individual agencies could modify their original project proposals over the period of implementation. Thus, flexibility in Plan implementation has always been a feature of the annual budget process. Such flexibility was given added emphasis with the adoption of the program-based approach to the planning process in the Fourth Development Plan.

The need for such flexibility has become even more significant in the Sixth Plan, as the planning emphasis moves increasingly from capacity creation to efficiency aspects, from the concentration of earlier plans on expenditure programs to the design and implementation of comprehensive and consistent policies, and from filling a need for the output of public sector projects to analyzing their overall consequences and impacts.

1.4.3 PLANNING METHODOLOGY

The Kingdom adopts a dual system of *program-based* planning for government agencies and *indicative* planning for the private sector. Program-based planning was first introduced in the Fourth Plan to provide a functional framework for defining the structure of development agency activities and services. This approach required agencies to adhere to an agreed program structure, while simultaneously increasing their flexibility to manage expenditure on projects within individual programs, according to prevailing funding conditions. It thus shifted the focus of planning from projects to programs,

from the detailed implementation of individual projects to responsibility for managing expenditure priorities and structure. Government agencies will continue their program-based planning in the Sixth Plan also.

With the onset of the Sixth Development Plan, planning methodology will enter a new phase of development, commensurate with the Kingdom's current circumstances and a changing world economy. Over the previous five development plans, the government has played a major role in driving the socio-economic development process through spending on development programs and projects. The economy has now entered a more mature stage and remarkable progress has been made in diversifying the economic base. After twenty-five years in which planning has been concentrated on government spending, the need has emerged to concentrate planning on objectives and policy measures aimed at raising efficiency and improving performance, so that government spending can be rationalized through a balanced framework of demand management measures and improvements in the administrative and operational efficiency of government services. Thus, the focus of planning will shift from the expansion of productive capacity towards raising economic efficiency, from the direct contribution of projects to the satisfaction of demand towards the analysis of the overall impacts of these projects. Based on this comprehensive view, the emphasis of the Sixth Development Plan is on policies, measures and instruments that will achieve greater economic efficiency and the optimal utilization of resources, thereby encouraging the private sector to increase investment and generate more job opportunities for Saudi citizens.

The new emphasis on indicative planning for the private sector, introduced in the Fifth Plan, will continue in the Sixth Plan through:

- clarification by the government of the main directions of development within each sector;
- identification of the volume and structural composition of the total investment needed to achieve the development objectives and the private sector's share of this investment;
- the creation of a positive environment for investment through the adoption of appropriate fiscal and monetary policies to facilitate the expansion of medium and long-term capital financing, and economic policies that will support agricultural and industrial production and promote exports;
- the identification of privatization and other investment opportunities that will generate good returns for the private sector and contribute directly to the achievement of the Sixth Plan's growth and diversification objectives.

1.4.4 MANAGEMENT OF PLAN IMPLEMENTATION

Managing the implementation of the Plan is an integral part of the planning system, without which the Plan's objectives cannot be effectively achieved. The Ministry of Planning's approach to this task will include a number of important activities, as described below.

1.4.4.1 Follow-Up and Evaluation

The follow-up function is concerned mainly with assessing the progress of Plan implementation, for its intended impacts, the effects of unexpected external influences, as well as possible delays and deviations from the Plan. A number of continuous, inter-related and responsive activities comprise the follow-up function, the key elements of which are:

- ensuring that development programs and policies effectively achieve and are consistent with the strategic objectives of the Plan;
- evaluating the effectiveness of policies and relevant programs in achieving their objectives, and providing alternative policy options when needed;
- assessing efficiency in the allocation of resources, thereby improving the Ministry's effective input to expenditure decisions and promoting the achievement of strategic objectives;
- expanding and upgrading the available information for decision makers to minimize deviations from the Plan and to identify the obstacles and constraints to implementation.

1.4.4.2 Consultation between the Government and the Private Sector

Because of the special emphasis on the private sector's role in the economy, greater coordination is needed between the government and the private sector. Improved dissemination of timely, reliable information and analysis about the performance of specific sectors and the economy in general will also be required. Several mechanisms for business-government consultations already exist, such as the conferences and symposia organized by the government or by the Saudi Council of Chambers of Commerce and Industry, studies undertaken by the government with private sector participation (such as the survey of businessmen), and the studies on investment opportunities undertaken by the Chambers of Commerce and Industry. These will be further expanded during the Sixth Plan period.

1.4.4.3 Data Base and Information Systems

To strengthen the management of Plan implementation activities, the Ministry of Planning is developing and extending its data bases, management information systems and capabilities in the fields of policy analysis and program review. Furthermore, it is actively encouraging other relevant agencies to improve the quality and scope of socio-economic and demographic data necessary for effective planning. Similarly, the development agencies themselves will strengthen their data bases and management information systems to meet the needs of decision makers within these agencies, as well as to provide the Ministry of Planning with the information and analysis needed to monitor and evaluate the implementation of the Plan.

CHAPTER 2

PROGRESS DURING THE FIFTH DEVELOPMENT PLAN

2. PROGRESS DURING THE FIFTH DEVELOPMENT PLAN

This chapter reviews the progress made during the Fifth Plan period (1410/11 to 1414/15) in terms of economic growth, government revenues and expenditures, employment and international trade. The chapter provides the background for the expected developments in the national economy during the Sixth Plan, which are presented in Chapter 4.

2.1 OVERVIEW

The invasion of Kuwait and the subsequent outbreak of the Gulf war posed enormous organizational and financial challenges to the Saudi economy in the early years of the Fifth Plan. There followed a period of substantial investment activity, as the private sector responded to higher government expenditures in the economy and a rise in consumer spending.

The speed and scale of the post-war recovery provided encouraging confirmation of the adaptive capacity of the Saudi economy and the restoration of private sector confidence. Most significantly, this recovery took place with only a marginal rise in consumer prices. The Kingdom's free trade philosophy, along with the rationalization of economic policies, played an important role in containing inflationary pressures, as the supply of imported goods and services responded rapidly to the increase in demand. This surge in economic activity reduced the private sector's incentive to invest abroad and led to a significant repatriation of Saudi capital and higher domestic liquidity in the Fifth Plan period. One indicator of this high liquidity and investor confidence is the stock market index, which almost doubled in value in the twelve months following the end of the war.

Notwithstanding these positive aspects, however, the consequences of the Gulf war pose serious challenges to the Saudi economy at the start of the Sixth Plan period. Higher than planned oil revenues, arising from the Kingdom's increased OPEC quota, provided only partial cover for the financing needs of the war and its aftermath. Expenditures exceeded revenues in the first three years of the Fifth Plan period, thereby creating a financial burden on the state budget.

The enormous strain on the government finances in the first three years of the Fifth Plan, therefore, had to be reduced, as budget deficits of this magnitude could not be sustained. The budgetary situation was further aggravated by a decline in crude oil prices in 1414/15 to a level more than 30 percent below the OPEC target price. A dedicated effort has since been made to consolidate the budget, with sizable expenditure reductions being made in each of the two remaining years of the Fifth Plan.

The resulting decline in government-induced demand inevitably had a dampening effect on economic growth at the end of the Fifth Plan period, although its effects were limited by the private

sector's ability to adapt to lower government spending. Thus, the transition from a primarily budget-driven economy to an economic structure reflecting more autonomous private sector demand and investment activity has been firmly established. Despite the negative impacts of the Gulf war, the private sector has emerged more active, independent and dynamic at the end of the Fifth Plan.

2.2 FIFTH PLAN OBJECTIVES

The major objectives of the Fifth Plan were to:

- develop human resources, thus ensuring a constant supply of manpower, upgrading its quality and improving its efficiency to meet the requirements of the national economy;
- reduce dependence on the production and export of crude oil as the main source of national income;
- continue the restructuring of the Kingdom's economy and the diversification of the economic base, with due emphasis on industry and agriculture;
- concentrate on the qualitative development of existing utilities and facilities by improving their level of performance;
- encourage further private sector participation in socio-economic development.

For the achievement of these objectives, planned allocations by the government in the Fifth Development Plan amounted to about SR 753 billion.

2.3 GOVERNMENT REVENUES AND EXPENDITURES

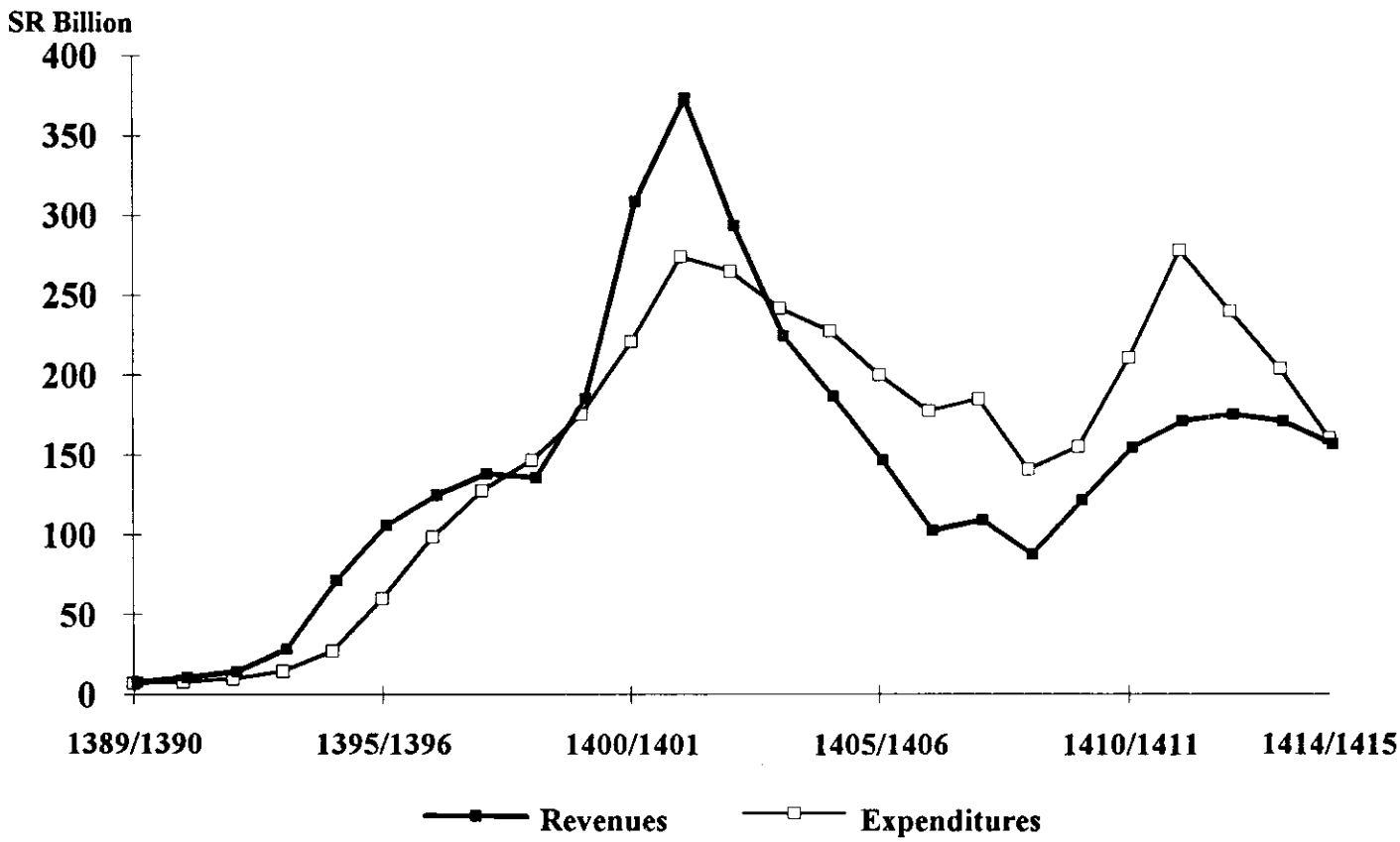
The onset of the Gulf crisis and the Kuwait liberation war early in the Fifth Plan period caused a substantial deviation of both government revenues and expenditures from their planned paths. As a result, a fiscal strategy aimed at rationalizing government expenditure was adopted. The firm implementation of this strategy succeeded in reducing the budget deficit in the later years of the Fifth Plan (see Figure 2.1).

2.3.1 OIL AND NON-OIL REVENUES

In the first year of the Fifth Plan, the Kingdom responded to the cutback in world oil supplies (due to the Gulf war) by raising its crude oil production. As a result, the oil revenue position changed dramatically. Although the initial production increase was sustained, falling oil prices led to a decline in revenues in the last two years of the Plan.

Non-oil revenues, on the other hand, showed a downward trend in the early years of the Fifth Plan, as the draw-down in reserves reduced the flow of investment income from abroad. With the recovery of economic activity after the war, however, non-oil revenues began to rise again.

Figure 2.1
Government Revenues and Expenditures (at current prices)



2.3.2 RECURRENT AND PROJECT EXPENDITURES

Government expenditure, which had reached a minimum level in the fourth year of the Fourth Plan (1408/09), rose moderately in the final year of that Plan period (1409/10). There followed a dramatic increase in expenditure in response to the Gulf crisis, so that in the second year of the Fifth Plan (1411/12) government expenditure rose to its highest level in ten years (see Figure 2.2).

Despite the similar levels of government expenditure at the beginning of the Third and Fifth Development Plans, there were significant differences in the composition of expenditure between these two periods (1401/02 and 1411/12). Whereas at the beginning of the Third Development Plan, the build-up of the Kingdom's infrastructure required a high level of project expenditure, the cost of the war was reflected in the high share of recurrent expenditure in the first two years of the Fifth Plan. The pronounced expansion of project expenditure in the third year (1412/13), however, highlights the Kingdom's efforts to strengthen its infrastructure through previously delayed priority projects and to speed up economic recovery.

After considerable efforts to consolidate the budget, recurrent expenditure had returned to its level of five years earlier by the end of the Fifth Plan. Project expenditure, on the other hand, was marginally higher than at the end of the Fourth Plan (1409/10), because of the conscious effort to expand the country's infrastructure to meet the needs of a growing population and to replace equipment and facilities installed during the rapid development of the Second and Third Plan periods.

Total government expenditure during the Fifth Plan period, including non-civilian expenditure, reached SR 1,090 billion, or 44 percent more than planned spending for the period. Of this total, project expenditure accounted for 26 percent.

2.3.3 DEVELOPMENT EXPENDITURE

Despite the enormous strain on the financial resources of the Kingdom, total spending by the development agencies reached 91.7 percent of the planned allocations (see Table 2.1). Spending priorities changed, however, particularly at the beginning of the plan period, in response to unforeseen circumstances and the government's ongoing concern for the welfare of citizens. Thus, allocations for the development of human resources and for health and social services were increased significantly, while expenditures on transportation and communications facilities, economic resources development and municipalities and housing were lower than planned.

Figure 2.2
Recurrent and Project Expenditure (at current prices)

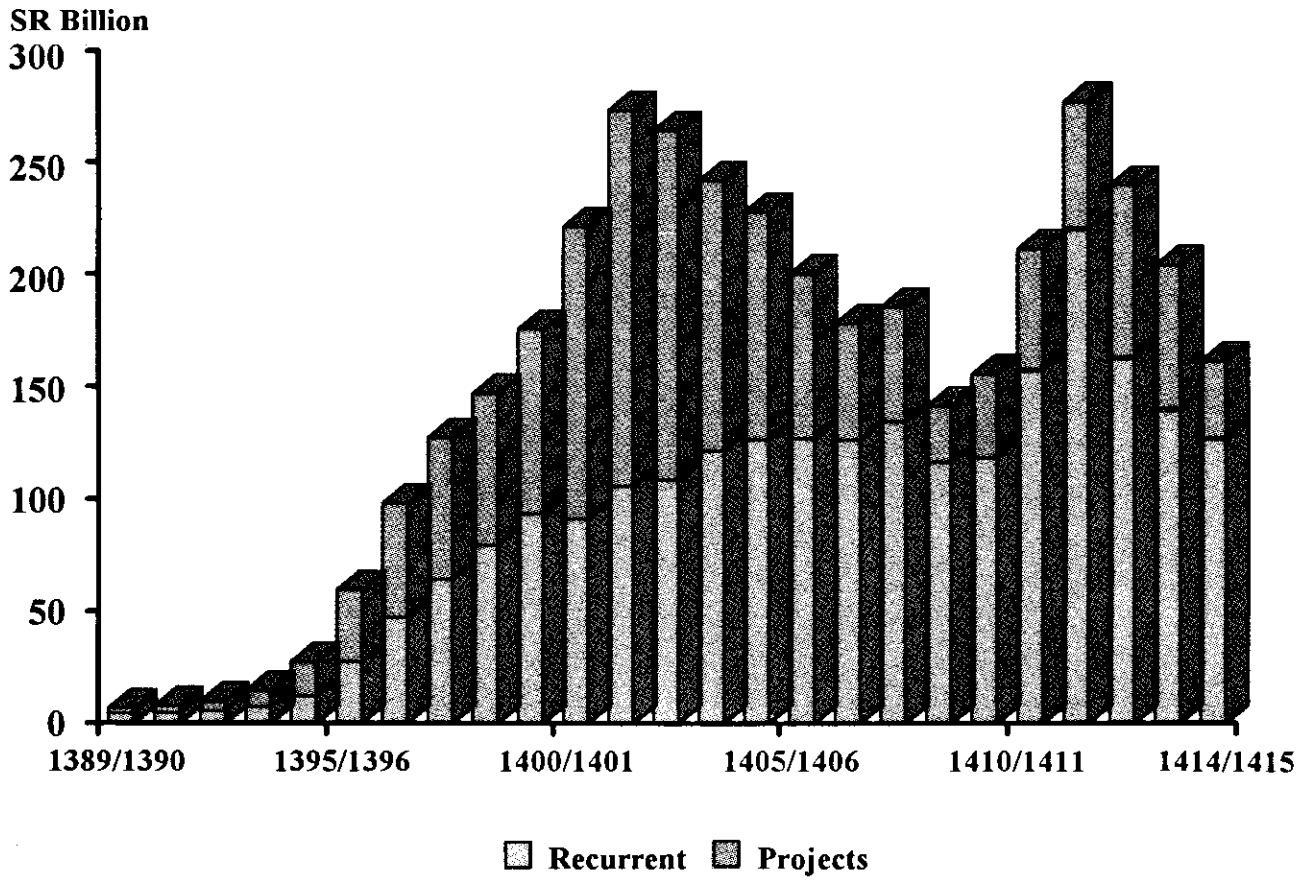


Table 2.1

ALLOCATION OF DEVELOPMENT EXPENDITURE IN THE FIFTH PLAN ★

Spending Category	Percentage Distribution		Actual Expenditure ★★	
	Plan %	Actual %	Value (SR billion)	As percent of Plan -- %
Economic Resources	15.8	10.6	34.7	61.4
Human Resources	39.1	47.3	155.0	111.1
Health and Social Services	17.9	19.3	63.3	99.0
Transport and Communications	14.7	12.9	42.4	80.6
Municipalities and Housing	12.5	9.9	32.4	72.3
Total	100.0	100.0	327.8	91.7

★ Excluding loans from the government's specialized credit institutions

★★ Amounts for the last year of the Fifth Plan are estimates.

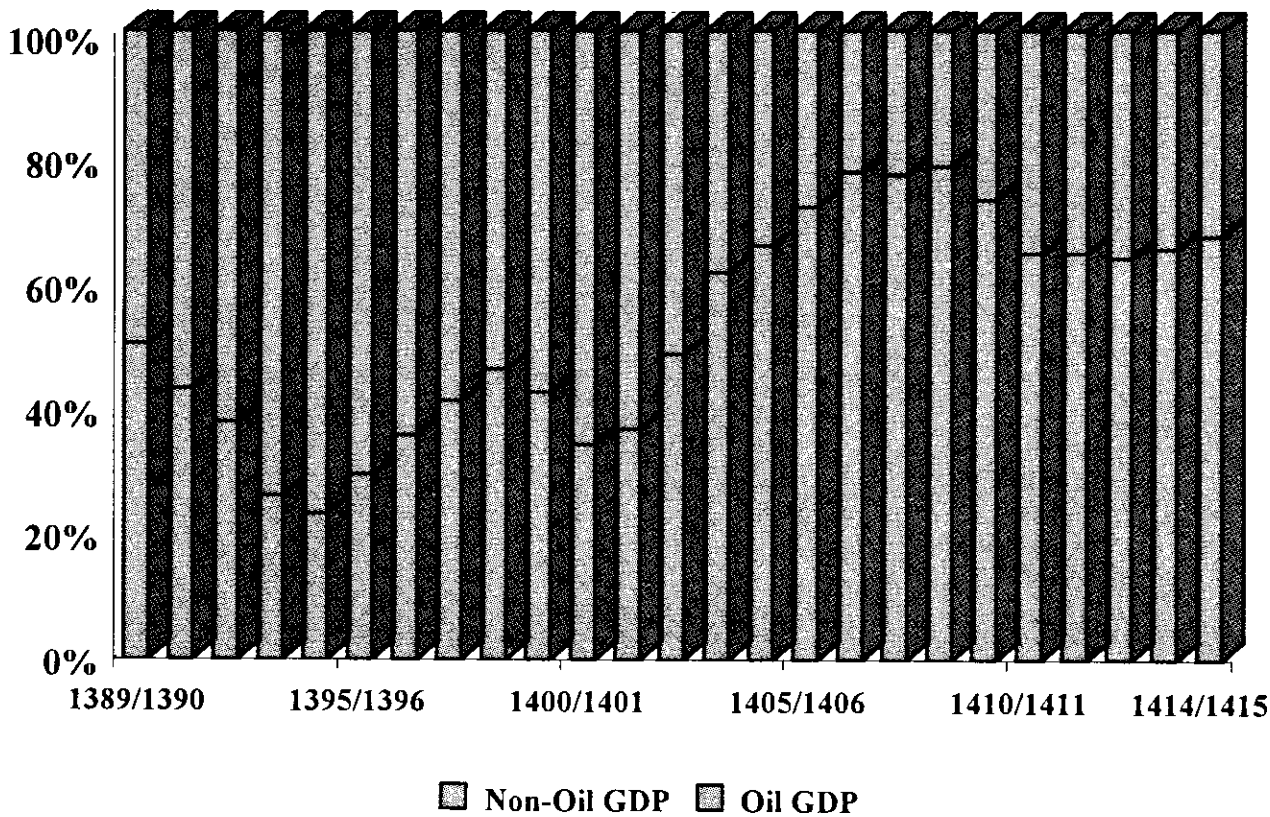
The high standards of infrastructure and government services already achieved in all development sectors allowed for the postponement of some projects targeted in the Fifth Development Plan. Project expenditure was reduced by varying amounts in all development agencies, so that overall, this category of spending reached 41 percent of the planned allocations. Funds initially identified for projects had to be channeled into recurrent expenditure, which reached a level almost SR 34 billion higher than planned.

2.4 GROSS DOMESTIC PRODUCT IN THE FIFTH PLAN

A change in the structure of the Kingdom's economy over any particular period is profoundly affected by price and volume changes in the international oil market. Although the rise in crude oil production at the start of the Fifth Plan was particularly sharp, subsequent price fluctuations limited the impact of this volume increase on the structural composition of GDP. Thus, the oil sector's share (based on current prices) rose from 30 percent to 36.6 percent over the course of the Plan (see Figure 2.3).

The sustained expansion in crude oil production at the start of the Fifth Plan was sufficient to ensure that Gross Domestic Product grew at an average annual rate of 4.1 percent (measured in constant 1409/10 prices) over the five-year period. At the same time, growth in the non-oil economy was heavily influenced by the annual fluctuations in government expenditure, which temporarily reversed in the earlier years the long-term downward trend in the relative weight of government expenditure in the economy.

Figure 2.3
Gross Domestic Product by Main Sector
(at current prices)



In real terms, the non-oil economy grew at the rapid rate of 8.6 percent in the first year of the Fifth Plan period, primarily in response to the Gulf war-related increase of government expenditure and the consequent rise in the government contribution to the non-oil GDP at that time. In the following years, however, the decline in government expenditure had a restraining influence on economic growth, to the extent that the non-oil sectors' value added grew at an average annual rate of 2.1 percent during the Fifth Plan period as a whole. Table 2.2 presents a sectoral breakdown of GDP and the growth in the Kingdom's economy over the Fifth Plan period.

Notwithstanding the relatively slow rate of economic growth for the non-oil sectors over the period as a whole, a number of positive features confirm that the long term structural transformation of the Saudi economy is continuing:

- First, particularly significant to the continued diversification of the Kingdom's economy was the relatively strong average annual growth of 4.4 percent of "other" manufacturing industry. As a result, its share of value added in the non-oil sectors (non-oil GDP) rose from 5.3 percent to 6.2 percent during the Fifth Plan period in current price terms.
- Second, there is evidence of a continued decline in the private sector's dependence on government expenditure, as private non-oil sectors' contribution to GDP continued to grow at an average annual rate of 2.9 percent in the third and fourth years of the Plan, when government expenditure fell by 5.2 percent and 16.6 percent respectively.

Table 2.2

Gross Domestic Product by Sector in the Fifth Plan
(at constant 1409/10 prices) ★

	Value Added (SR billion)		Average Annual Growth (percent)	
	1409/10	1414/15 ★★	Target	Actual
Producing Sectors	**83.0**	**93.2**	**5.7**	**2.4**
Agriculture, Forestry, Fishing	22.7	26.4	7.0	3.1
Other Mining, Quarrying	1.8	2.3	4.0	4.9
Manufacturing	**25.2**	**31.1**	**6.8**	**4.3**
Petroleum Refining	9.4	13.5	5.4	7.5
Petrochemicals	4.0	3.0	8.0	(5.6)
Other Manufacturing	11.8	14.6	7.5	4.4
Electricity, Gas, Water	0.8	0.9	6.9	4.5
Construction	32.5	32.5	3.8	0.0
Service Sectors	**83.7**	**89.8**	**3.6**	**1.4**
Trade, Restaurants, Hotels	26.1	27.8	3.0	1.3
Transport, Communications	23.1	25.0	3.2	1.6
Finance, Insurance, Real Estate and Business Services	**23.1**	**25.2**	**5.7**	**1.8**
Real Estate	6.1	6.9	2.8	2.5
Other	17.0	18.3	6.6	1.5
Community and Personal Services	11.4	11.8	1.7	0.7
Government Services	57.8	66.4	0.8	2.8
Non-Oil Sectors	**224.5**	**249.4**	**3.7**	**2.1**
Crude Oil and Natural Gas	83.8	129.3	2.2	9.0
Other Items (1)	2.5	2.1	---	---
Gross Domestic Product	**310.8**	**380.8**	**3.4**	**4.1**

★ Development of real growth of GDP at 1409/10 prices should not be compared with figures presented in current prices, which reflect the cash value of current transactions in the economy.

★★ Estimate

(1) Import duties less imputed bank service charges;( ) Figures in brackets denote negative values.

Table 2.3 shows the relative GDP contributions of the oil and non-oil sectors during the Fifth Development Plan period. In contrast to Table 2.2 where it was included as part of the manufacturing sector, petroleum refining in Table 2.3 has been included as part of the oil sector so that the main sectors (oil,non-oil) can reflect the contribution to the GDP in current prices .

Table 2.3

Gross Domestic Product in the Fifth Plan : oil and non-oil sectors

Sector	Value Added at Current Prices (SR billion)		Average Annual Growth Rates at 1409/10 prices (%)	
	1409/10	1414/15	Target	Actual
Non-Oil Sectors	**215.0**	**276.3**	**3.7**	**1.9**
Government Services	57.8	77.0	0.8	2.8
Other Non-Oil Sectors	157.2	199.3	4.5	1.5
Oil Sector ★	**93.3**	**161.1**	**2.7**	**8.9**
Other Items ★★	2.5	2.7	—	—
Gross Domestic Product	**310.8**	**440.1**	**3.2**	**4.1**

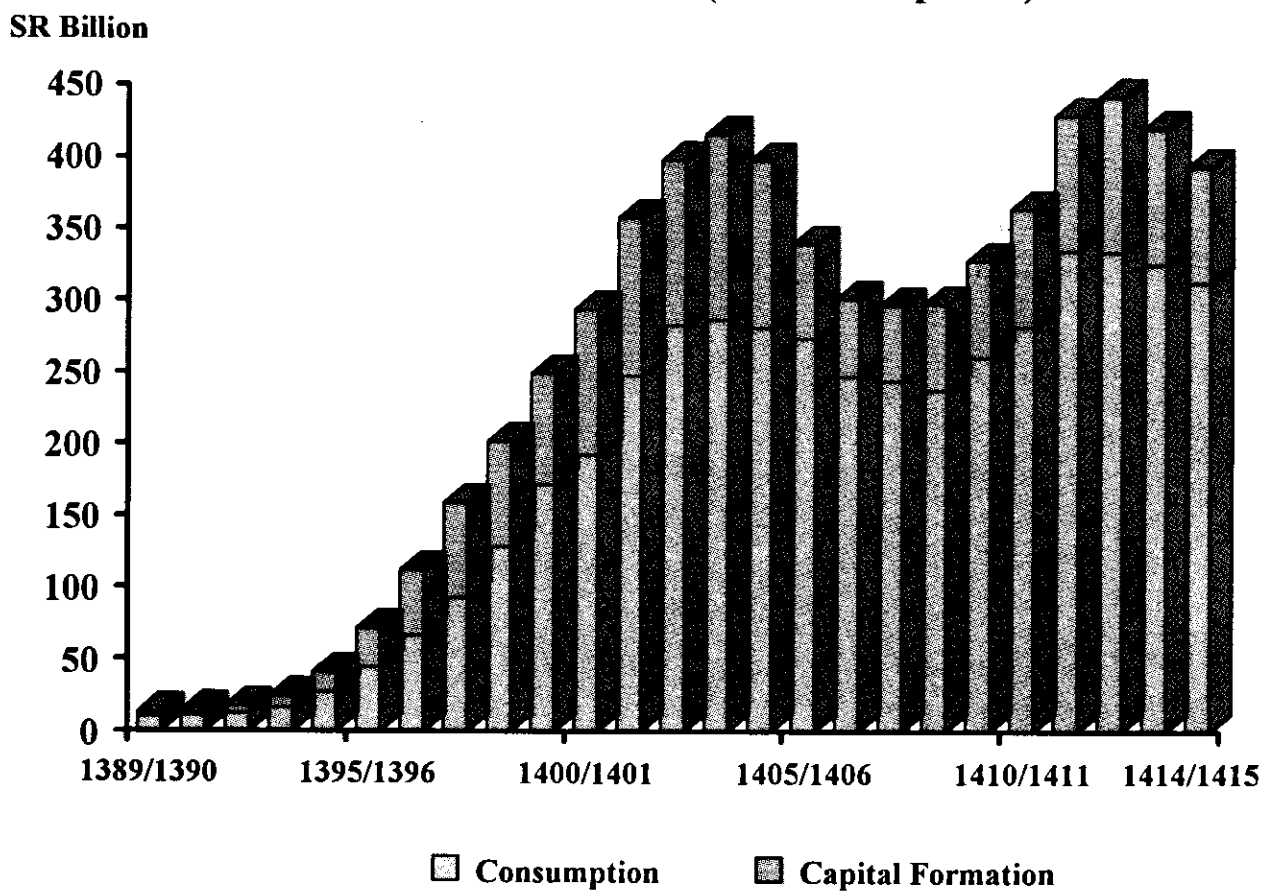
★ Oil Sector is defined in this table according to the definition adopted by the CDS, which includes petroleum refining. Since petroleum refining is related to the other economic sectors, it will be included as part of the non-oil producing sectors in the other tables.

★★ Import duties less bank service charges.

2.5 EXPENDITURE ON GROSS DOMESTIC PRODUCT

The Gulf crisis and its aftermath not only caused major changes in the composition of supply; it also severely affected the demand side of the economy. In 1410/11 and 1411/12, there was a surge in demand for both government consumption and investment expenditure, which induced more private consumption. The rapid increase of government investment in the early years of the Plan was offset by a reduction in private investment, which had to be expected in such an uncertain environment. During the adjustment period after the Kuwait liberation war, the government reduced its expenditure to pre-war levels, while the private sector, regaining confidence, increased investment considerably, particularly in real estate. Thus, this period was characterized by huge fluctuations in domestic demand (see Figure 2.4).

Figure 2.4
Domestic Final Demand (at current prices)



In real terms, private consumption grew at an average annual rate of 4.1 percent compared to the targeted growth rate of 3.5 percent, at which a constant per capita income is expected to be maintained. Government consumption fell at an average annual rate of 3.3 per cent in real terms, compared to the targeted growth rate of 1.5 percent, due to the decline in government expenditure in the later years of the Fifth Plan which limited the growth in total consumption to an average annual rate of 1.1 percent (see Table 2.4).

Growth rates calculated over the entire Plan , however, do not adequately reflect the substantial changes that took place in the individual years and give no impression of the major disruptions the Saudi economy experienced at the start of the Fifth Plan. For example,

- government consumption measured in constant prices increased by 7.9 percent in 1410/11 and by 9.1 percent in 1411/12. Over the remaining years of the plan period, it declined by an average annual rate of 10 percent to the level reached in 1414/15;
- the combined effect of these developments was that real consumption expenditure as a whole grew at an average annual rate of 5.4 percent in the first two years, but declined at the average annual rate of 1.7 percent over the remaining three years of the Fifth Plan.

Table 2.4

Expenditure on Gross Domestic Product
(at constant 1409/10 prices) ★

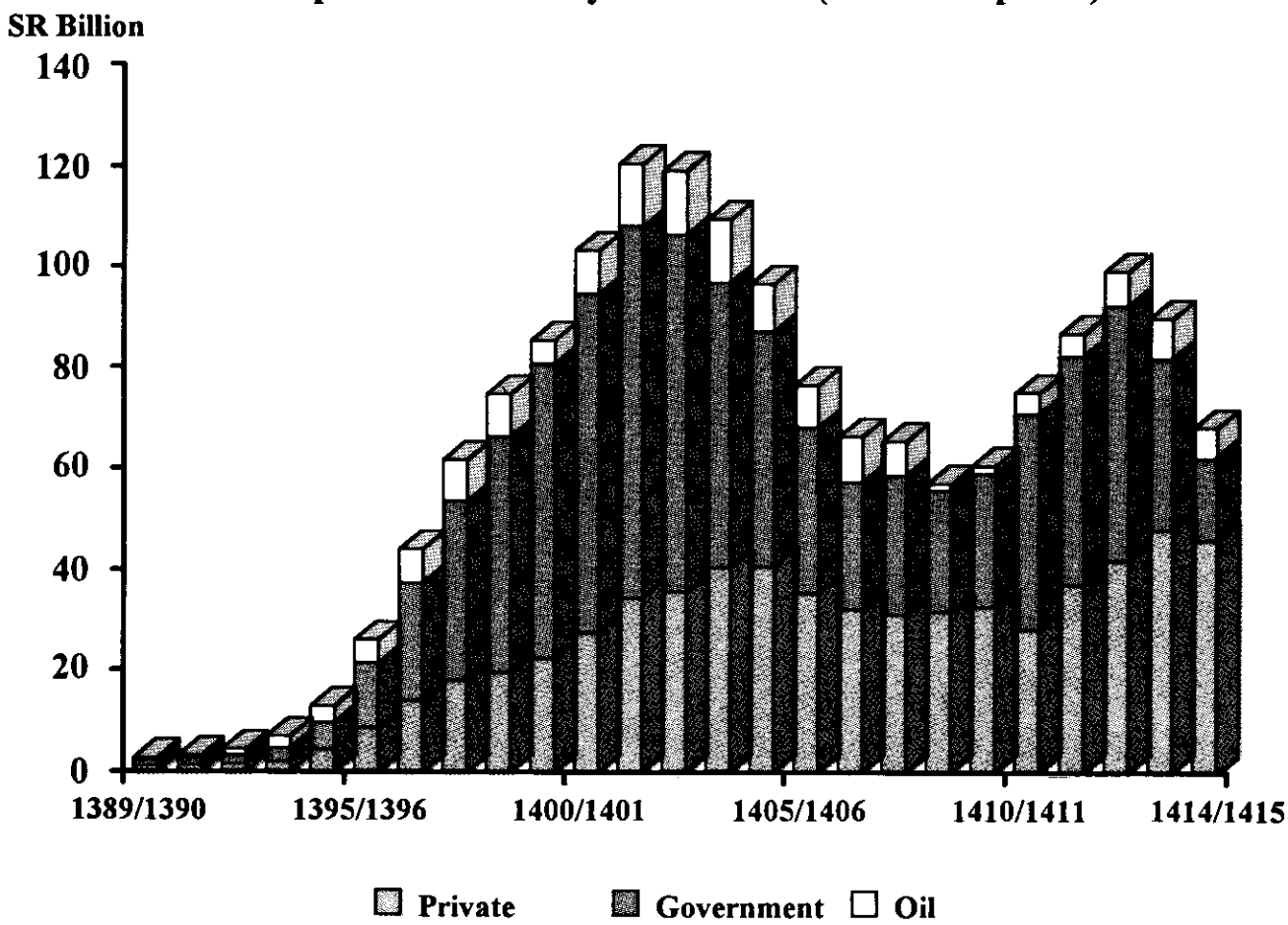
	Expenditure (SR billion)		Average Annual Growth (percent)	
	1409/10	1414/15	Target	Actual
Consumption	**259.3**	**273.5**	**2.6**	**1.1**
Government	114.3	96.6	1.5	(3.3)
Private	145.0	176.9	3.5	4.1
Gross Fixed Capital Formation	**60.4**	**54.8**	**7.5**	**(1.9)**
Oil	1.5	4.9	3.2	26.3
Government	26.3	13.7	8.6	(12.2)
Private	32.6	36.2	6.8	2.1
Change in stocks	6.8	(3.9)	---	---
Domestic Final Demand	326.5	324.4	3.1	(0.1)
Net Exports	**(15.7)**	**56.4**	**---**	**---**
Exports	120.3	184.1	4.0	8.9
Imports	136.0	127.7	3.2	(1.2)
Gross Domestic Product	**310.8**	**380.8**	**3.4**	**4.1**

★ The values shown for real growth of expenditure components are measured at 1409/10 prices and are not comparable with corresponding values at current prices.

( ) Figures in brackets denote negative values

Investment in the oil sector was substantially higher at the end of the Fifth Plan compared to its level at the beginning. Uncertainty imposed by the Gulf war deterred private investment in the first year of the Plan, but private investment activity rebounded again growing by 20.8 percent in 1411/12 and by 6.0 percent in 1412/13. By the end of the Fifth Plan in 1414/15, private investment had reached a higher level than before the war. Government investment, on the other hand, had to respond to the particular challenges at the time and reached a peak in 1412/13 at more than double the expenditure of 1409/10 (see Figure 2.5).

Figure 2.5
Fixed Capital Formation by Main Sector (at current prices)



2.6 EMPLOYMENT

Total civilian employment increased by 818,300 persons during the Fifth Plan period, from 6,049,400 in 1409/10 to 6,867,700 in 1414/15, or at an average annual rate of 2.6 percent.

The total number of Saudis employed rose by 402,700 in the Fifth Plan period, from 1,981,500 in 1409/10 to 2,384,200 in 1414/15, or at an average annual rate of 3.8 percent. Thus, not only did most Saudis entering the labor force succeed in finding employment in the Fifth Plan period, but the Saudi share of total employment also increased from 32.8 percent to 34.7 percent over the Fifth Plan period.

Sectoral employment trends in the Fifth Plan period are shown in Table 2.4. In absolute terms, the largest employment increase occurred in the community and personal services sector, where an additional 326,200 workers were employed. Other significant increases were in the construction sector (144,000), the trade sector (114,800), government services (106,500) and other manufacturing (69,100).

Employment growth was highest in the services sectors, particularly in community and personal services, Where Productirity is Lowest (in terms of value added per worker). As a result, productivity in the non-oil sectors of the economy as a whole continued to decline, notwithstanding the Fact that productirity in the producing sectors grew at a moderate rate.

Table 2.5

Employment by Sector in the Fifth Plan
(in thousands)

	1409/10	1414/15	Change 1409/10-1414/15
Producing Sectors	**1,874.8**	**2,088.9**	**214.1**
Agriculture, Forestry, Fishing	393.2	377.2	(16.0)
Other Mining, Quarrying	3.7	4.4	0.7
Manufacturing	**494.7**	**566.9**	**72.2**
Petroleum Refining	15.2	16.8	1.6
Petrochemicals	6.5	8.0	1.5
Other Manufacturing	473.0	542.1	69.1
Electricity, Gas, Water	66.5	79.7	13.2
Construction	916.7	1,060.7	144.0
Service Sectors	**3,414.8**	**3,906.4**	**491.6**
Trade, Restaurants, Hotels	921.9	1,036.7	114.8
Transport, Communication	274.9	319.9	45.0
Finance, Insurance, Real Estate, and Business Services	324.6	330.2	5.6
Community and Personal Services	1,893.4	2,219.6	326.2
Government Services	**711.2**	**817.7**	**106.5**
NON-OIL SECTORS	**6,000.8**	**6,813.0**	**812.2**
Crude Oil and Natural Gas	48.6	54.7	6.1
Total	**6,049.4**	**6,867.7**	**818.3**

2.7 FOREIGN TRADE AND THE BALANCE OF PAYMENTS

The invasion of Kuwait at the start of the Fifth Plan Prompted some significant and contradictory changes in the Kingdom's foreign trade and balance of payments positions. On the one hand, the sharp and sustained rise in the value of oil exports at the start of the period resulted in an average annual surplus of SR 74.5 billion in the trade balance. On the other hand, the substantial costs of the war and the enormous outflow of related payments had a dramatic negative impact on the overall balance of payments position, so that the average annual current account deficit during the Plan period reached SR 53.7 billion (Table 2.6).

Table 2.6

FOREIGN TRADE AND BALANCE OF PAYMENTS IN THE FIFTH PLAN
(SR billion in current prices)

	1409/10 Base Year	1410/11	1411/12	1412/13	1413/14	1414/15 ★	Fifth Plan Annual Average
Merchandise Exports (fob)	106.3	166.3	179.0	176.2	168.2	157.8	169.5
Merchandise Imports (fob)	72.0	80.5	97.3	113.3	96.0	87.9	95.0
Trade Balance	34.3	85.9	81.7	62.9	72.2	69.9	74.5
Net Services and Transfers	(70.0)	(101.3)	(185.0)	(141.4)	(125.4)	(88.2)	(128.7)
Current Account	(35.7)	(15.4)	(103.3)	(78.5)	(53.2)	(18.3)	(53.7)
Relative Significance of Foreign Trade (%)							
Exports of goods and services as a percent of GDP	38.7	46.8	44.6	43.1	41.7	40.9	43.4
Imports of goods and services as a percent of non-oil GDP	60.6	61.8	64.7	63.6	51.8	45.2	57.2
Current Account as per cent of GDP	(11.5)	(3.9)	(23.4)	(17.3)	(11.6)	(4.1)	(12.3)

★ MOP estimates
( ) Figures in brackets denote deficits

Over the Fifth Plan period exports of goods and services as a percentage of GDP rose from 38.7 percent in 1409/10 to 40.9 percent in 1414/15, while imports of goods and services as a percentage of non-oil GDP rose from 60.6 percent in 1409/10 to 64.7 percent in 1411/12, although this ratio declined to 45.2 percent by the end of the Fifth Plan period. This decline in imports reflects a growing reliance on domestically produced goods and services.

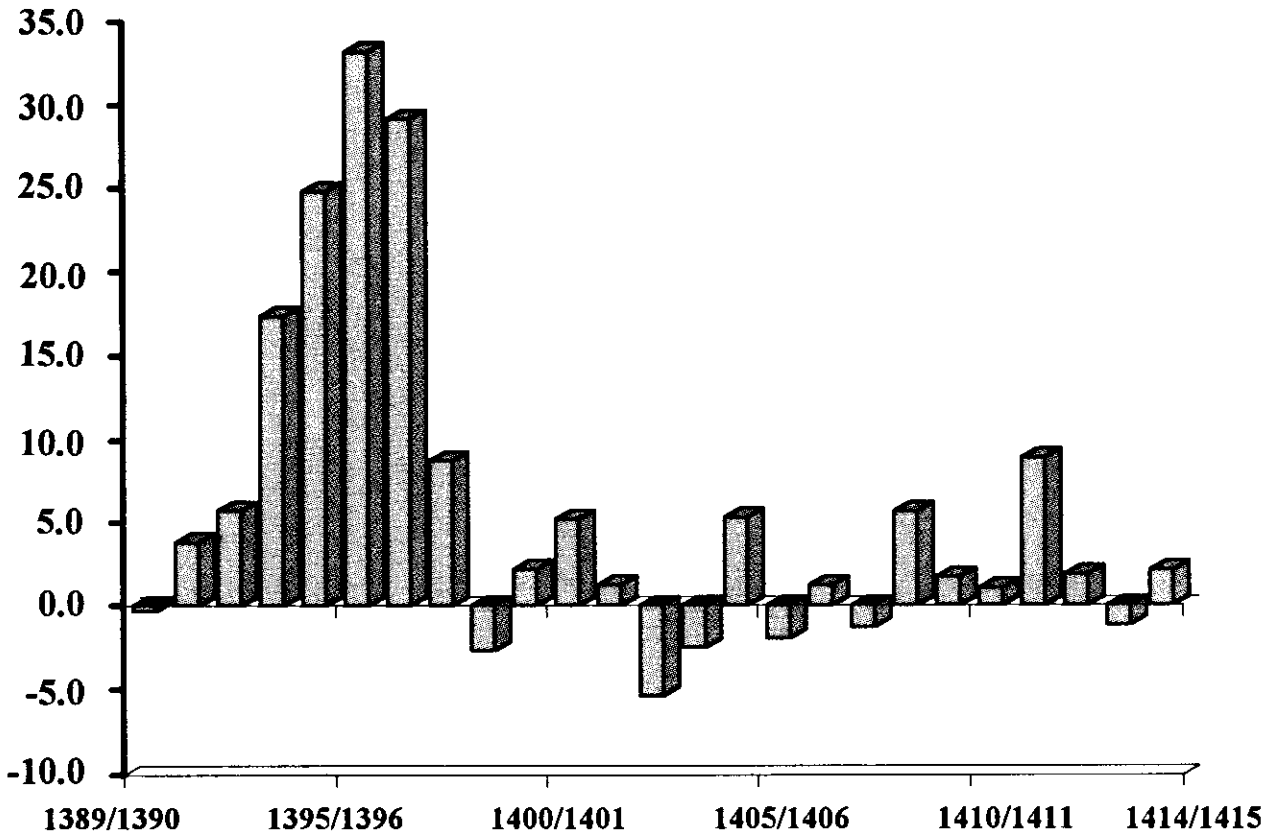
At the same time, however, steps were taken in the Fifth Plan period to address the balance of payments constraint facing the Kingdom, as large-scale drawings from the Kingdom's foreign reserves could not finance a rising current account deficit indefinitely. The success of these measures can be seen in the decline in the current account deficit as a percentage of GDP in three of the five years, so that by the end of the Fifth Plan period, this ratio had fallen to 4.1 percent from its level of 11.5 percent at the start of the Plan. However, the decline of oil prices and the increase in import prices relative to export prices, as well as the rise in transfers abroad, prevented any further reduction in the current account deficit during the last two years ofthe Fifth Plan.

2.8 INFLATION

Over the course of past development plans, the Kingdom has managed to achieve respectable economic growth accompanied by low inflation. The government's resolve to control inflation was severely tested by the rapid expansion of domestic demand in the aftermath of the invasion of Kuwait. This pressure was particularly strong in the third year of the Fifth Plan, when the government responded by reducing prices for essential commodities and utility services. As a result, consumer prices rose at the very low average annual rate of only 2.5 percent over the five-year period (see Figure 2.6).

There was some variation in the rate of price increase between individual sectors and between the earlier and later years of the Plan. In general, prices rose more sharply in the early years and were followed by lower inflation rates in the later years. Overall, the annual average rate of inflation, as measured by the non-oil GDP deflator, reached 3.2 percent for the Fifth Plan period as a whole.

Figure 2.6
Consumer Price Index



CHAPTER 3

MAIN OBJECTIVES, CENTRAL THEMES AND KEY ISSUES OF THE SIXTH DEVELOPMENT PLAN

3. MAIN OBJECTIVES, CENTRAL THEMES AND KEY ISSUES OF THE SIXTH DEVELOPMENT PLAN

The Sixth Development Plan represents an important phase in the continuing economic and social development of the Kingdom. Through the implementation of the first five plans, the Kingdom has realized tremendous achievements in many different sectors of the economy, including its physical infrastructure, industry, construction, agriculture, mining, transport, trade and financial services, as well as in the regulatory framework and in the development of public and private institutions. Much still remains to be accomplished, however, as development is a continuing process, with the short and medium term objectives and central themes changing from one plan to another, according to the prevailing economic, social and political conditions. This chapter outlines the main objectives of the Sixth Development Plan and describes the internal and external conditions at the time of the Plan's preparation. It also discusses the central themes of the Sixth Plan and some of the key issues now facing the national economy.

3.1 OBJECTIVES OF THE SIXTH DEVELOPMENT PLAN

The objectives of the Sixth Development Plan (1415/16-1419/20), as established by the Council of Ministers, are:

1. To safeguard Islamic values by duly observing, disseminating and confirming Allah's Sharia (God's Divine Law);
2. To defend the Faith and the nation and to uphold the security and social stability of the Kingdom;
3. To form the productive national citizen through providing him with the appropriate means and sources of income, and ascertaining his reward on the basis of his work;
4. To develop human resources and continually ensure an increasing supply of manpower, upgrading its efficiency sufficiently to meet the requirements of the national economy, and replacing non-Saudi manpower with suitably qualified Saudis;
5. To achieve balanced growth throughout all regions of the Kingdom;
6. To continue encouraging private sector participation in socio-economic development;
7. To reduce dependence on the production and export of crude oil as the main source of national income;
8. To continue restructuring the Kingdom's economy through continuing diversification of the economic base, particularly through laying more emphasis on industry and agriculture;

9. To develop mineral resources and to encourage discovery and utilization thereof;
10. To concentrate on qualitative development of already-existing utilities and facilities by improving their level of performance;
11. To complete infrastructure projects necessary to achieve overall development;
12. To promote scientific activity and to raise cultural and informational standards to keep pace with the Kingdom's development;
13. To achieve economic and social integration among the Gulf Cooperation Council (GCC) countries, and to support economic cooperation with Arab, Islamic and other friendly countries.

3.2 STRATEGIC PRINCIPLES

To achieve these general objectives, the Council of Ministers - through its Decree No. 142 of 19.11.1413 - specified eleven strategic principles and more than eighty policies. The General Objectives and Strategic Principles are included as an Appendix in this document.

3.3 CONDITIONS PREVAILING DURING SIXTH DEVELOPMENT PLAN PREPARATION

The domestic and international conditions under which the Sixth Plan was prepared differed greatly from those prevailing for previous plans. Particularly important in this respect were the Kuwait liberation war and the steep decline of oil prices that followed in the later years of the Fifth Plan.

3.3.1 DOMESTIC CONDITIONS

Domestic circumstances early in the Fifth Plan period and later during its implementation influenced government planning policy in the preparation of the Sixth Plan.

3.3.1.1 Institutional Framework

Due to the substantial development witnessed by the Kingdom in the various domains and the desire to continue with this progress, the government established three new systems in the Fifth Plan period: (i) the basic system of government, (ii) the Consultative Council and (iii) the system of Provincial Councils. The basic system of government has affirmed the importance of five-year development plans as a tool for achieving balanced economic and social development among the Kingdom's various regions. At the same time, the formation of the Consultative Council brings an added dimension in this respect, as this new body of experienced advisors will have the responsibility for reviewing the overall development plan and for making known their views about its content. The new system of Provincial Councils aims to further the goal of balanced regional development by entrusting each Provincial

Council with a significant development planning role and with the identification of priority needs in its own region. Furthermore, each ministry and government agency will be responsible for informing the Provincial Council about all projects approved for each province in the annual budget and the national development plan.

3.3.1.2 High Population Growth Rates

Although the rapid growth of the Saudi population is not an entirely new phenomenon, it has now reached the stage of exerting considerable influence on many aspects of economic and social policy. The preparation of the rapidly expanding labor force for employment will require some significant new education and training policies, along with the creation of new job opportunities. At the same time, the large and growing non-Saudi population is adding considerably to the demand for a wide range of public services.

Rapid population growth, combined with industrial expansion and increases in government subsidies, have raised the demand for physical and social infrastructural services beyond existing capacity, so that some shortages have begun to emerge in the provision of services such as electricity, telecommunications, water, education and health services.

3.3.1.3 Government Revenues and Expenditure

Since 1403/04, government expenditures in meeting development needs under successive budgets have exceeded revenues. To finance these budget deficits, the government used its reserves built up during the period 1393-1401. In addition, from 1408 onwards, the government resorted to new methods of deficit financing through domestic borrowing by the issuance of development bonds, while public sector companies raised funds on the international capital markets. The unusual circumstances of the Fifth Plan period caused government expenditures to exceed revenues by a considerable margin. At the same time, the Kingdom cannot continue to use its foreign exchange reserves as a fiscal stabilization mechanism to finance budget deficits. The Sixth Development Plan, therefore, has been prepared under relatively difficult new financial conditions.

3.3.1.4 Expansion of Oil Production Capacity

A major program for the expansion of crude oil production and gas collection and processing was completed by the end of the Fifth Plan. This will provide the Kingdom with greater flexibility to exploit available opportunities, both in the international oil market and in the expansion of local downstream industries that will help to achieve the objective of diversifying the economic base. At the same time, the restructuring and vertical integration of the oil industry will boost the Kingdom's position in international markets through ensuring marketing channels in consuming countries such as the United States, Korea and the Philippines. Furthermore, efforts are continuing to secure other outlets for Saudi crude and refined oil products in Asian and European markets.

3.3.1.5 Increasing Role of the Private Sector

Previous plans (particularly the Fifth Plan) aimed at expanding the private sector's role in the development of the national economy and enabling it to undertake new activities commensurate with its own capabilities and the needs of social and economic development. Towards the end of the Fifth Plan period, the government declared its intention to privatize some of its commercial activities.

The private sector has responded with great interest to the investment opportunities that this initiative opens up. At the same time, the private sector has greatly enhanced its own investment capabilities, as evidenced by its growing confidence in the Saudi economy and the substantial repatriation of financial assets held abroad following the liberation of Kuwait. Thus, private sector liquidity is greater now than ever before. Among the challenges facing the Sixth Plan, therefore, are the implementation of appropriate policies and the identification of new opportunities for the private sector to transform these financial assets into investment in fixed assets within the Kingdom. Chapter five of this document deals with the various aspects of these issues.

3.3.2 INTERNATIONAL CONDITIONS

Significant developments in the international economic environment affecting the Saudi economy at the time of the Sixth Plan preparation included the following:

- continuing fluctuations in the oil markets and increasing competition in the world oil, gas and petrochemical markets;
- the slow recovery from recession in many of the world's largest economies and growing fears of protectionism in world trade, as well as the establishment of new trading blocs which might influence the Kingdom's position as an exporter of primary commodities;
- an increasing role for scientific and technological capabilities as the determinant of comparative advantage in world trade, with a commensurate decline in the relative importance of natural resources;
- growing competition for foreign capital investment from regions such as south-east Asia, Eastern Europe and the newly independent states of the (former) Soviet Union, making it imperative for the government to formulate policies to attract foreign investment and expand its role in the process of advanced technology transfer to the Kingdom;
- the substantial growth of international interest in development and the environment, and the response of the industrial countries by proposing new taxes on the consumption of crude oil and refined products as a means to protect the environment;

- the conclusion of the Uruguay round of GATT at a time when the Kingdom has applied to join this multi-lateral trade agreement and its successor, the World Trade Organization.

Thus, both domestic and external factors have influenced the preparation of the Sixth Development Plan. These factors must also be considered in the context of the long term view of the Saudi economy and its medium-term growth potential. The large and growing social expectations and enormous ongoing financial obligations require urgent action to raise the overall level of efficiency in the national economy and to open up new opportunities for the private sector to invest its financial resources inside the Kingdom.

3.4 CENTRAL THEMES OF THE SIXTH PLAN

The longer term development strategy points at the need for specific action in the individual plan periods, chiefly through appropriate regulatory policies and institutional mechanisms. As for the Sixth Development Plan, the circumstances described above dictate that overall development strategy will focus increasingly on a number of very important themes for the Kingdom's longer term development: the development and utilization of Saudi human resources, the need for greater economic efficiency, and the expanding role of the private sector.

3.4.1 DEVELOPMENT AND UTILIZATION OF SAUDI HUMAN RESOURCES

The longer term prosperity of any society ultimately lies in an educated and skilled work force rather than in shorter term cost or natural resource advantages. This basic truth does not deny the hugely significant roles of natural resource endowments or of skilled expatriate workers in the rapid economic and social transformation of the Kingdom. From the outset, however, the development plans fully recognized the finite nature of the Kingdom's oil resources and the consequent needs to diversify the economic base as rapidly as possible, and to educate and train young Saudis for the complex tasks on the path to future economic, social and institutional development.

The large government investments in infrastructure and basic industries have laid the physical foundations of a modern economy. It is now, however, after twenty-five years of successful development planning, the scale of which has been unique in world history, that human and institutional factors, along with their related aspects of technology transfer and productivity, take center stage. Future development in the Kingdom will properly be measured by the level of Saudiization of the labor force and the extent to which the private sector can provide meaningful employment opportunities for our educated young people.

It is the urgent joint responsibility of leaders in government, the educational institutions and the private sector, together in a spirit of mutual respect and cooperation, to identify industrial investment opportunities and to forge ahead in preparing young Saudis for employment through education

and training programs appropriate to the needs of development and the private sector. The challenge ahead, therefore, is to devise a recruitment, selection, training and placement system for Saudi nationals that will progressively reduce the dependence on expatriate labor without producing a serious loss of competitiveness or drop in economic efficiency. In this regard, some of the more important policies to be followed in the Sixth Plan will include the following:

1. *Addressing the constraints that impede the development of Saudi manpower, through:*

   - increasing the absorptive capacity of universities in those fields of specialization which meet the requirements of the national economy;
   - increasing the absorptive capacity of the technical education and vocational training institutions, as well as the technological colleges, to ensure that the number and quality of graduates match as closely as possible the actual needs of the national economy;
   - laying more emphasis on the quality of general education, higher education, and training;
   - concentrating education and training efforts on those fields of specialization that meet the requirements of the private sector.

2. *Replacing non-Saudi manpower with Saudi nationals and stimulating the private sector to provide employment opportunities for Saudi citizens through:*

   - preparing a detailed annual plan for Saudiization in each government agency;
   - addressing the problems of government sector employment outside the major cities;
   - re-allocating existing job vacancies in the government sector;
   - relating government loans and support facilities provided to individual private firms to the implementation of its Saudiization commitments;
   - identifying the percentage of Saudis to be employed annually by private companies and establishments according to their size;
   - restricting the recruitment of expatriates to skilled and semi-skilled manpower and reducing the demand for low productivity manpower in the community and personal services sector;
   - reducing the number of low-productivity non-Saudi workers.

3.4.2 ECONOMIC EFFICIENCY

During the first five development plans, the government necessarily played a major role in stimulating economic development, both directly through its massive investment program and indirectly through policies to promote private investment in those sectors selected to lead the economic diversification process. As the market economy matures in many directions, however, while its oil revenue base shrinks relative to the economy as a whole, efficiency aspects will begin to dominate economic activity in the future. In this context, both public and private investment decisions must increasingly reflect the optimal utilization of resources, the proper identification of real costs and benefits, a more accurate evaluation of the relations between risks and rewards, and a more sophisticated approach to managing risk. For its part, the government will focus its attention increasingly on the importance of efficiency for both the public and private sectors, and for the medium and longer term coherence of the development process as a whole. Thus, the government will implement the following steps in directing its regulatory policies and investment incentives towards the achievement of this goal.

3.4.2.1 Rationalization of Subsidies

Subsidies are an important tool for managing the economy and for the achievement of planned growth rates. Within the framework of comprehensive development, the government can use direct or indirect subsidies to attain a variety of social and economic objectives. However, the best methods of providing such subsidies depend on many factors, especially on the needs of particular stages of development and economic efficiency.

In its early stages of development, the Saudi economy faced many social and economic constraints because of the shortages of infrastructure, limited resources and the lack of scope for productive activities. As a result, the government provided direct and indirect subsidies to basic food producers and exporters, and to some other producing sectors, while restricting income subsidies to social security payments to citizens with special needs. As the Saudi economy matures, however, the dependence on specific product subsidies will decline. Direct income subsidies and social security payments can be expected to expand, thus according to needy citizens the freedom to exercise their own individual consumption preferences according to the principles of social care and charity as prescribed in the Islamic Sharia. At the same time, the Fourth Strategic Principle will increasingly influence the provision of subsidized public sector services, so that "the prices of public services should not be less than their production costs except in rare cases, and that they should be periodically reviewed."

The next phase of development requires the rationalization of subsidies on goods and services because:

- the demand for many goods and services, such as water, electricity, health services, transport and communications has increased dramatically;

- the low fees and prices of these services, together with rising capital and operating costs, have resulted in additional burdens on the state budget;
- the excessive utilization of these services leads to a waste of resources and needs to be controlled.

In recognition of these factors, the Council of Ministers' Decree no. 142 (dated 19/11/1413) approving the General Objectives and Strategic Principles of the Sixth Development Plan, called for the rationalization of government expenditures through upgrading administrative efficiency and productivity in government agencies without affecting the standards and availability of services. At the same time, according to the priorities identified in the Sixth Development Plan, the government will seek appropriate means to expand the country's physical infrastructure to meet the demand from a growing population. The simultaneous implementation of both these principles will require the use of demand management techniques to control excessive consumption without relying solely on increasing the supply of public goods and services in response to rising demand.

3.4.2.2 Realization of Economic Efficiency

Productivity growth and the efficient use of resources are essential aspects of a comprehensive strategy for achieving balanced economic and social development. In this respect, the extensive provision of health and education services has both social and economic benefits for citizens. Substantial government expenditure programs have put special emphasis on these aspects of development, so that education and health standards in the Kingdom have now reached a high level, albeit at a high financial cost to the government. Moreover, the government has provided these and other public services at nominal prices over the years when per capita incomes have been rising. It is now necessary to review the provision of such services and to attain a better balance between the social goals of these services and the need to use limited financial resources more efficiently.

The government has also implemented a range of direct and indirect subsidies for the producing sectors, such as agriculture, industry, electricity and construction. These measures included the provision of inputs at below-cost prices and the purchase of outputs at support prices that exceed market prices. As a result of this continuous support, the productivity objectives for some sectors have been achieved and high investment returns have been realized. Thus, it is now necessary to apply the system of subsidies to the producing sectors on a more selective basis, in accordance with the strategic objectives of the Sixth Development Plan.

3.4.2.3 Policies

In reviewing the system of direct and indirect subsidies, the government will consider the following policy options:

i) reducing existing direct and indirect subsidies in a number of ways, while continuing the policy of income support, which is considered to be more effective over the medium to long terms, while applying the principle that the prices of services should not be less than their production costs, except in rare cases;

ii) the application of subsidies to producing sectors on a more selective basis, in accordance with the strategic development objectives and the potential consequences for value added, the international competitiveness of national products and the longer term capability for non-subsidized sustainable growth;

iii) studying the possibility of providing academic bursaries and scholarships selectively according to individual need, academic talent and aptitude, and the introduction of educational loans at higher education and university levels;

iv) studying the application of a health insurance scheme for non-Saudi employees in all companies and establishments regardless of the number of employees, thus helping to share the cost burden of medical services and medicines;

v) the development of effective mechanisms to ensure the consistency of various subsidies with the general framework of economic and social policy and the overall development strategy;

vi) taking necessary measures to increase the utilization of private hospitals and health centers, thus stimulating private investment in the construction of such facilities;

vii) limiting the growth in demand for infrastructural facilities and services through administrative measures such as the re-structuring of user fees for electricity, water and other services, so as to rationalize consumption and recover costs;

viii) training and upgrading graduates, introducing a system of cooperative education in the universities, and adopting advanced technology where possible in all fields.

3.4.3 PRIVATIZATION AND STRENGTHENING THE PRIVATE SECTOR'S ROLE IN THE NATIONAL ECONOMY

The Fifth Development Plan firmly reinforced the theme of greater private sector involvement in the development process. That plan called for the large-scale mobilization of financial resources into autonomous private sector investment in the domestic economy. Thus, the longer term development of the Saudi economy is becoming increasingly dependent on the ability and willingness of the private sector -- with appropriate government support -- to recognize and grasp emerging opportunities to engage in new and more complex economic activities whose returns on investment may be longer and may carry more risk than earlier "safe" investments in real estate and trading activities.

By the end of the Fifth Development Plan, the government had expressed its commitment to expanding the private sector's role in the development process through a range of institutional measures. This commitment requires the extensive study of possible techniques for financing or managing or transferring ownership of some of the government's existing commercial activities, and any other measures appropriate to the gradual expansion of the private sector's role in the economy. These topics are discussed in Chapter 5.

The following policies in support of private sector expansion will be implemented where deemed to be feasible:

- adopting new methods of cooperation between the government and the private sector in financing investment in development projects, such as lease-purchase agreements and build-operate-transfer arrangements, where the private sector finances, builds and operates new facilities, collecting revenues for a sufficient period to earn an adequate return on investment before transferring ownership to the relevant government agency;
- expanding the incorporation of large joint stock companies;
- attracting foreign investment in joint ventures or in large capital-intensive projects which use advanced technology in the Kingdom;
- expanding the Offset Programs to include large civilian projects, while ensuring that projects under these programs make an effective contribution to the transfer of advanced technology and the development of Saudi manpower;
- Accelerating the moblization of private capital to finance many government projects;
- privatizing some government commercial activities.

3.5 KEY ISSUES OF THE SIXTH DEVELOPMENT PLAN

This section deals with some of the key sectoral and national issues that are currently influencing the development of the economy and the achievement of the Kingdom's long term objectives. Possible solutions and alternative policy measures to overcome these constraints are discussed, some of which are short term in nature, while others are directed towards the medium and longer terms. The key issues discussed in this section are not the only ones to be addressed by the Sixth Development Plan; other key issues relate more exclusively to specific sectors and are discussed in the relevant sector chapters that follow. The individual government agencies concerned have a direct responsibility to study the proposed solutions and to implement them during the Sixth Plan period.

3.5.1 SCIENCE AND TECHNOLOGY ISSUES

In all countries, scientific and technological innovation is an essential feature of economic development, where support for the development of science and technology is seen as a measure of development. Because it has links to all sectors and activities of the national economy, science and

technology are critical to the overall pattern of development in the Kingdom. The development of science and technology in the Kingdom, however, faces a number of constraints. These include the inefficient technology base, the emergence of a technology gap between the level of technology used in the Kingdom and that which Saudi Arabia can adapt or produce itself, a shortage of qualified manpower, and the inadequate utilization of scientific research centers.

3.5.1.1 Technology Gap

In its development plans, the Kingdom acknowledged its dependence on imports of the most advanced technologies and the latest management and production techniques in order to accelerate the development process. Although this approach was crucial to the substantial achievements in many fields, such dependence on imported technology, without the capability to develop it, will not enable the Kingdom to keep abreast of scientific and technological developments elsewhere in the world. To solve this problem, it will be necessary to concentrate on those technologies that enhance the Kingdom's applied research capabilities according to its development needs. In this respect, intensive cooperation is needed through joint ventures with international companies. These companies will be encouraged to establish high technology industries that will promote the development process and upgrade the skills and efficiency of the Kingdom's manpower resources. It will also be necessary to complete the comprehensive national plan for science and technology and to draw up appropriate guidelines for the transfer of technology.

3.5.1.2 Optimal Utilization of Scientific Research Centers

Although KACST and the Saudi universities have established specialized research centers, their benefits to the industrial sector remained limited. Many research activities are not being targeted at the problems and constraints of the development process. Furthermore, most national industries do not make use of the research centers. A much more effective mechanism is needed, therefore, to ensure closer links between the research demands of the producing sectors and the activity profile of these research centers.

3.5.1.3 Private Sector Role in Raising the Saudi Economy's Competitiveness

The private sector has an important role to play in improving the Saudi economy's international competitiveness through raising the quality of national products, reducing production costs and more intensive utilization of scientific and technological research, innovations and inventions. However, the high cost associated with investment in advanced technology and scientific research has deterred the private sector from developing its own technological capabilities and from innovation activity in the field of research and development (R&D). In this regard, the private sector needs more encouragement to develop its own technological capabilities, through the adoption of R&D policies and the establishment of research and quality control laboratories.

3.5.1.4 Policies

The government will consider the following policy options to address these issues during the Sixth Plan period:

- finalize the national Master Plan for the development of science and technology;
- finalize the formulation of guidelines for the transfer of technology;
- encourage the industrial sector to adopt R & D policies and assist it in establishing research and quality control laboratories;
- increase the utilization of scientific research centers by strengthening their links to the industrial sector;
- upgrade the standard of educational courses and curricula related to science and technology at all levels;
- deepen public awareness of science and technology's role in development through the mass media, symposia and exhibitions;
- enhance science and technology support services through improved information services, a patent protection scheme and the establishment of appropriate mechanisms for sponsoring research and development results and risk sharing systems.

3.5.2 INFORMATION ISSUES

The availability of ever increasing flows of data and information throughout all sectors is fundamentally important for economic and social development, because planners and researchers can use such information in formulating future expectations on which to base important policy decisions. In this context, accurate and up-to-date information is of greatest benefit to users. The alleviation of obstacles impeding the flow of reliable and timely information will need the joint efforts and support of concerned agencies in the public and private sectors, so that the formulation of policies of positive value to the national economy and proper decision-making can be based on such information.

3.5.2.1 Basic Information Needs

The rising demand for information in all sectors of the economy is evidence of the growing awareness about the importance of information. Besides ongoing information requirements, some new information needs have emerged that require particular attention in the Sixth Development Plan. These include the following:

Labor Market Information: A data base on current job opportunities is badly needed to facilitate the absorption into employment of increasing numbers of new graduates entering the labor market. Such a data base must be linked to all labor offices and other employment agencies to widen the accessibility of information on job openings. To facilitate effective analysis of employment performance and productivity trends, labor force statistics need to be updated regularly through comprehensive annual surveys.

Quality of Education: To achieve the desired improvements in the quality of education, adequate information and information management support should be provided, through measures such as standardized national monitoring and evaluation procedures.

Health: Health needs and data must be monitored through the full implementation and eventual computerization of the health card system, to achieve the required effectiveness and to avoid cost increases.

Government and Social Services: With the considerable expansion of the Kingdom's infrastructure, it is important to follow up and analyze developments in the demand for such services and in their costs and usage patterns, to increase their social and economic value and to achieve a balanced expansion in their supply. In recent years, the need for information and social indicators in the areas of health, education, housing, municipal services and electricity, and their regional distribution, has greatly increased.

Housing: There is a lack of reliable up-to-date information on housing and a need to improve the flow of information for analysis, planning and decision making purposes. Although the population census of 1413 provides a great deal of information, it is necessary to update these data regularly.

Construction: At present, many government agencies and private firms are involved in construction activities. However, accurate information is not collected within a single central agency, while the classification and updating of information does not take place on a regular basis. There is a need, therefore, to establish an integrated and comprehensive data base for the collection, processing and management of information related to all construction industry activities.

3.5.2.2 Need to Improve Quality and Flow of Information

There is a direct relationship between the quality of information and its timely availability on the one hand, and effective socioeconomic development planning and decision making on the other. Decisions based on inaccurate information can have very costly consequences. In many social and economic sectors, available information is not yet sufficiently reliable or timely for rational and responsible analysis, planning and decision making. This may be attributed to the lack of standardized definitions and data classification criteria, as well as to the lack of training in information collection and the shortage of manpower in the areas of information technology and information management support.

The lack of up-to-date information about economic performance at both sectoral and national levels acts as a constraint on the development of the private sector, which needs the maximum possible amount of information to guide its investment and management decisions. The following issues relate to the need for improving the collection and dissemination of information:

1. Data collection surveys still tend to occur on an irregular basis and with long time intervals between one survey and the next. In addition, discontinuities of time series related to important demographic and labor market data seriously impair analysis and rational policy making.
2. The elapsed time between the collection of data and its availability to users is often too long, thus diminishing the value of such data. Up-to-date information on production, sales, employment, investment and prices is badly needed in the producing and services sectors alike.
3. Statistical data collection and processing by several government agencies, without prior coordination, leads to the duplication of efforts.
4. The lack of standardized technical criteria and the shortage of qualified national manpower are factors hindering the efficient exchange and flow of information.
5. The private sector and other concerned agencies need improved access to information, which should be disseminated widely by government agencies in order to facilitate effective decisions about future development.

3.5.2.3 Policies

The Sixth Development Plan aims at strengthening the role of the Central Department of Statistics (CDS) in collecting and processing basic data to meet the information requirements of the future. It also aims at encouraging the private sector to increase its contribution in providing and disseminating economic and trade information through the Chambers of Commerce and Industry and other private sector organizations.

Regarding data processing and information flows, the Ministry of Planning will implement a new project related to management information systems using the latest technology. The aim of this project will be to act as an information network for all government agencies in the Kingdom.

Moreover, information collection will be improved through better use of modern electronic data processing and communications facilities, together with the provision of the funds needed to accelerate technology transfer from the advanced countries. At the same time, it is imperative that the key issues related to training and understanding the basic principles for developing management information systems be addressed. Because of the importance of standardizing the criteria for the efficient use of electronic data processing technology, agencies shall review their administrative procedures to facilitate better exchange and dissemination of information.

3.5.3 ENVIRONMENT AND DEVELOPMENT ISSUES

Rapid economic development, high rates of population growth and increasing urbanization are all usually associated with adverse environmental impacts. For this reason, the Kingdom has paid particular attention to environmental issues in its successive development plans, in article 32 of the System of Government, and in the tenth basic strategic principle of the Sixth Plan, which reaffirms the need to safeguard the environment and prevent pollution. Further, the Sixth Plan document has assigned an entire chapter (chapter 14) to addressing environmental issues from a national development perspective.

The Kingdom has reinforced its environmental efforts through its participation in international conferences on the environment and its approval of some international agreements to promote a clean environment, the conservation of wildlife and the maintenance of ecological balance.

The ultimate objective of environmental and development policies is to fulfill the basic needs of citizens and to improve their quality of life. The direct relationship between the environment and development is widely recognized. Environmental protection, the preservation of natural resources and the prevention of pollution are critically important to ensure that economic growth will not adversely affect the rights and capabilities of coming generations to meet their future needs. Thus, this concept of "sustainable growth" recognizes the difficulty of continuing development activities on a deteriorating base of environmental resources and through neglect of the environment. From this point of view, environmental policies are integrated with development policies rather than conflict with them.

In recognition of the direct link between economic growth and sound environmental management, and the tremendous development achievements of the Kingdom until now, the Kingdom's basic environmental strategy integrates the planning, institutional and management dimensions through:

- achieving balanced sustainable growth while making optimal use and extending the life span of natural resources -- particularly non-renewable resources;
- considering the environmental dimension at all stages of designing, implementing and operating development projects;
- maintaining a sustainable balance between population distribution and the absorptive capacity of the environment, with due regard to the effects of population growth and consumption patterns on the Kingdom's natural resources;
- preserving the biological diversity and protecting the wildlife of the Kingdom with the aim of maintaining ecological equilibrium, particularly with respect to endangered animal and plant species;
- providing environmentally clean energy for industrial activities and lead-free fuel (gasoline) throughout the Kingdom;

- expanding the private sector's role in environmental protection and pollution control activities, while encouraging investment in environmentally sound industries and other economic activities;
- intensifying and developing environmental awareness and education;
- completing the establishment of a comprehensive national environmental data base.

3.5.4 WATER ISSUES

The Kingdom's environment and climate dictate that water be considered the most important of all natural resources, while the scarcity of potable water is one of the main constraints on social and economic development.

3.5.4.1 Water Demand

One of the most important policy issues facing the Kingdom is the change in the national water balance as a result of the remarkable increase in the demand for water over the past twenty years. In recent years, agriculture has been the largest consumer of water. At the same time, the growth in demand for water for domestic, recreational and industrial uses has been accelerating as a result of population growth, urban expansion, rising living standards and changes in individual consumption patterns. This growth in the demand for water has brought the overall rate of water consumption to a critical level. Thus, effective water conservation measures are now needed, including possible changes in water tariffs, increasing the use of reclaimed waste water and the implementation of optimal cropping patterns.

3.5.4.2 Institutional Framework

The Sixth Development Plan pays particular attention to the optimal utilization of scarce water resources. The second Basic Strategic Principle calls for the concentration "on improving the economic and productive standards of the services, utilities and products which the government provides for citizens both directly and indirectly." In the case of water, this will be achieved through the development of effective management systems in conformity with society's changing needs, implementing and coordinating all water regulations, providing firm management and control, rationalizing water consumption patterns, defining priorities for water use, possible adjustments in water tariffs and close coordination between the development plans of the agriculture and water sectors. Thus, the institutional framework for the management of the Kingdom's water resources will need to be re-evaluated.

3.5.4.3 National Water Plan

Successive Development Plans have called for the completion and implementation of the National Water Plan as a necessary tool in the development and conservation of scarce water resources.

Because water consumption rates have now reached critical levels, comprehensive and accurate data and information on the Kingdom's water resources is now badly needed for effective planning. In this regard, every effort is needed and all measures must be taken to ensure that the National Water Plan will be issued and that negative impacts on the Kingdom's water security are avoided.

3.5.4.4 Policies

The policies to be adopted in the Sixth Development Plan will be based on the following major principles:

- water must be considered as the most essential and valuable resource, and an important factor in determining economic efficiency in public and private sector projects;
- long term policy considerations must take precedence over short and medium term concerns;
- priorities must be identified for the utilization of water resources, with continuous reconciliation between the objectives of concerned agencies and the future potential water supply.

The following water policy options will receive a high priority in the Sixth Development Plan:

i) Non-renewable ground water resources must be conserved.

ii) The National Water Plan will be issued during the Sixth Plan period, so as to ensure the optimal utilization and conservation of water resources.

iii) An agricultural policy to reduce water consumption rates in agriculture will be adopted.

iv) Effective demand management measures will be applied and water tariffs re-considered in order to rationalize water consumption for domestic, recreational and industrial purposes.

v) The institutional framework for the management of the Kingdom's water resources will be re-evaluated to conform with society's needs.

CHAPTER 4

THE NATIONAL ECONOMY
IN THE SIXTH DEVELOPMENT PLAN

4. THE NATIONAL ECONOMY IN THE SIXTH DEVELOPMENT PLAN

This chapter discusses the development of the Kingdom's economy during the Sixth Development Plan, in terms of the expected future growth in Gross Domestic Product (GDP), its sectoral components and the investment needed to generate economic growth. It also examines likely future conditions for foreign trade and the balance of payments.

4.1 DEVELOPMENT OBJECTIVES FOR THE NATIONAL ECONOMY

The macroeconomic strategy for the Sixth Development Plan has been formulated in accordance with the General Objectives and Strategic Principles approved by the Council of Ministers (Decree No. 142 dated 19/11/1413), taking into account the economic conditions prevailing at the time of the Plan's preparation. This strategy will continue to achieve the Kingdom's long term objectives for the national economy. Accordingly, the Sixth Development Plan gives priority to the resumption of moderately rapid but steady economic growth and achievement of internal and external balances through the progressive elimination of both the budget deficit and the current account deficit. These priorities will be pursued through the continued structural diversification of the Kingdom's economy to create more employment opportunities for Saudi nationals, and the development of practical policies for privatization and alternative methods of financing some government services. The Sixth Development Plan also attributes to the private sector an important role in mobilizing its resources for the development of the national economy. The main themes of the Sixth Plan are to increase the rate at which non-Saudis are being replaced by Saudi nationals (Saudiization), the opening up of more opportunities for private sector investment and the achievement of greater economic efficiency in the government and private sectors.

More specifically, the macroeconomic objectives of the Sixth Plan include the following:

- real average annual growth of 3.9 percent in the non-oil sectors' contribution to GDP, compared to the 3.2 percent growth rate targeted in the Fifth Plan period;
- total investment growing in real terms at an average annual rate of 8.5 percent and amounting to more than 18 percent of GDP;
- growth in non-oil merchandise exports at an average annual rate of 12 percent in current prices;
- an increase in the government's domestic non-oil revenues;
- the progressive elimination of both the budget deficit and the balance of payments deficit on current account;
- a balanced government budget by the end of the Plan period and the rationalization of government expenditure.

The steady expansion of the economy throughout the Sixth Plan will be supported by a broad range of fiscal, regulatory and institutional measures to which a positive response from the private sector is anticipated. These measures will include:

- a pronounced shift in the government budget from consumption to investment expenditure;
- providing opportunities for private sector investment through the gradual and selective use of alternative financing options and privatization initiatives;
- the mobilization of the private sector's financial assets by broadening the domestic capital market;
- reducing the number of low-skilled workers and increasing the capability of the Saudi labor force in order to realize productivity improvements.

4.2 IFISCAL AND MONETARY POLICIES

4.2.1 FISCAL POLICY

The objectives of fiscal policy are:

- to achieve a positive GDP growth rate, thereby increasing the nation's wealth, and to create new job opportunities;
- to maintain living standards by keeping inflation as low as possible and below the rate of economic growth;
- to direct government expenditures towards the expansion and diversification of the economic base and improvements of public services.

To achieve these objectives, the policies of the Sixth Plan will concentrate on the following:

1- Structuring of Government Expenditures

a) The balance between government revenues and expenditures will be gradually improved during the Plan period, through both revenue increases and reductions in expenditures.

b) The budget deficit will be reduced to the minimum possible level over the Sixth Plan period by rationalizing recurrent expenditures and by increasing government revenues.

c) Spending will be kept within the overall limits of the approved budget during the fiscal year, with any unforeseen increase in a government agency's expenditure on specific projects and programs to be met by transfers from that agency's other program or project allocations or by adjusting project implementation periods in conformity with the annual financial resources available to each government agency.

d) The proportion of total government spending allocated for investment and capital expenditure purposes will be increased, whether on new projects and programs or on the maintenance and renovation of existing facilities.

e) Innovative ways will be introduced to encouraging the private sector to implement and finance some public sector projects, thereby providing profitable business opportunities for the private sector and improving the productivity and efficiency of these projects.

f) The adjustment in local utility and fuel prices is aimed to reflect actual costs and to cover maintenance, improvement and expansion costs in line with rising demand in all cases, social stability will be preserved, as lower income groups will not be deprived of the benefits of these services at lower prices compared to the high-income groups..

2- Subsidies and Loans

a) Subsidies (direct and indirect) which the government renders for a wide variety of goods and services will be reviewed and rationalized in order to increase the self reliance of the subsidized sectors. In all government agencies effective measures will be adopted to reduce production cost of public services. Prices of public goods and services will be kept over the level of its economic costs except in rare cases.

b) The development funds will continue to play their positive role in providing loans for individuals and companies, provided that the total value of loans is within the limits of repayments. All necessary government actions will be taken to support the funds in collecting their loans, so that they will be able to provide new loans and continue to play their roles based on their own resources, while taking into consideration the following:

- Loans should be linked to the rate of employment of Saudi nationals.
- Loans should also be linked to the use of local materials and products in the implementation and operation of projects.

4.2.2 MONETARY POLICY

Objectives

The objectives of monetary policy are:

(1) to maintain stable prices as a prerequisite for achieving sustainable economic growth;

(2) to maintain the exchange rate of the Saudi Riyal as a source of strength for the Kingdom's balance of payments position;

(3) to ensure stability of the banking system and to enhance its efficiency and effectiveness;

(4) to encourage stability and orderly growth in the domestic capital markets;

(5) to maintain reasonable liquidity in the economy so as to avoid inflation and achieve balanced economic growth.

To achieve the above objectives, the following measures shall be adopted:

a) Close coordination between monetary and fiscal policy will be maintained.

b) Prices will be stabilized as much as possible by maintaining the purchasing power of the Saudi Riyal.

c) Confidence in the Saudi Riyal will be enhanced by maintaining its value on the foreign exchange markets, in line with economic policy objectives and in a manner that encourages both national and foreign investment.

d) Sufficient liquidity will be provided to the domestic economy to cater for actual needs and to avoid inflation.

e) The regulation of the banking system will be designed to ensure its soundness, to maintain its resources and to promote its support of the national economy.

f) The banking system will be supported by removing the constraints that impede the flow of bank credits to the private sector, while the rules and regulations covering bank lending will be further developed. Furthermore, Saudization will be encouraged in banks and financial institutions.

g) The Credit Risks Center established by SAMA will be supported, so as to increase the accuracy and quality of data obtained by the commercial banks in this respect.

h) Banking control methods will be improved, so as to protect customers and secure their deposits on the one hand, and to protect the banks by ensuring the proper use of resources on the other.

i) The information systems and computer services of SAMA and its branches will be developed by utilizing modern computer technology, and the banks encouraged to use state-of-the-art technology to improve the efficiency of customer services.

j) Savings and capital formation will be encouraged through the development and of appropriate savings and investments channels.

k) Stability of the Saudi stock market will be encouraged and price fluctuations kept within reasonable margins, so as to minimize speculation and encourage citizens to use the stock market as an appropriate tool for investing their savings, thereby transforming them into potential resources for financing development projects in the Kingdom.

4.3 GROSS DOMESTIC PRODUCT IN THE SIXTH PLAN

An important element of the planning process is the determination of expected growth paths for the economy during the plan period. These targets reflect the planned scope and scale of government activities and the anticipated response from the private sector. They also present a comprehensive and consistent picture of the planned development of the Kingdom's economy at the macroeconomic level. Finally, they reflect the expected impact of policies that will be adopted to achieve the overall Sixth Plan objectives for structural change and economic diversification, and for the overall welfare of the nation (Figure 4.1).

4.3.1 GROWTH TARGETS FOR THE OIL AND NON-OIL SECTORS

The Kingdom's national economy is expected to grow at an average annual rate of 3.8 percent (in 1409/10 constant prices) during the Sixth Plan period, resuming its previous moderate and sustainable growth path after the rapid growth experienced during the first two years of the fifth plan, The average annual growth rate of the GDP during the fifth plan (in 1409/10 constant prices) was 4.1% owing to the major expansion in oil production at the begining of the Plan period.

The non-oil sectors of the economy are expected to grow at an average annual rate of 3.9%. This will have strong positive implications on the achievement of the economic diversification objective and will also imply the creation of employment opportunities for the rapidly growing population.

The oil GDP is expected to grow at an average annual rate of 3.8% (See table 4.1), based on the expected developments in the world oil markets where the most recent forecasts indicate to increase of oil demand and prices. This will improve the conditions for achievement of the Sixth Plan growth targets.

Figure 4.1
Gross Domestic Product by Main Sector (at current prices)

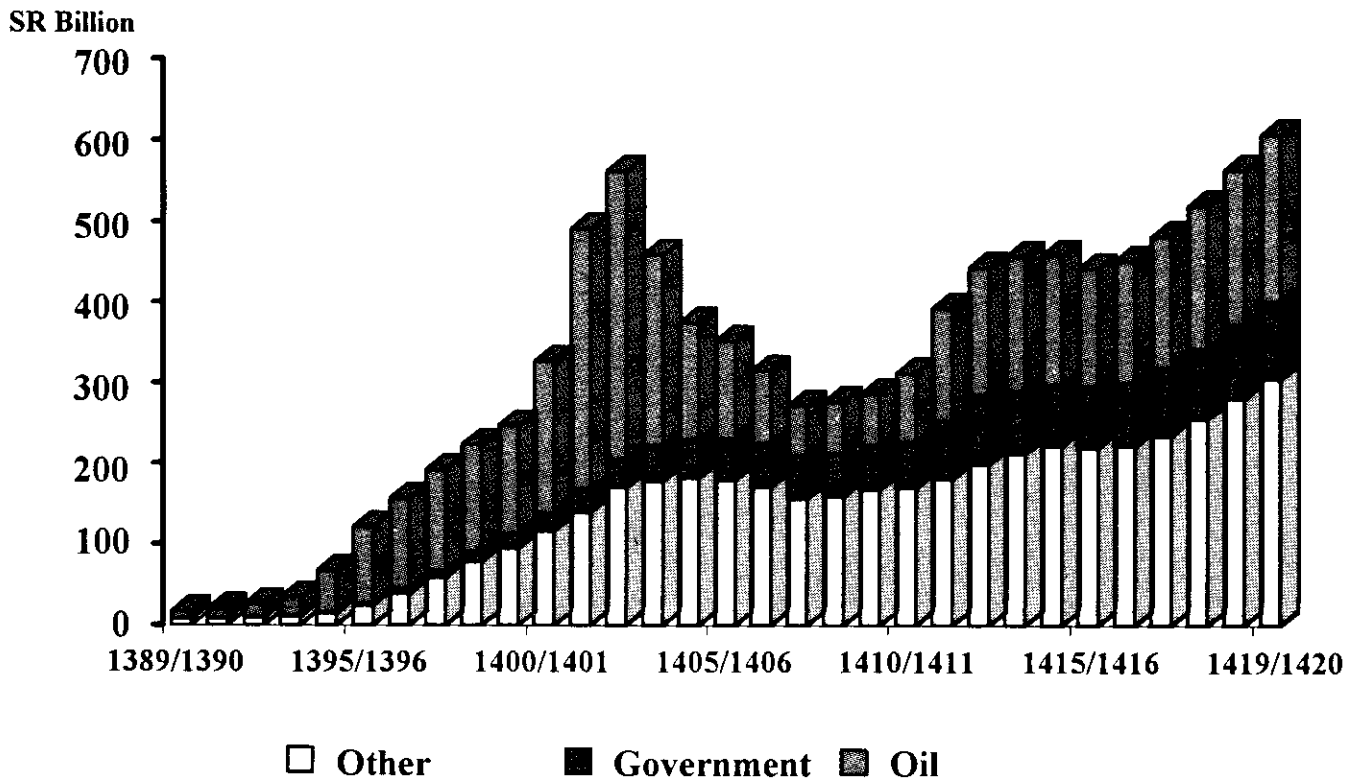


Table 4.1

Gross Domestic Product in the Sixth Plan: Oil and Non-Oil Sectors (at constant 1409/10 prices) ★

Main Sectors	Value Added (SR Billion) 1414/15	Value Added (SR Billion) 1419/20	Average Annual Growth (Percent)
Non-Oil Sectors	235.9	285.1	3.9
- Other Non-Oil Sectors	169.5	209.3	4.3
- Government Services	66.4	75.8	2.7
Oil Sector ★★	142.8	172.5	3.8
Other Items ★★★	2.1	1.0	—
Gross Domestic Product	380.8	458.6	3.8

★ GDP contributions valued in 1409/10 prices are not comparable to their counterparts valued in current prices.

★★ According to the CDS definition, this table includes petroleum refining as part ofthe oil sector. In other tables, petroleum refining is included as a component of the non-oil producing sectors.

★★★ Import duties less imputed bank service charges

4.3.2 SECTORAL GROWTH TARGETS

Longer term efforts to diversify the structure of the economy will continue to be a key factor guiding development in the Sixth Plan. A necessary condition for further structural change will be the ability of Saudi industry to maintain and further improve its competitiveness in international and domestic markets, through higher productivity and the attainment of high quality standards. An increase in world economic activity will open up new export opportunities. The growing domestic market will provide more opportunities for import substitution, which if exploited, will contribute to the strengthening and structural transformation of the economy. Specific strategies and opportunities for the growth of the private sector, including privatization, are discussed in Chapter 5.

All sectors are expected to show positive growth trends, with the producing sectors growing at an average annual rate of 4.2 percent, and the service sectors at 4.4 percent (Table 4.2). The expected stronger growth of services can be partly explained by their slowdown during the Fifth Plan period, when output of the service sectors virtually stagnated. The service sectors are now expected to benefit from a return to a more normal civilian structure of domestic demand.

Agriculture

The Sixth Plan is expected to be a period of transition for the agricultural sector. Production will shift away from large-scale crop production using substantial volumes of scarce water resources, towards high value-added crops produced mainly in areas which have renewable water resources and in greenhouses to serve rapidly growing demands for fresh vegetables and fruits. Because of this change, agricultural output is expected to grow at an annual rate of 3.1 percent during the Sixth Development Plan.

Mining and Quarrying

Thes sector in expectecl to grow at an average annual rate of 9 percent depending mainly on the developments of the construction sector. Development of the mining ond quarrying sector entails great efforts to be devoted to mining activties other than gold. such efforts will give results by the end of the sixth plan period.

Table 4.2

Gross Domestic Product by Sector in the Sixth Plan
(at constant 1409/10 prices) ★

Sectors	Value Added (SR Billion) 1414/15	Value Added (SR Billion) 1419/20	Average Annual Growth (Percent
Producing Sectors	**93.2**	**114.5**	**4.2**
Agriculture, Forestry, Fishing	26.4	30.8	3.1
Other Mining, Quarrying	2.3	3.5	9.0
Manufacturing	**31.1**	**39.5**	**4.9**
- Petroleum Refining	13.5	16.4	3.9
- Petrochemicals	3.0	4.5	8.3
- Other Manufacturing	14.6	18.6	4.9
Electricity, Gas, Water	0.9	1.2	5.5
Construction	32.5	39.5	4.0
Service Sectors	**89.8**	**111.2**	**4.4**
Trade, Restaurants, Hotels	27.8	37.6	6.2
Transport, Communication	25.0	28.9	2.9
Finance, Insurance, Real Estate and Business Services	**25.2**	**30.7**	**4.1**
- Real Estate	6.9	8.1	3.3
- Other	18.3	22.6	4.3
Community, Social and Personal Services	11.8	14.0	3.4
Government Services	66.4	75.8	2.7
Non-Oil Sectors	**249.4**	**301.5**	**3.9**
Crude Oil and Natural Gas	129.3	156.1	3.8
Other Items (1)	2.1	1.0	---
Gross Domestic Product	**380.8**	**458.6**	**3.8**

★ Not comparable to sectoral GDP contributions in current prices

(1) Import duties less imputed bank service charges.

Oil Refining

The stimulus for the 3.9 percent growth expected for the petroleum refining industry will come primarily from strongly increasing domestic demand. Efforts to increase the Kingdom's share in the value added generated from its crude oil resources will be continued.

Petrochemicals

Adverse world market conditions prevented this sector from reaching the potential expected at the beginning of the Fifth Plan. However, a number of positive developments helped to improve performance in the last two years of the Fifth Plan. These included the increase in world demand and higher prices for petrochemical products, the lowering of barriers to Saudi petrochemical exports in some importing countries, the rapid development of new markets and higher productivity. This positive trend is expected to continue throughout the Sixth Plan period, when the petrochemical industry is projected to grow at an average annual rate of 8.3 percent.

Other Manufacturing

Together with the downstream oil and petrochemical sectors, these "other" manufacturing industries form the backbone of the industrialization drive in the Kingdom. The diversification already achieved in this sector is impressive. The 4.9 percent annual growth expected for these diverse activities will result from the active pursuit of export and import substitution opportunities, and the deepening of linkages between Saudi industries. Domestic markets, especially those for consumer goods, have now reached a volume where import substitution can realistically be targeted through the economies of large-scale industrial production. As in the previous plan period, agreements under the Peace Shield and Al Yamamah Offset Programs will also induce growth in high technology manufacturing.

Public Utilities

During the Fifth Plan period, a number of factors contributed to the rising demand for public utilities (electricity, gas and water). These included the rapidly growing urban population, the strong growth in energy-intensive production activities, and a change in consumption patterns following the further reduction of already low and highly subsidized tariffs. The wider use of demand management techniques, such as selective tariff increases, to bring user charges more into line with production costs without jeopardizing social considerations, will prevent a continuation of recent trends in water and electricity consumption into the Sixth Plan period. As a result, output growth in this sector is expected to average 5.5 percent annually.

Construction

The post-war construction boom had subsided by the end of the Fifth Plan. The demand for residential buildings is expected to increase, however, although rising prices are expected to limit this growth to less than the rate of increase in population. Commercial buildings for office space and shopping malls will be in sufficient supply during the first two years of the Sixth Plan. Because of relatively tight budgets over the Plan period, government investment in non-residential buildings and infrastructure expansion will provide a significant stimulus to the construction industry only late in the Sixth Plan period. Against this background, the construction sector is expected to grow at an average annual rate of 4.0 percent.

Trade

The decline in previously ample trade margins and the unusual circumstances that pertained at the beginning of the Fifth Plan period, negatively affected growth in the trade, hotel and restaurant sector during the Fifth Plan period. However, the increase in population and incomes during the Sixth Plan is expected to revive consumer demand for distribution, food and recreation services, which, together with a continuing high level of general business activity, will induce an annual growth rate of 6.2 percent in the trade sector.

Transport and Communications

The demand for transportation and communications services is closely linked to the level of overall economic activity. Thus, this sector is projected to grow at an average rate of 2.9 percent annually in the Sixth Plan.

Real Estate

The surge in real estate transactions immediately after the Gulf crisis abated and growth in this sector returned to more normal levels by the end of the Fifth Plan period. The real estate sector is expected to grow at an average rate of 3.3 percent annually, with most of the growth concentrated in the later years of the Sixth Plan period.

Financial and Business Services

In general, the financial, insurance and business services sector has stood the test of the crisis and war remarkably well. The degree to which individual financial institutions were able to capitalize on the post-war economic upswing differed significantly, mainly because of value adjustments necessitated by non-performing loans. These difficulties were largely resolved by the end of the Fifth Plan, so that the financial sector is expected to grow at an annual rate of 4.3 percent during the Sixth Plan period, or at about the same rate as private sector economic activity as a whole.

Community and Personal Services

Although relatively small in terms of value added, this sector accounts for a significant proportion of total employment in the Kingdom. Domestic household services are the dominant element in this sector. This sector is expected to grow at an average annual rate of 3.4 percent in the Sixth Plan period.

Government Services

Value added in the government sector is approximated by the compensation paid to government employees. With a rapidly growing population and efforts to strengthen the defense capability of the nation, employment in government services will continue its growth trend of recent years. As a result, the government sector's contribution to GDP is planned to grow at 2.7 percent annually during the Sixth Plan.

Crude Oil and Natural Gas

The OPEC members, and especially those belonging to OAPEC, are the only countries which can expand their production profitably at the moderate prices expected to prevail until the end of the Sixth Plan. Any shortfall in production arising from declining reserves in other producer countries and any increase in world oil demand arising from the worldwide economic recovery currently under way, is expected to be met primarily by OPEC oil. As a result, the crude oil and natural gas sector is projected to grow at an average annual rate of 3.8 percent during the Sixth Plan.

4.3.3 STRUCTURE OF THE ECONOMY

Over time, differential growth rates in individual sectors will change the overall structure of the economy, particularly if such differences are substantial. Because most sectoral growth rates are expected to lie within a similar range, however, the structure of the economy is expected to change only gradually during the Sixth Plan period (Table 4.3). This will remain valid except for the crude oil sector where increase in oil prices by the end of the Sixth plan would increase the contribution of this sector to GDP by about the same rate as that witnessed during the Fifth plan as a result of oil production increase.

The government's share in non-oil sectors' value added is expected to decrease slightly over the Sixth Plan (Figure 4.2), reflecting the continuing restraint on the expansion of government. The share of the service sectors will remain largely unchanged, while the producing sectors are expected to continue past trends and to increase their share by 2 percent (Table 4.3).

Figure 4.2
Structure of Non-Oil GDP (at current prices)

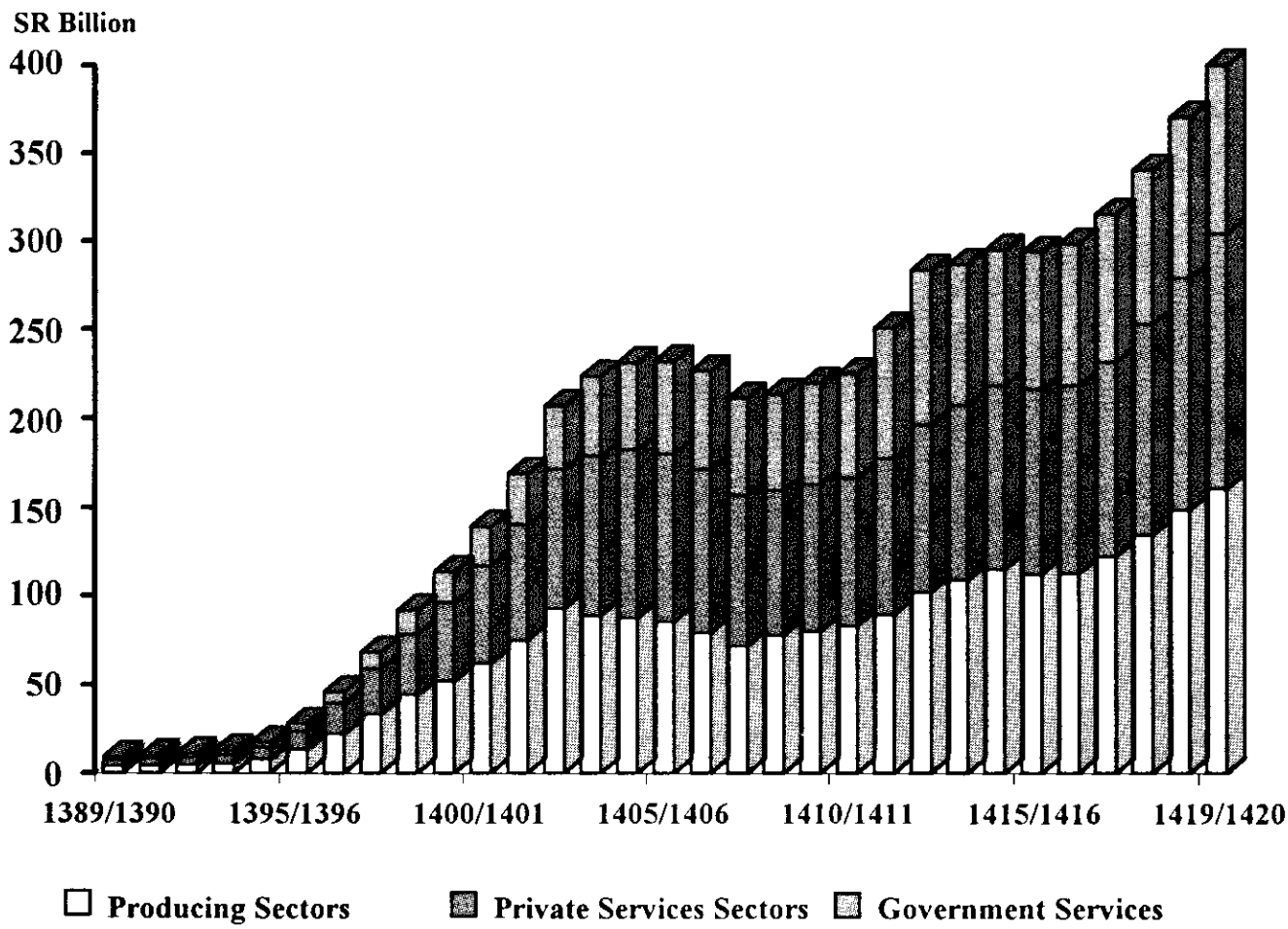


Table 4.3

Structure of the Economy in the Sixth Plan
(at current prices)

Sector	Value Added (SR billion)		Share in Non-Oil Gross Domestic Product (percent)		
	1414/15	1419/20	1409/10	1414/15	1419/20
Producing Sectors	**112.2**	**160.2**	**36.9**	**38.3**	**40.2**
Agriculture, Forestry, Fishing	31.9	39.5	10.1	10.9	9.9
Other Mining, Quarrying	2.7	4.4	0.8	0.9	1.1
Manufacturing	**38.3**	**56.4**	**11.3**	**13.1**	**14.2**
- Petroleum Refining	16.4	26.1	4.2	5.6	6.6
- Petrochemicals	3.8	6.4	1.8	1.3	1.6
- Other Manufacturing	18.1	23.9	5.3	6.2	6.0
Electricity, Gas, Water	0.8	1.3	0.3	0.3	0.3
Construction	38.5	58.6	14.4	13.1	14.7
Service Sectors	**103.5**	**143.0**	**37.3**	**35.4**	**35.8**
Trade, Restaurants, Hotels	32.2	44.2	11.6	11.0	11.1
Transport, Communication	29.2	38.1	10.3	10.0	9.5
Finance, Insurance, Real Estate and Business Services	**28.3**	**40.2**	**10.3**	**9.7**	**10.1**
- Real Estate	7.9	11.4	2.7	2.7	2.9
- Other	20.4	28.8	7.6	7.0	7.2
Community, Social and Personal Services	13.8	20.5	5.1	4.7	5.1
Government Services	77.0	95.6	25.8	26.3	24.0
Non-Oil Sectors	**292.7**	**398.8**	**100.0**	**100.0**	**100.0**
Crude Oil and Natural Gas	144.7	204.5	---	---	---
Crude Oil and Natural Gas as a percentage of GDP	---	---	27.0	32.9	33.8
Other Items (1)	2.7	1.0	---	---	---
Gross Domestic Product	**440.1**	**604.3**			

(1) Import duties less imputed bank service charges.

4.3.4 GROWTH AND STRUCTURE OF EXPENDITURE ON GROSS DOMESTIC PRODUCT

Expenditure on GDP in the Sixth Plan will reflect the high priority assigned to investment. The combined gross fixed capital formation of the government, the private sector and the oil sector is targeted to grow at an average annual rate of 8.5 percent (in 1409/10 prices) during the Sixth Plan period where government investment in expected to increase at an avevage annnal rate of 19 percent and private investment at 4.9 percent (Table 4.4). This anticipated increase will reverse a decline in the rate of investment which occurred towards the end of the Fifth Plan. As shown in Table 4.5, the growth in investment will bring investment's share of GDP from 15.5 percent at the beginning of the Sixth Plan to almost 19 percent by the end of the Plan (at current prices). This is comparable to the investment rate in many other rapidly growing modern industrializing nations.

Table 4.4

Expenditure on Gross Domestic Product in the Sixth Plan (at 1409/10 prices) ★

	SR billion 1414/15	SR billion 1419/20	Average Annual Growth (percent)
Consumption	273.5	335.5	4.2
Government	96.6	126.5	5.5
Private	176.9	209.0	3.4
Gross Fixed Capital Formation	54.8	82.5	8.5
Oil Sector	4.9	3.7	(5.6)
Government Sector	13.7	32.8	19.0
Private Non-oil Sectors	36.2	46.0	4.9
Change in Stocks	(3.9)	(2.1)	---
Domestic Final Demand	324.4	415.9	5.1
Net Exports	56.4	42.7	---
Exports	184.1	229.5	4.5
Less Imports	127.7	186.8	7.9
Gross Domestic Product	380.8	458.6	3.8

★ Not comparable to expenditures in current prices;

( ) negative value

The strong recovery of government investment from its level in 1414/15, together with the opportunities and services offered by the government to the private sector, is expected to induce a 4.9 percent average annual growth in private investment, or significantly stronger growth than in the Fifth Plan period. Oil sector investment will decline at an average annual rate of 5.6 percent, due to the completion of its expansion program at the end of the Fifth Plan period.

In constant price terms, total consumption is projected to grow by 4.2 percent annually during the Sixth Plan, with private consumption growing at 3.4 percent, or about the same rate as during the Fifth Plan. Government consumption is planned to increase at a rate of 5.5 percent annually. The ongoing efforts to maintain the huge public capital stock accumulated in the development process are reflected in this higher than average increase.

The average annual growth in domestic final demand of 5.1 percent will be higher than both total and non-oil GDP growth. This surplus demand will be satisfied by strongly increasing imports, which will be induced primarily by imported investment goods.

Table 4.5

Expenditure on Gross Domestic Product in the Sixth Plan
(at current prices)

	SR billion		Share in Gross Domestic Product (percent)		
	1414/15	1419/20	1409/10	1414/15	1419/20
Consumption	311.6	428.4	81.9	70.8	70.9
Government	111.4	160.2	36.1	25.3	26.5
Private	200.2	268.2	45.8	45.5	44.4
Gross Fixed Capital Formation	67.9	113.4	19.1	15.5	18.8
Oil Sector	6.0	5.2	0.5	1.4	0.9
Government Sector	16.2	44.5	8.3	3.7	7.4
Private Non-oil Sectors	45.7	63.7	10.3	10.4	10.5
Change in Stocks	12.6	0.3	3.9	2.8	0.0
Domestic Final Demand	392.1	542.1	104.9	89.1	89.7
Net Exports	48.0	62.2	(4.9)★	10.9	10.3
Exports	180.2	285.3	38.0	40.9	47.2
Less Imports	132.2	223.1	42.9	30.0	36.9
Gross Domestic Product	440.1	604.3	100.0	100.0	100.0

★ Values brackets are negative

4.4 CAPITAL STOCK AND INVESTMENT

The strategic importance of investment for the development process and economic growth derives from its dual impact on the national economy. On the one hand, it is a powerful determinant of effective demand, while on the other hand, it has a significant influence on production capacity and the supply of goods and services.

4.4.1 CAPITAL STOCK AND REPLACEMENT REQUIREMENTS

Over the past three decades, the Kingdom has witnessed an impressive accumulation of capital stock in the form of physical infrastructure, manufacturing plants, buildings and equipment. At the same time, the capacity to utilize this fixed capital stock has increased as the Saudi labor force has grown and the skills of its workers have improved. The combined influence of these two forces has led to the rapid expansion of the economy.

The economy's capacity for continued expansion is directly related to the increase in capital stock, as new and more efficient equipment helps to raise productivity and results in the production and sale on domestic and international markets of more competitive goods in terms of both quality and price. In this respect, substantial investment in new capital assets is essential for continued economic growth.

A larger volume of private and public investment will be needed in the Sixth Plan period than during the Fifth Plan. In the private sector, new plant and equipment is needed by companies that are expanding and modernizing their production facilities to become more competitive in domestic and world markets. In the government sector, new facilities are needed to accommodate the growing needs of an expanding population. In the past, many sectors had excess capacity, but this has now been largely used up. Substantial new investment is needed to expand capacity in sectors such as electricity generation and telecommunications. At the same time, investment is needed in the maintenance and replacement of facilities that have been installed over the course of past development plans.

Although, up till now, there are no accurate estimates available, various indicators suggest that the volume of funds needed to meet the investment requirements of the public and private sectors will be very large. The Sixth Development Plan will include a program to prepare reliable estimates of future requirements, in cooperation with concerned agencies.

4.4.2 INVESTMENT REQUIREMENTS AND THE MOBILIZATION OF CAPITAL

4.4.2.1 Investment Requirements

An estimated gross investment of SR 472 billion will be required to achieve the economic growth targets set for the Sixth Plan. The investment requirements by sector are shown in Table 4.6 for selected years, while the expected sources of sectoral investment funds in the Sixth Plan are shown in Table 4.7.

Government services are expected to account for a significantly higher share of total investment in 1419/20 than in 1414/15 (Table 4.6), reflecting the emphasis on project expenditure in the Sixth Plan. The diverse range of investment expenditures included in government services is expected to have strong multiplier effects on many domestic sectors, especially other manufacturing, construction and other mining (quarrying). All of these sectors are expected to increase their annual investment substantially between 1414/15 and 1419/20.

Table 4.6

Estimates of capital Investment by Sector
(at current prices)

	Investment (SR billion)			Share in Total (percent)		
	1409/10	1414/15	1419/20	1409/10	1414/15	1419/20
Producing Sectors	**16.0**	**21.7**	**45.8**	**26.4**	**31.9**	**40.5**
Agriculture, Forestry, Fishing	1.9	2.8	3.3	3.1	4.1	2.9
Other Mining, Quarrying	0.3	0.6	1.2	0.5	0.9	1.1
Manufacturing	7.4	11.2	15.4	12.2	16.5	13.6
- Petroleum Refining	0.2	0.7	0.6	0.3	1.0	0.5
- Petrochemicals	3.4	3.3	5.5	5.6	4.9	4.9
- Other Manufacturing	3.8	7.2	9.3	6.3	10.6	8.2
Electricity, Gas and Water	4.6	4.5	22.3	7.6	6.6	19.7
Construction	1.8	2.6	3.6	3.0	3.8	3.2
Services Sectors	**14.7**	**17.0**	**21.0**	**24.4**	**25.0**	**18.5**
Trade, Restaurants, Hotels	3.1	4.7	5.9	5.1	6.9	5.2
Transport, Communications	7.3	5.9	6.7	12.1	8.7	5.9
Finance, Insurance, Real Estate and Business Services	3.3	4.9	6.4	5.5	7.2	5.6
- Real Estate	1.2	1.9	2.5	2.0	2.8	2.2
- Other	2.1	3.0	3.9	3.5	4.4	3.4
Community, Social and Personal Services	1.0	1.5	2.0	1.7	2.2	1.8
Government Services	**19.9**	**12.3**	**28.3**	**32.9**	**18.1**	**25.0**
Residential Housing	**8.4**	**11.6**	**13.7**	**14.0**	**17.2**	**11.9**
Non-oil Sectors	59.0	62.6	108.8	97.7	92.2	95.9
- Crude Oil and Natural Gas	1.4	5.3	4.6	2.3	7.8	4.1
Total Investments	60.4	67.9	113.4	100.0	100.0	100.0

Investment in the producing sectors in 1419/20 is expected to be 186 percent higher than one decade earlier, while investment in the services sectors is expected to be 43 percent higher. The faster increase expected for investment in production activities is an encouraging sign for the progress of diversification and the further strengthening of the Kingdom's economic base. A significant contribution to these efforts is expected from the "other manufacturing" sector, which encompasses a wide variety of production activities. The anticipated increase in annual investment to SR 9.3 billion in this sector by the end of the Sixth Plan confirms the success of the government policy to provide well developed facilities in the industrial cities, together with financial support and other incentives to manufacturing establishments.

Investment requirements for residential housing will continue to increase, reflecting the needs of a growing population and the rising cost per housing unit in the metropolitan areas. With its strong links to construction, other mining and other manufacturing sectors, investment in housing will generate demand in these related sectors and encourage investment in their expansion.

Funding of investment in the Sixth Plan will be provided by several sources (Table 4.7).

Estimates of capital investments in the main economic sectors is shown in Figure 4.3

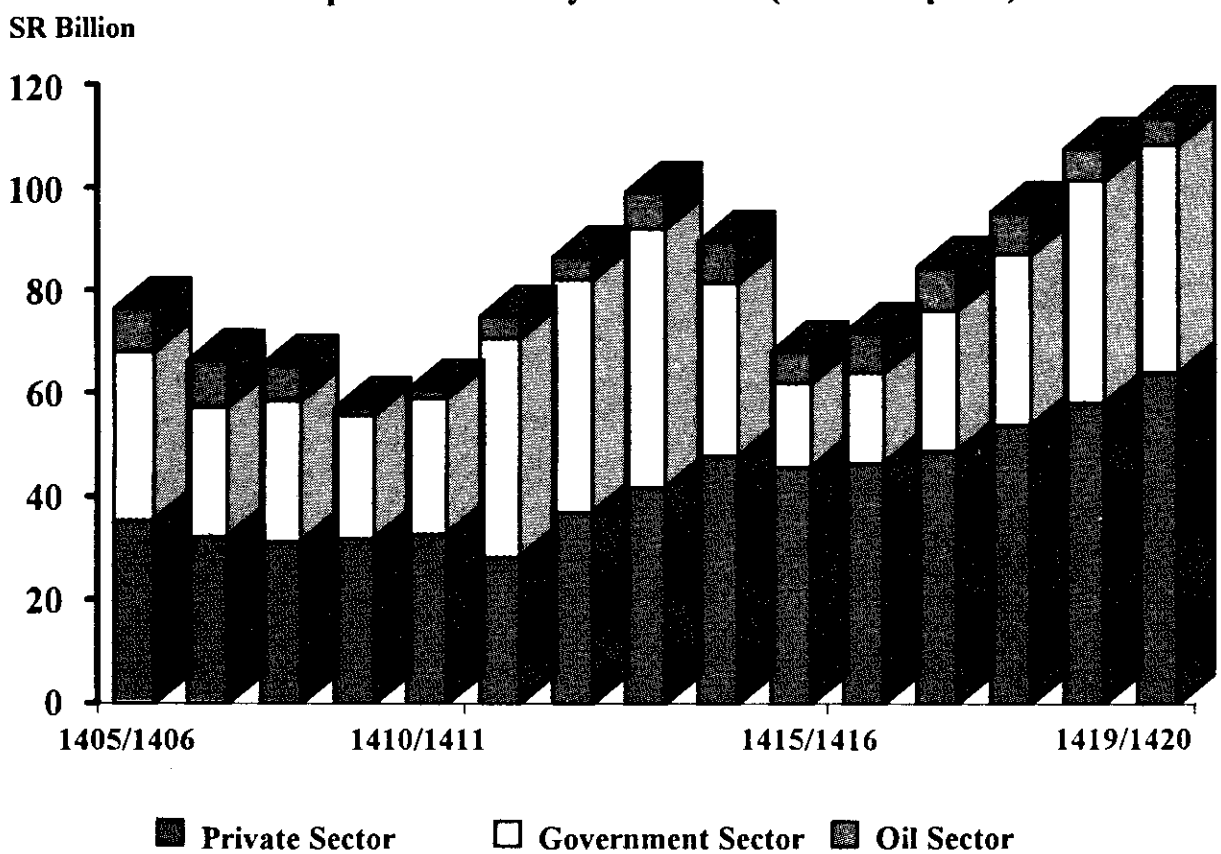
Table 4.7

Estimates of Sixth Plan Investment Financing Requirements by Sector and Source (SR billion at current prices)

Sector	Total Sixth Plan	Private Sector	Public Sector★
Producing Sectors	**181.0**	**88.9**	**92.1**
Agriculture, Forestry, Fishing	14.6	10.0	4.6
Other Mining, Quarrying	4.1	2.2	1.9
Manufacturing	64.7	31.8	32.9
Petroleum Refining	4.2	2.1	2.1
Petrochemicals	22.2	2.8	19.4
Other Manufacturing	38.3	26.9	11.4
Electricity, Water	83.1	31.5	51.6
Construction	14.5	13.4	1.1
Service Sectors	**92.0**	**76.8**	**15.2**
Trade, Restaurants, Hotels	24.6	24.4	0.2
Transport, Communications	32.9	21.9	11.0
Finance, Insurance, Real Estate and Business Services	26.2	23.3	2.9
Real Estate	10.3	8.2	2.1
Financial and Business Services	15.9	15.1	0.8
Community, Social and Personal Services	8.3	7.2	1.1
Government Services	103.4	0.0	103.4
Residential Housing	64.1	47.0	17.1
Non-Oil Sectors	**440.5**	**212.7**	**227.8**
Crude Oil and Natural Gas	31.5	0.0	31.5
Total Investment	**472.0**	**212.7**	**259.3**

★ Government agencies, specialized funds and public companies.

Figure 4.3
Fixed Capital Formation by Main Sector (at current prices)



4.4.2.2 Mobilization of Capital

Profitabillity is the key to the successful mobilization of private capital for domestic investment in fixed assets. Private capital has to be attracted to domestic investment in a market-oriented economic system where investment decisions by private investors are determined by perceived risk/return relations of investment opportunities worldwide.

The contribution of the private sector is essential for the achievement of the Sixth Plan investment objectives. The mobilization of private capital will require a regulatory framework enabling financial intermediaries effectively to perform their allocative functions of collecting funds from private households and enterprises with financial surpluses by offering attractive returns and transferring these funds to sectors offering profitable investment opportunities.

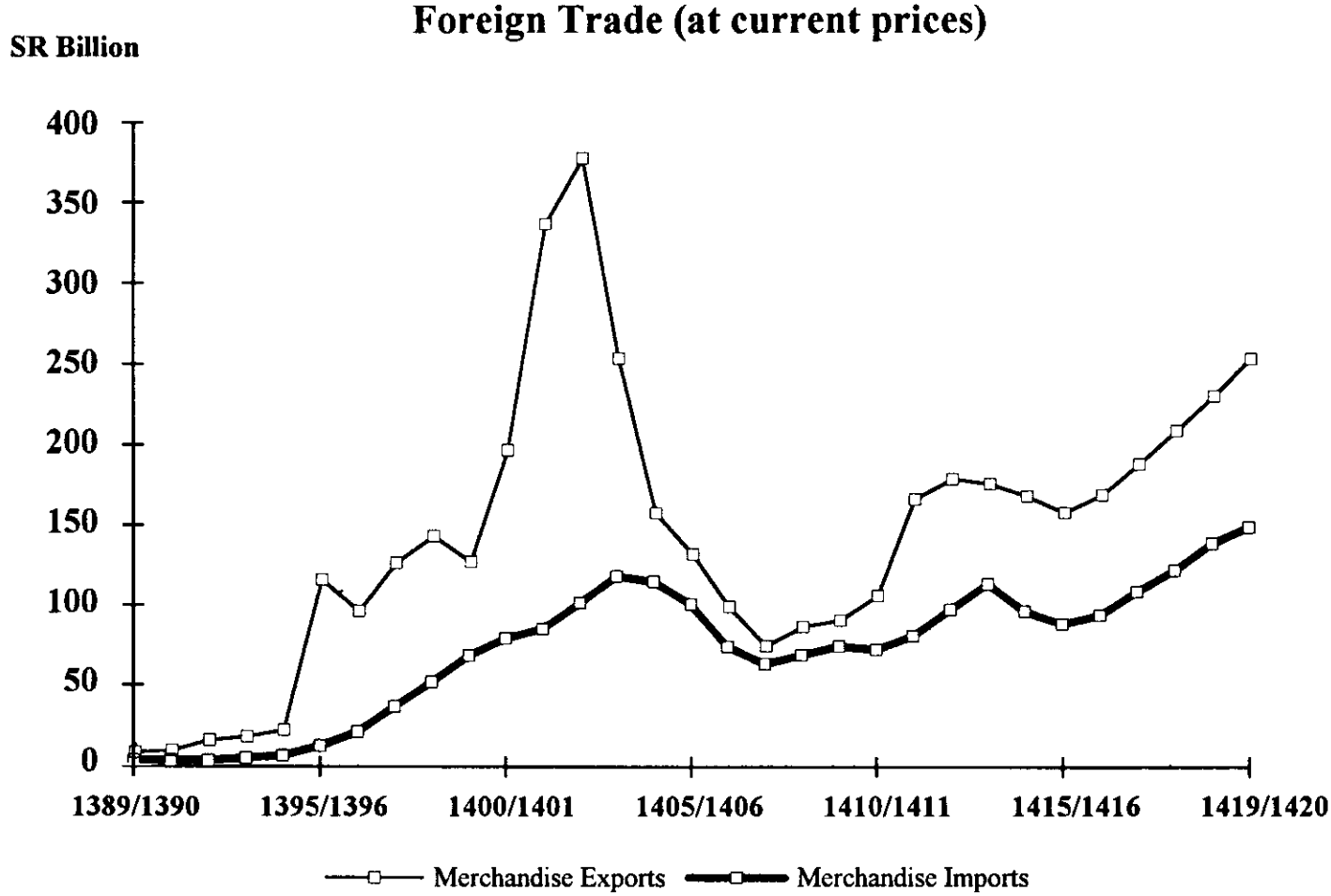
To claim a higher share of domestic savings for the financing of investment in fixed assets or to attract foreign capital into the Kingdom will require a wider range of short-and long-term financial instruments. With a more developed and competitive capital market, the transformation of short-term financial assets into long-term capital and the reduction/sharing of risks will be possible. An innovative capital market could provide private sector companies with an attractive and significant complement to the government's specialized credit institutions as a source of non-equity finance for long-term investment.

Other institutional innovations could also contribute to the mobilization of capital by channeling a large share of private savings to investment through various investment vehicles and channels. Licensing for these and similar institutions will be considered as a Sixth Plan policy option.

4.5 FOREIGN TRADE AND THE BALANCE OF PAYMENTS

Foreign trade is vital to the process of economic development in the Kingdom, as it represents a dual link between the domestic and international economies, in terms of both the physical and financial flows related to the exports and imports of goods and services. As a percentage of GDP, exports now reach about 40 percent, while imports as a percentage of non-oil GDP stand at about 45 percent. Furthermore, the significance of foreign trade to the Kingdom is evident by the fact that Saudi Arabia is the world's largest oil exporter and ranks 20th in the world in terms of foreign trade volume. Figure 4.4 shows development in the Kingdom's foreign trade over the previous five development plans.

Figure 4.4
Foreign Trade (at current prices)



4.5.1 FOREIGN TRADE AND BALANCE OF PAYMENTS OBJECTIVES

Within the framework of the medium and long-term development strategy, the government of the Kingdom aims to achieve the following objectives:

(1) Making radical changes in the structure of the balance of payments and protecting the national economy growth path against adverse external impacts;

(2) Re-building the Kingdom's foreign reserves and maintaining the value of the national currency;

(3) Increasing the Kingdom's share of the international market for oil and petrochemical products, commensurate with its share of the world's crude oil reserves;

(4) Increasing non-oil exports as a proportion of total exports;

(5) Expanding international economic and trade relations, and in particular, enhancing regional cooperation with GCC states and other Arab and Islamic countries.

4.5.2 OPPORTUNITIES AVAILABLE IN THE WORLD ECONOMY

World trading patterns are changing due to the formation and growth of trading blocs, such as the European Union (EU) and the North American Free Trade Area (NAFTA), as well as to different levels of economic development and growth rates between countries. At the end of the Fifth Plan period, the economies of the European Union had not yet begun to recover strongly from recession, while the longer term structural adjustment problems facing Eastern Europe and the newly independent countries of the former Soviet Union will continue to limit their demand for imported goods for some time. In contrast, the North American economy had already begun to recover from recession, while some of the Far Eastern economies, such as Hong Kong, Taiwan, and Malaysia, continued their rapid growth of recent years.

Export opportunities for the Kingdom in the Sixth Plan period are likely to shift away from Europe and North America in favor of the GCC and the faster growing Asian economies, whose trade is expected to grow by around 9 percent annually, or at twice the growth rate of North American or European trade. India, and especially China, will provide substantial opportunities for increased trade as their markets open up, while Japan and South Korea can also be expected to offer increasing opportunities for Saudi exporters, as their economies recover and their trade policies are gradually liberalized. Nearer to the Kingdom, the GCC is expected to be one of the fastest growing trade areas in world.

The Kingdom's decision to join the GATT will pave the way for new opportunities for the Kingdom's petrochemicals exports, as customs duties will be reduced in the 125 signatory countries to

within the range of 5.5 percent and 6.5 percent from the beginning of 1995. It is generally expected that the trade liberalization measures agreed in the Uruguay Round will continue to have positive impacts on the volume of world trade, which is expected to grow by between $ 200 billion and $ 300 billion as a result.

4.5.3 CONSTRAINTS ON FOREIGN TRADE GROWTH AND DIVERSIFICATION

Notwithstanding the growing positive trends in the world economy in general, and the more favorable conditions for expanding the Kingdom's foreign trade, however, the achievement of the above-mentioned foreign trade objectives faces real constraints at both international and domestic levels. At the international level, the Kingdom's foreign trade faces the following structural constraints:

Persisting Protectionism in the industrialized Countries :

Despite the progress achieved in trade liberalization following the conclusion of the Uruguay Round, trade in crude oil is still not included under the regulations of the new GATT accord, thus making it subject to continued tariff and non-tariff barriers imposed by the industrialized countries, which discriminate against oil in favor of other energy sources. Taxes on oil products in some countries are up to four times the revenues per barrel of oil received by the oil exporting countries.

Moreover, plans are being formulated in these countries to raise the tax burden on petroleum products still further, through the introduction of new types of tax, such as carbon or energy taxes. Clearly, the imposition of these additional taxes will exert further downward pressure on future world demand for oil, thereby reducing the income of oil exporters, limiting their development potential and reducing their role in the global economy.

Growing Role of Regional Economic Blocs

Undoubtedly, regional economic blocks are of significant benefit to participant countries, as evidenced by the dedicated efforts of the industrial countries in this direction. Three such regional blocks are the EU, NAFTA and APEC (Asia Pacific Economic Cooperation), which together have a major influence on the world economy and on international trade flows. The formation of such economic blocks hinders the endeavors of GATT to promote pluralism and transparency in international markets. Under such developments, the Kingdom's exports are expected to face sharp competition in world markets, as world trade flows are diverted in favor of trade within the major regional groups.

The Kingdom's Terms of Trade

The Kingdom's terms of trade showed a steady decline over the period 1400 to 1411, as the index number of the ratio of export prices to import prices fell from 100 to 50 according to UN data. Thus, the purchasing power of the Kingdom's exports fell by half during this period, as import prices rose by 32 percent while

export prices declined by 65 percent. Notwithstanding the relative improvement in export prices in 1410 and 1411, the subsequent decline in crude oil prices and the value of the U.S. dollar in the later years of the Fifth Plan period led to a further deterioration in the Kingdom's terms of trade in favor of the oil importing countries.

At the *domestic* level, intensive efforts are needed in the following areas to boost the development and diversification of non-oil exports:

Institutional Framework

Notwithstanding the achievements made by the Export Development Center at the Council of Saudi Chambers of Commerce and Industry, a continuing effort is needed to diversify and expand the scope of its activities and services. At the same time, the commercial banks have been reluctant to extend export financing facilities to exporters in the case of countries where payments can be delayed. In overcoming these difficulties, small and medium-sized exporters need the support of an export credit guarantee institution.

Furthermore, increased coordination between export related government agencies and the private sector will further enhance and develop private sector exports

Export Marketing Skills

Exporting success requires the availability of certain skills, such as establishing and maintaining contacts in foreign markets, foreign language skills, and the ability to deal effectively with banks, insurance and shipping companies, foreign agents and clients. The small and medium - sized enterprises are expected to intensify efforts towards the employment of qualified saudi staff in the fields of production and marketing. In this respect, the efforts of the Saudi Company for Industrial Exports (established in 1411) have been substantial and will become even more significant for the marketing of non-oil exports during the Sixth Plan period. The sales of this company, which reached SR 200 million in 1413/14, are expected to grow steadily in the future.

Information for Exporters:

Broad structural shifts and rapid changes in the geographical pattern of world trade have led to intense competition between exporters. Entry into foreign markets, or even maintaining existing positions in these markets, is becoming increasingly difficult, unless the exporter acquires a thorough understanding about consumer needs and the overall supply and demand conditions in these markets.

The Ministry of Industry and Electricity and the Chambers of Commerce and Industry have been making great efforts to provide information and data about domestically manufactured products. However, such information is not sufficient for exporters because no comparisons are made between the advantages and disadvantages of national and foreign products, which might enable exporting opportunities to be reliably assessed.

4.5.4 FOREIGN TRADE POLICIES

Government policies related to foreign trade and the balance of payments concentrate on the following strategic principles:

First: Optimizing the contribution of foreign trade to the development process and boosting its role in meeting the Kingdom's financial, physical and technological needs, by maximizing export revenues, while minimizing the outflow of physical and financial resources and guarding against their potential depletion.

Second: Continue to develop the institutional framework of foreign trade, to upgrade the organizational capabilities of relevant public and private establishments, and to improve coordination between these establishments.

The following are the most important policies the government will continue to implement:

- Ensuring the continuity of monetary policy and maintaining the value of the national currency;
- Supporting export-oriented industries that use locally available resources, particularly the petrochemical industries, oil refineries and other energy-intensive industries;
- Developing a system of incentives for non-oil exporting industries similar to the existing system of incentives for import substitution industries;
- Enhancing the efficiency of the system of customs tariffs on imports in collaboration with GCC states and in conformity with GATT rules;
- Intensifying efforts to establish a national institution entrusted with export financing and export credit guarantee functions;
- Supporting the Exports Development Center at the Saudi Council of Chambers of Commerce and Industry, as well as its initiatives for the establishment of a national information system about international trade and world markets;
- Improving coordination between the Kingdom's aid to developing countries and its foreign trade objectives, as well as expanding export loans on easy terms and credit guarantees to friendly countries;
- Boosting regional trade cooperation with GCC states, the unification of customs systems, standards and specifications, as well as the expansion of joint ventures;
- Expanding economic and trade cooperation with other countries through establishing more bilateral and multi-lateral agreements, particularly with Arab and Islamic states.

4.5.5 GROWTH Targets

The following quantitative objectives for the growth of Foreign trade and the structure of the balace of payments have been identified in the light of the Sixth Plan forecasts for the development of the overall economy :-

- Gradual reduction of the current account deficit in the balance of payments over the Sixth Plan period;
- Average annual growth in non-oil export revenues of around 12 percent over the Sixth Plan period.

CHAPTER 5

ROLE OF THE PRIVATE SECTOR

5. ROLE OF THE PRIVATE SECTOR

Private sector expansion is one of the three central themes of the Sixth Development Plan. Its significance stems from the substantial role the private sector is expected to play in the realization of the Kingdom's overall development objectives. This chapter discusses the historical background and recent development of the Saudi private sector, its future growth potential, some of the key issues facing the private sector, available investment opportunities, its role in the achievement of the Sixth Plan objectives, pertinent government initiatives and policies, as well as the role of financial institutions and markets.

5.1 DEVELOPMENT PROCESS AND PRIVATE SECTOR EVOLUTION

The nature and scope of economic activity by the Saudi private sector and the development of its institutions have been closely linked to the Kingdom's overall development path since the adoption of the First Development Plan. Unlike the situation in some other countries, the Saudi private sector's progress has never faced ideological constraints, as the government has consistently affirmed, both by its stated policies in the development plan documents and by its actions, its commitment to principles based on :

i) the Islamic Sharia and traditions that foster freedom for individuals to engage in economic activity of their own choice ;

ii) the philosophy of the market economy, with free access for all individuals and groups, as stated in development plans and guaranteed by the state.

The Saudi private sector has a long history stretching back to early Islamic times, when its main institutional features were determined largely by its trading tradition. From a modern economic perspective, however, it was during the implementation of the First Development Plan when the private sector began to expand the scope of its activities beyond its previous concentration on trade into some modest forms of production activity, such as the manufacture of plastics and the generation of electricity.

During the Second and Third Development Plans, the increase in government expenditure -- which was of historic proportions -- began to shape more forcefully the modern emerging private sector, as it successfully implemented a wide range of industrial, agricultural, health care, transport and operations and maintenance projects, thus verifying the complementary links between the public and private sectors, and confounding any false assumption about a possible contradiction between the two sectors.

With the fluctuation of the Kingdom's oil revenues during the Fourth and Fifth Plans, moreover, the private sector's ability to adapt to external and internal changes became clear. Encouraging signs of a more mature and autonomous private sector began to appear, whose reliance on government expenditure had been reduced.

At the beginning of the Sixth Plan, several factors indicating continuity of the private sector's steady growth are evident, thus providing grounds for optimism that the private sector will undertake an increasingly important role and will become a major driving force for growth in the Saudi economy in the near future. Some of these factors are :

(1) the growth in private investor confidence following the end of the Gulf War which confirmed the region's economic image and potential and improved the general investment climate ;

(2) the government's determination to continue its policies of supporting and stimulating private sector investment, thus further enhancing investment opportunities ;

(3) the accumulation of private sector liquidity and savings and the expanding role of the financial institutions and markets in channeling this liquidity into fixed investment ;

(4) the emergence of ample investment opportunities in the producing and service sectors.

5.2 PRESENT CONDITIONS OF THE PRIVATE SECTOR

5.2.1 SIZE AND MAJOR COMPONENTS OF THE PRIVATE SECTOR

The concept of the private sector is normally based on the criteria of private ownership of establishments which engage in various industrial, agricultural and commercial activities with the aim of realizing profits. The scope of the Kingdom's private sector can be extended to include those economic establishments of mixed public and private ownership which operate as joint stock companies according to the disciplines of the market. Such companies would include :

- SABIC
- Saudi Ceramic Company
- Cement companies : Saudi, Yamama, Qassim, Yanbu, Southern region and Eastern region.
- Some commercial banks : Riyadh Bank, Saudi Investment Bank, Saudi Cairo Bank, Saudi American Bank
- SAPTCO, Sea Transport Company
- Some agricultural companies : NADEC, Tabuk Agricultural Co., Al-Jouf Agricultural Co.

The private sector's ownership in these companies ranges from 30 percent in the case of SABIC to 99 percent of the Saudi Cement Company. The electricity generation companies represent a spec-ial case amongst these companies, where the private sector's ownership ranges between 1 percent of

the Southern Region Electricity Company and 66 percent of the Tabuk Electricity Company. As special cases, these companies should be studied separately and in light of the social objectives specified by the government.

Three major categories of economic unit comprise the Saudi private sector :

- Commercial, industrial and service establishments registered in the Commercial Register, of which there were more than 391,000 by the end of 1413/14; these establishments include 7,642 companies which have a different legal status, of which 98 are joint stock companies ;
- Retail outlets and small service facilities and workshops licensed by the municipalities, of which there were about 134,000 units in 1413; this group represents the smallest economic units in the private sector ;
- Agricultural holdings and related production units, which currently employ around 377,000 farmers and agricultural workers, including a substantial number of small farmers.

Within each of these groups there are small, medium and large units, in terms of the number of workers, capital invested, production volumes and annual sales. Available data are not sufficient to determine the relative economic importance of each size category. However, the following indicators are useful in this respect :

- The number of establishments covered by the social insurance system and employing ten workers or more reached about 17,000 in 1413. This accounts for only 5 percent of the number of establishments registered in the Commercial Register, so that the vast majority (95 percent) are small establishments employing less than ten workers.
- Statistics from the Ministry of Industry and Electricity indicate that there were 2,260 licensed and operating factories in 1414. Small-scale industries, with capital of less than SR 10 million, account for about 65 percent of this number, while medium-scale industries with investment of between SR 10 million and SR 100 million account for 24 percent. Thus, large-scale industries with investments of over SR 100 million account for 11 percent of the total number of operating factories.

5.2.2 GROWING SIGNIFICANCE OF THE PRIVATE SECTOR IN THE NATIONAL ECONOMY

Table 5.1 shows the trend in the number of establishments registered in the Commercial Register between 1399 and 1414 and their regional distribution throughout the Kingdom.

Table 5.1

Registered Private Companies and Establishments

Regions	1399	1405	1410	1414
Central	34,963	56,471	76,989	130,761
Eastern	10,182	27,430	38,952	58,595
Northern	9,492	18,541	25,101	36,935
Western	20,271	62,417	88,600	135,972
Southern	3,862	12,620	18,995	29,304
Total	78,770	177,479	248,637	391,567

It is noteworthy that the number of establishments increased about five-fold in 15 years, reflecting the substantial increase in the private sector's importance in the national economy, which can also be measured by the following indicators:

- *Number of companies :* The number of operating companies increased from 1473 companies with total capital of SR 7.0 billion in 1396 to 7,643 companies with total capital of SR 108.7 billion in 1414 (Table 5.2).

- *Gross Domestic Product (GDP) :* Over the past twenty years since 1395/96, the private sector's GDP contribution has risen from 21 percent to about 45 percent (Figure 5.1). The private sector currently accounts for about 72 percent of the Kingdom's non-oil GDP.

- *Investment in Fixed Capital :* The private sector's share of fixed capital formation rose from 34 percent in 1395/96 to 67 percent in 1414/1415. Preliminary projections indicate that the private sector's total fixed investments during the Fifth Plan period amounted to about SR 200 billion.

- *Employment :* Employment in the private sector rose from about 1.4 million in 1390/91 to more than 6 million by the end of the Fifth Plan, an increase of more than 4.6 million. The private sector now employs more than 88 percent of the Kingdom's 6.9 million workers.

Table 5.2

Major Indicators of Private Sector Development

	1395/96	1414/15
Number of Operating Companies	1,473★	7,643★★
Invested Capital (SR billion)	7.0★	108.7★★
Contribution to GDP (%)	21.0	45.0
Contribution to Fixed Capital Formation (%)	34.0	67.0
Employment in the Private Sector (million)	1.7	6.0

★ in 1396
★★ in 1414

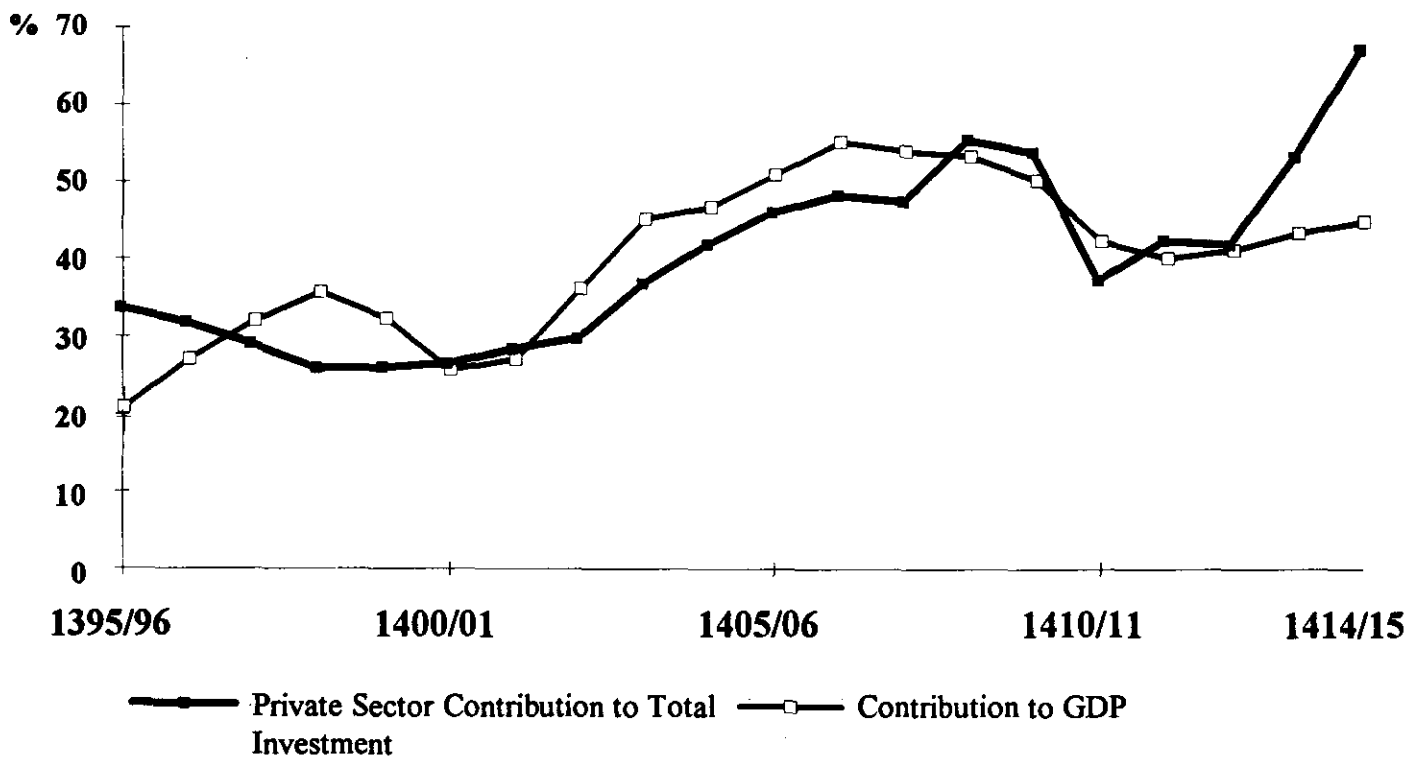
5.3 PRIVATE SECTOR ACHIEVEMENTS AND GROWTH POTENTIAL

5.3.1 ACHIEVEMENTS DURING FIFTH PLAN PERIOD

Over the Fifth Plan period, and particularly after the Gulf War, the private sector consolidated its role as an active and key factor in the economic growth process. By this time, private investment has gained a momentum covering most sectors of the national economy, and has exceeded earlier expectations. Some quantitative indicators of private sector activity during the Fifth Plan period are:

- Private investment rose from SR 28 billion in the first year of the Plan (1410/11) to more than SR 46 billion in the last year of the plan, at an average annual growth rate of 13 percent.
- More than 100,000 new private establishments have been registered in the Commercial Register.
- The number of new private companies registered reached 1,534.
- 17 new stock companies, with capital of around SR 6 billion, have been established, thus bringing the total number of stock companies to 98, with capital of about SR 53.9 billion.

Figure 5.1
Private Sector Contribution to GDP and Investment
(percentage share in current prices)



Undoubtedly, the high government expenditure during the first two years of the Fifth Plan helped in the realization of these achievements. However, the vital factor contributing to the momentum of private sector growth in subsequent years has been the implementation of the Fifth Plan's supporting policies and incentives. These policies have been based on the principles of providing opportunities for and avoiding crowding out of the private sector.

5.3.2 PRIVATE SECTOR STRENGTHS

The Kingdom's large private sector establishments, particularly the stock companies, occupy an important position in the national economy because of their strengths in the following areas:

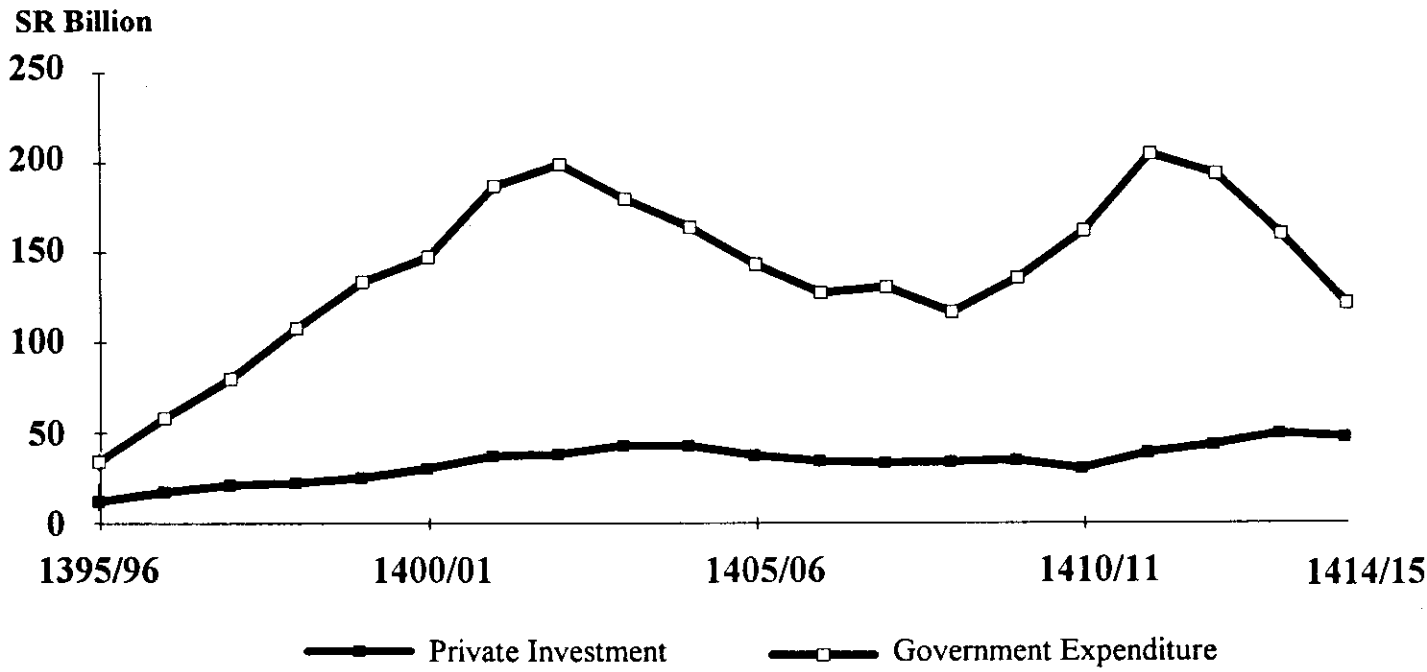
- enormous financial resources available for investment ;
- high levels of production and operational efficiency ;
- the use of advanced production technologies ;
- the use of modern management techniques in production and marketing activities ;
- accumulated experience of trading in international markets and dealing with foreign companies.

The growing strengths of the private sector are also evident in the emergence of a new type of industrial development companies that have been formed in recent years to provide venture capital for large investment projects in the manufacturing sector, such as the National Industrialization Company, established in 1405. Among these companies are : the Saudi Advanced Industry Corporation, the Arab-ian Industrial Development Company, the Saudi Company for Industrial Development, Al Baha Company for Investment and Development, Al-Hasa Development Company and Al-Madinah Company for Industrial Investment. Work is under way on the establishment of other development companies in the various regions of the Kingdom.

The significance of these new development companies lies in their readiness to invest as partners in large and medium-scale production projects, thereby sharing and reducing the associated long term investment risks, while performing a role in such projects previously played by the government.

Confidence in the private sector's future growth outlook is also based on evidence of a decline in the private sector's former reliance on government expenditure. In this regard, Figure 5.2 shows that private investment continued to grow steadily despite the considerable decline in government expenditure in 1405/06, 1413/14 and 1414/15.

Figure 5.2
Government Expenditure and Private Investment
(at current prices)



5.4 KEY ISSUES

The formulation of an effective strategy for increasing the role of the private sector depends on the accurate diagnoses of influencing factors, whether positive or negative, so that necessary measures can be taken to control the consequences. Despite its growing strengths, the private sector continues to face some key structural issues which must be addressed if the strategy for expanding the private sector's role is to succeed. These are described below.

5.4.1 SMALL-SCALE ENTERPRISES

Although the vast majority of private enterprises are small, these small businesses account for a large proportion of total employment. From the outset of the planning process, the government recognized the important role of small enterprises in achieving the development objectives to diversify the national economy, to create job opportunities, to mobilize small savings and channel them into investment, and to promote regional development throughout the Kingdom. However, small enterprises are affected by the following constraints :

- limited access to finance, as most small enterprises are unable to satisfy the lending criteria of the commercial banks and the loan repayment guarantees required by the government's specialized credit institutions ; as a result, many sound investment initiatives are unable to proceed ;
- the system of incentives in its present structure, which does not allow small enterprises (capitalized at less than SR 1 million) to enjoy such privileges as customs or tax exemptions, or obtaining land at nominal prices and fuel at support prices ;
- low levels of management and production efficiency, the lack of advanced production technology and marketing techniques, and a shortage of marketing, technical and competitor information.

5.4.2 INVESTMENT BEHAVIOR

Notwithstanding the positive trend in private investment in recent years, most private sector companies (both large and small) continue to seek too rapid a return on their investments. As a result, private investment is often characterized by extreme risk aversion and a preference for investment in financial rather than fixed assets. At the beginning of 1415, for example, 14 stock companies had invested around SR 10 billion in financial assets. At the same time, most private investment has shown an excessive concentration on imitation of existing activities at the expense of new innovative development opportunities with correspondingly longer and more uncertain investment returns. Investment of this kind has often resulted in excess capacity and a waste of resources.

5.4.3 LIMITATION OF THE KINGDOM'S FINANCIAL MARKET

Although the Saudi financial market expanded strongly during the Fifth Plan, it still lags behind developments in the real economy owing to its recent origins. As a result, the financial market continues to face some difficulties, such as :

- the limited scope of the financial market, which deals only in stocks and has not yet extended its activities to include bonds (private or government) ;
- its restricted organizational and administrative capacity to provide services commensurate with the needs of the expanding private sector ;
- the small size of the stock market with only 89 listed Saudi companies and with share dealings limited to Saudi companies and Saudi citizens, apart from exceptional cases where GCC citizens are allowed to purchase specific amounts of such shares ;
- the weak linkage between the commercial banks (as the main collector of savings in the form of various types of deposit) and the financial market, because of the lack of suitable investment channels and diversified savings instruments that can attract various groups of savers.

5.5 OPPORTUNITIES AVAILABLE FOR THE PRIVATE SECTOR

Substantial investment is needed to ensure the steady growth and prosperity of the national economy. The achievement of the Sixth Plan's objectives depends on the full participation of the private sector in mobilizing its resources to finance such investment. In Chapter 4 of this document, Tables 4.6 and 4.7 show the estimated volume of national investment which must be financed from all sources during the Sixth Plan, while various private investment opportunities at sector level are discussed in the relevant sector chapters.

In recent years, government agencies and the Chambers of Commerce and Industry have made great efforts to explore and promote investment opportunities by providing the private sector with the findings of preliminary feasibility studies. At present, there are at least 252 investment opportunities in 13 different production fields which have already been studied and publicized by government agencies and the Chambers of Commerce and Industry.

The Sixth Plan anticipates an expansion of private investment in a range of activities currently undertaken by the government. During its preparation, many comprehensive studies were conducted about possible scenarios for cooperation between the public and private sectors, with a view to enhancing the private sector's role in the development process. In this respect, the following cooperation options have been identified as investment opportunities for the private sector :

FIRST : FINANCING AND IMPLEMENTING NEW PROJECTS OF THE SIXTH PLAN

The operation plans of a number of government agencies include many new projects that can be both financed and implemented by the private sector in the Sixth Plan period in a number of ways :

(1) Construction and operation of new public projects for a certain period -- agreed in advance with the concerned agency -- for the private sector company to recover its costs and achieve a reasonable profit margin, before transferring ownership of the project to the government agency ; such projects include power generation, communications, and public parks and gardens.

(2) Constructing public facilities and leasing them to government agencies prior to their eventual transfer of ownership, so that the private sector receives rental income for a sufficient period to recover its costs and then transfers ownership to the government; the best examples for such projects are the construction of schools, primary health care centers and other government buildings.

(3) Building and operating public facilities which will be owned permanently by the private sector. There are increasing opportunities for the private sector to provide some specialized services, such as the expansion of private schools, the establishment of private universities and municipal facilities, and the establishment of health insurance companies whereby individuals' health insurance contributions would decrease the cost of providing health services through the government budget. Such options also include the implementation of 16 new projects for PETROMIN in the fields of precious metals, mining, oil and marble, representing a total investment of SR 3.5 billion.

SECOND : EXISTING GOVERNMENT FACILITIES

For quite some time, the government has contracted the private sector to operate and maintain a range of public facilities, such as hospitals, roads, municipal facilities and government buildings. During the Sixth Plan period, the government will continue to develop this approach and expand its coverage to more government facilities such as desalination plants, sea ports, airports and others. The possibility of privatizing selected government-owned commercial activities at the appropriate time, such as telecommunications and SAUDIA, will be considered -- provided that such privatizations will be of real benefit to the national economy.

THIRD : GOVERNMENT COMPANIES

Very few companies are wholly government-owned, with ARAMCO and the Cooperative Insurance Company being the most important ones. Most other public sector enterprises have some degree of private ownership. The government's privatization program will be implemented through one or more of the following alternatives :

- increasing the capital of both government-owned companies and joint public/private sector companies and offering the newly issued shares for public subscription ;
- offering some shares of government-owned companies for sale in the financial market on a gradual basis and in a manner that would not adversely affect the stability of this market ;
- selling the entire government share of these companies to privately owned venture capital companies listed on the local stock market.

At the same time, however, the advantages and disadvantages of each of these alternatives will be examined closely in the context of selecting the most appropriate time for initiating the privatization program. Accordingly, the best alternative will be selected, so that the final outcome of the privatization program will result in upgrading the economic efficiency of those companies to be privatized and thus benefiting the national economy.

5.6 ROLE OF THE PRIVATE SECTOR IN ACHIEVING THE SIXTH PLAN OBJECTIVES

The enhancement of the private sector's role in the development process represents the basic pillar of the Sixth Development Plan and reflects the unique features of the present stage of development, which differ from those of earlier plans. The Saudi economy is facing great challenges and the private sector is called upon to cooperate with the government in facing these challenges by effectively contributing to the achievement of the following development objectives :

1. to raise the overall level of efficiency in the economy by making more efficient use of scarce resources and improving productivity ;
2. to replace non-Saudi manpower by Saudis and create new job opportunities for citizens ;
3. to diversify the economic base and reduce the dependence on hydrocarbon resources by entering into new fields of investment directed towards domestic and world markets ;
4. to reduce the financial burden of government through participation in financing development projects ;
5. to raise labor productivity by participating effectively in upgrading technical and administrative skills through training.

Within the framework of the Sixth Plan's macroeconomic projections for the period 1415/16-1419/20, the government is looking forward to the private sector's full participation in the achievement of the following quantitative targets :

- the private sector is expected to account for 57 percent of total fixed capital formation ;

- it is expected to contribute from its own resources 45 percent of the total investment required during the Plan period, as shown in Table 4.7 in Chapter 4 ;
- it is expected to achieve a real average annual growth in value added of 4.3 percent ;
- the private sector's share in non-oil GDP is expected to rise from 72 percent at the beginning of the Sixth Plan to 76 percent by the end of the period ;
- the private sector is expected to increase the employment of Saudi nationals by 466,000 employees, through the replacement of 284,000 non-Saudis by Saudis and the creation of 182,000 new jobs.

5.7 GOVERNMENT POLICIES AND INITIATIVES

In accordance with the Council of Ministers decree No. 142 of 19/11/1413, in which the General Objectives and Strategic Principles of the Sixth Development Plan were approved and the priorities identified, the government will implement the following integrated group of policies and measures in support of private sector development.

5.7.1 DEEPENING DIALOGUE WITH THE PRIVATE SECTOR

The government will continue the policy of extending and deepening its dialogue with the private sector, thereby strengthening the growing cooperation and coordination between the government and the private sector. This will be accomplished through open meetings and the organization of scientific and other seminars, and through the various channels which already exist between government agencies and private sector organizations and institutions. In the course of the Sixth Development Plan, an appropriate institutional mechanism will be developed to give practical effect to the indicative planning methodology approved in the previous plan. Thus, periodic meetings will be organized between private sector representatives and relevant government agencies at the sector level, so that a joint working program can be formulated to evaluate new developments in each sector and to address the constraints which might be affecting the implementation of the Sixth Development Plan.

5.7.2 PRIVATIZATION

In the light of the Sixth Development Plan's objectives, the successful implementation of the government's privatization policy will be guided by consideration of all social and economic conditions prevailing in the Kingdom. In its first stage, privatization policy will concentrate on the following four themes :

i) *Financing :* mobilizing private funds for investment in new and ongoing public sector projects which experience financing difficulties due to budgetary constraints ;

ii) *Privatizing Management :* granting the private sector more opportunities to manage and operate public sector projects ;

iii) *Divestment :* the gradual sale to the private sector of government shares in joint stock companies, following in-depth studies of each individual case, so that the social and economic costs and benefits can be properly evaluated and timing can be determined when appropriate conditions prevail ;

iv) *Deregulation :* the promotion of a positive climate for private investment through extending and increasing the effectiveness of the market mechanism.

In general, privatization is not considered to be an objective in itself, but rather an instrument for realizing economic efficiency. Thus, the government's privatization policy will be based on the following principles :

- the final outcome of the privatization process should benefit both public and private sectors ;
- the timing of each privatization measure will be carefully chosen to ensure that conditions are favorable to a successful outcome.

5.7.3 CONTINUING INCENTIVES AND INFRASTRUCTURE SUPPORT

One of the main features of government policy to support the private sector has been the government's concern to provide a wide range of physical infrastructure, such as transport services, telecommunications, power plants and industrial cities, comparable in quality to the prevailing standards in many industrial countries. During the Sixth Development Plan, the government will take practical steps to meet the growing demand for basic infrastructure, in addition to maintaining the existing fac-ilities.

The Sixth Development Plan will also see the continuation of other forms of government support to the private sector, such as customs and tax exemptions, support for national industries, the provision of soft loans by the specialized credit institutions (including the continuation of loan programs for hotels, hospitals, agricultural activity and local press institutions), in addition to the provision of subsidies to the agriculture and transport sectors.

5.7.4 SUPPORTING SMALL ENTERPRISES

The various government agencies will continue to coordinate with the Chambers of Commerce and Industry in implementing small business support programs and measures in the following areas :

- the identification of small-scale investment opportunities ;.

- broadening the access to finance for small enterprises by expanding the activities of the Saudi Credit Bank ;
- expanding the existing incentives system to include small businesses ;
- preparing and implementing specialized training programs for small business within the scope of services provided by the Chambers of Commerce and Industry ;
- encouraging the development of new organizational structures to promote cooperation between small-scale enterprises.

5.7.5 FOREIGN INVESTMENT PROMOTION

Since the early stages of development planning, the government realized the importance of foreign investment for the transfer of technology and modern management techniques and for the development of the private sector's own capabilities. In this respect the Offset Programs and the Foreign Capital Investment Law are the main tools of government policy to encourage the formation of joint ventures. The Government will continue to develop ways of attracting foreign investment into the Kingdom through the following measures :

- signing more foreign investment protection guarantees and agreements with the industrial countries ;
- continuing to facilitate the institutional and administrative procedures for licensing foreign projects in the Kingdom ;
- expanding the scope of the Offset Program to include large civilian projects.

5.8 ROLE OF THE FINANCIAL INSTITUTIONS AND MARKETS IN PRIVATE SECTOR DEVELOPMENT

Financial institutions and markets play an important role in national economic development by providing the essential links between savings and investment. In this respect, the financial sector in the Kingdom will assume its vital function in mobilizing financial resources for private investment in various production and services projects and in the effective implementation of the proposed privatization programs to ensure the desired results. Appropriate measures to support, improve and expand the financial institutions and markets will be adopted during the Sixth Plan period.

5.8.1 ROLE OF THE SPECIALIZED CREDIT INSTITUTIONS

The provision of long-term credit on easy terms is one of the main instruments of support to the private sector and its contribution to national economic diversification. This policy of financial support has been implemented through the five specialized credit institutions : the Saudi Arabian

as shown in Table 5.3.

Table 5.3

Loans by the Specialized Credit Institutions during the Sixth Development Plan

	SR million
Saudi Agricultural Bank	3,500
Saudi Industrial Development Fund	5,300
Saudi Real Estate Development Fund	12,984
Saudi Credit Bank	1,534
Other Credit Programs★	783
Total Loans	24,101

★ Includes loans of large agricultural projects, hospitals and hotels

During the Sixth Development Plan, a study will be conducted to develop the financial structures of the specialized credit institutions in line with changing financial market conditions and rapid developments at international and regional levels.

5.8.2 COMMERCIAL BANKS

The commercial banking sector witnessed high rates of growth during the Fifth Development Plan period, as reflected in the following indicators :

- the total number of branches of the 12 commercial banks throughout the Kingdom had reached 1,160 by the end of 1413/14 ;
- total bank deposits increased from SR 143.7 billion in the first year of the Fifth Plan (1410/11) to about SR 184 billion by the end of the first quarter of the last year of the plan (1414/15) ;

- total share capital increased from SR 17.4 billion in 1410/11 to about SR 33 billion at the beginning of 1414/15 ; thus, the ratio of share capital to deposits rose from 12 percent in 1410/11 to 18 percent at the beginning of 1414/15, which is fairly high by international standards ;
- total foreign assets fell from SR 123.5 billion in 1410/11 to SR 99.9 billion at the beginning of 1414/15 ;
- loans to the private sector increased from SR 65.3 billion in 1410/11 to SR 108.6 billion in the first quarter of 1414/15.

These indicators show the strong financial position of the commercial banks at the beginning of the Sixth Development Plan. This will enable the banks to increase their contribution to the implementation of the Plan's objectives through the development of financial instruments to meet the needs of both depositors and borrowers and through the expansion of long-term loans to finance investment in large development projects.

5.8.3 CAPITAL MARKET

The capital market is an important mechanism for mobilizing national resources and savings, and although of relatively recent origin, it grew substantially in the Fifth Plan period in terms of the volume and value of shares traded. As stated earlier, however, some constraints are impeding the capital market's effectiveness in mobilizing and directing savings towards investment channels, and have reduced the market's ability to absorb and trade government equity shares in some of the public sector enterprises proposed for privatization. Within the framework of the Sixth Plan strategy for the development of the private sector, the capital market will be developed through the following main policies :

- regulations will be reviewed and further developed ;
- buying and selling procedures will be simplified ;
- market efficiency will be increased and investor decision-making assisted through the establishment of independent sources for the collection, analysis and dissemination of data about the performance of individual joint-stock companies ;
- the possibility of trading new financial instruments (such as bonds) in addition to shares will be studied ;
- the possibility of allowing foreigners to deal in the capital market under specific rules will also be studied.

CHAPTER 6

LABOR MARKET IN THE SIXTH DEVELOPMENT PLAN

6. LABOR MARKET IN THE SIXTH DEVELOPMENT PLAN

The formation of a productive national work force through investment in human capital is a fundamental goal of all development efforts in the Kingdom. The rapid expansion of the Kingdom's education and training systems in successive development plans reflects the importance attached to this basic objective.

The results of manpower development efforts take longer to achieve than in other development areas. Thus, the early aspirations for the rapid development of the Saudi economy and infrastructure could not be met by the Saudi labor force alone, which was limited both in size and available skills. As a result, large numbers of non-Saudi workers were needed to facilitate the development process. Successive development plans, however, aimed at realizing a gradual balance between Saudi and non-Saudi employment, as increasing numbers of Saudi graduates of the Kingdom's education and training programs began to enter the labor market. Development efforts concentrated on the expansion of job opportunities for Saudis, and on replacing non-Saudis in the private sector, which is expected to lead the Kingdom's future development.

As the number of Saudi graduates from the education and training systems continues to grow, the Sixth Plan renews the emphasis on replacing non-Saudis by Saudis (Saudiization). This will require the adoption and implementation of policies that will not only provide a good match between the qualifications and skills of those seeking employment with the manpower needs of Saudi employers, but will also address those key issues and constraints that are hindering the employment of Saudis in greater numbers by private sector employers, and enhance replacement programs in different sectors and occupations.

This chapter deals with the major features of the labor force in the Sixth Development Plan, and in particular with the labor market objectives and key issues, the sectoral distribution of employment, and the overall balance between supply and demand in the labor market. The chapter also outlines the policies and executive procedures proposed to address the employment issues and to achieve the labor market objectives in the Sixth Development Plan.

6.1 LABOR MARKET OBJECTIVES IN THE SIXTH PLAN

In the light of the Sixth Plan strategy, the labor market objectives are:

(a) to replace non-Saudis by appropriately qualified Saudis in a gradually progressive manner in all occupations and economic sectors;

(b) to rationalize the growth of the non-Saudi labor force in all occupations and economic sectors;

(c) to provide job opportunities for all Saudi new entrants to the labor market, mainly in the private sector;

(d) to increase job opportunities for women in conformity with Islamic Sharia;

(e) to increase the number of graduates with skills and qualifications consistent with the requirements of the national economy;

(f) to reduce the number of unskilled Saudis entering the labor market before completing their education and training;

(g) to develop labor market services, including appropriate statistical information services.

6.2 LABOR MARKET ISSUES IN THE SIXTH PLAN

The specific labor market priorities of the Sixth Development Plan are to encourage the private sector to generate job opportunities for Saudi nationals and to replace non-Saudis with Saudis. Thus, policies are designed to address the key issues constraining the achievement of these priority objectives. These issues can be broadly classified into four groups: (i) labor supply issues; (ii) the demand for non-Saudi workers, (iii) Saudiization issues and (iv) labor market services issues.

6.2.1 LABOR SUPPLY ISSUES

Saudi Labor Force Participation Rate

The population census of 1413 indicated a total Saudi population of 12.3 million persons, of whom 7.4 million are in the working-age group (12 years and over). The participation rate of this group in the labor market in turn determines the size of the Saudi labor force. At the beginning of the Sixth Plan, this rate is at the internationally low level of only 30.2 percent. Three factors behind this low rate are: the young age structure of the Saudi population, with about 50 percent aged under 15 years; the large numbers of young people enrolled in education and training schemes; and the low participation of Saudi females in the labor market (under 5.5 percent) during the Fourth and Fifth Plan periods.

Output of Education and Training Systems

Although a labor force with a wide range of qualifications and skills is needed in all sectors of the economy, there is a shortage of graduates in some important occupations, notably those requiring technical skills. An important factor contributing to this skill mis-match between the graduate output of the education and training systems and the needs of private sector employers is the rapid enrollment growth at academic institutions at the expense of more scientific and technically based education and training. The economy's heavy dependence on imported technicians provides convincing evidence of

this trend. Thus, the unbalanced occupational structure of the Saudi labor force may be hindering efforts to replace non-Saudi workers.

Dropouts from the Education and Training System

Dropouts from the education and training systems, particularly at elementary level, represent a source of under-qualified manpower. Estimates indicate that 27.9 percent of new labor market entrants during the Sixth Plan period will be dropouts from elementary level and adult vocational training programs. In addition to the financial waste this causes, such dropouts further contribute to the problem of under-qualified job seekers entering a competitive labor market that is already amply supplied with low-wage imported labor that may be better trained and more in line with employers' needs.

6.2.2 DEMAND FOR NON-SAUDI WORKERS

The labor market in the Kingdom has been characterized by its inflexible response to prevailing economic circumstances. Following the downturn in the economy in 1402, for example, the total number of non-Saudi workers had decreased by only 100,000 between 1405 and 1406, or three years later. Since then, the number of foreign workers has continued to grow at relatively high rates, regardless of calls in the Fourth and Fifth Development Plans for a reduction in non-Saudi worker numbers in line with the actual needs of the economy.

With the virtual completion of the physical infrastructure, concentration in recent years has shifted towards the operation and maintenance of the existing facilities using skilled and semi-skilled non-Saudi workers. At the same time, there has been the rapidly rising demand for unskilled non-Saudi workers in the community and personal services sector. Continuous recruitment of non-Saudi workers will increase the difficulties in finding such jobs for poorly qualified Saudi workers, who make up such a high proportion of new entrants to the labor market.

6.2.3 SAUDIIZATION ISSUES

Saudiization Constraints in the Private Sector

Saudi new entrants to the labor market have shown a marked preference for employment in the government sector, which paid higher wages at middle level positions and below than the private sector, and provided greater job security and better working conditions, in terms of working hours, employment regulations and promotion prospects.

The recruitment practices of Saudi private sector employers have added to the constraints on higher Saudi employment in the private sector. These employers have naturally tended towards the recruitment of foreign workers, whose qualifications, training, operating flexibility and wage demands have

more closely matched their own requirements. Furthermore, the training costs of upgrading new Saudi graduates in such a competitive labor market are perceived as too high.

Saudiization Constraints in the Public Sector

The jobs created for Saudis in the public sector are more the result of filling vacant positions than through the implementation of an effective scheduled Saudiization program. Considerable scope still exists, however, for replacing non-Saudis. It is estimated that about 261,000 public sector jobs are currently filled by non-Saudis, most of which could be occupied by suitably qualified Saudis in various locations throughout the Kingdom.

The failure to implement replacement programs in the government sector can be attributed to three factors:

(i) inadequate numbers of Saudi graduates in scientific, technological and technical fields in general, and in various medical specializations in particular;

(ii) the demand for more general academic graduates in the civil service has already been met sufficiently, particularly in the major cities;

(iii) the difficulty for female graduates in taking up job opportunities in locations far from their families and homes and the consequent failure to replace non-Saudi female workers with Saudis, particularly with respect to female teachers.

6.2.4 LABOR MARKET SERVICES ISSUES

Current institutional and administrative structures are inadequate to deal with the complexities of the Saudi labor market and the apparent unrestrained demand for foreign workers. Most Saudis seeking work in the private sector tend to contact prospective employers directly, without referring to the labor offices responsible for studying recruitment applications and nominating Saudi citizens for employment in the private sector. Thus, the ability of these offices to match employer needs with the available Saudi labor supply is constrained.

Existing institutional structures are also constrained by a lack of human and financial resources to enable them to determine the true non-Saudi labor demand of the national economy, both in quality and quantity, and to assess the recruitment requests of employers accordingly, in order to eliminate the need for large numbers of foreign workers who are imported at a rate exceeding real economic needs and the national capabilities to replace them.

On the other hand, the lack of adequate, regular labor market information has reduced the awareness of students and job seekers about available job opportunities and their location, prevailing wage rates, and conditions of employment, all of which would help to achieve a better match between demand and supply.

6.3 EMPLOYMENT DURING THE SIXTH PLAN

6.3.1 AGGREGATE EMPLOYMENT

To achieve the economic growth targets of the Sixth Plan, total civilian employment is projected to increase from (6867.7) thousand in 1414/15 to (7059.4) thousand in 1419/20, an increase of 191,700, representing an average annual growth rate of 0.6 percent (table 6.1). In conformity with the Sixth Plan strategy to replace non-Saudi workers with qualified Saudis and to encourage the private sector to generate more job opportunities for Saudis, around 95 percent of the net growth in aggregate employment is expected to occur in the private sector. Employment growth in the government sector will be limited to meeting the additional requirements of the health and education sectors.

As shown in Table 6.1, the net increase in employment during the Sixth Plan is expected to be 182,200 workers in the private sector and 9,500 in the government sector, bringing the total net increase in both sectors to 191,700 workers.

Table 6.1

Civilian Employment in the Sixth Plan

	Employment		Net Increase	
	1414/1415 ('000)	1419/1420 ('000)	('000)	Percentage Share - %
Private Sector	6,050.0	6,232.2	182.2	95.0
Government	817.7	827.2	9.5	5.0
Total	6,867.7	7,059.4	191.7	100.0

It is also anticipated that some 319,500 jobs in the government and private sectors will be Saudiized during the Sixth Plan period, so that the number of non-Saudi workers will fall at an average annual rate of 1.5 percent. Accordingly, the private and public sectors will absorb 511,200 Saudis, through employment or replacement, during the Sixth Plan, at an average annual growth rate of 4 percent. This

Table 6.3

Civilian Employment by Occupation in the Sixth Plan

	1414/15		1419/20		Net	Average
	Employment (thousand)	%	Employment (thousand)	%	Change (thousand)	Annual Growth %
Professional & Technical	1,002.7	14.6	1,086.2	15.4	83.5	1.6
Management & Administration	158.0	2.3	189.3	2.7	31.3	3.7
Clerical workers	858.4	12.5	889.8	12.6	31.4	0.7
Sales persons	645.6	9.4	692.9	9.8	47.3	1.4
Services workers	1,559.0	22.7	1,482.8	21.0	(76.2)	(1.0)
Agriculture and related workers	274.7	4.0	298.6	4.2	23.9	1.7
Production, construction & transport related workers	2,369.3	34.5	2,419.8	34.3	50.5	0.4
TOTAL	6,867.7	100.0	7,059.4	100.0	191.7	0.6

( ) Numbers in brackets are negative

6.3.4 NEW JOBS AND REPLACEMENT NEEDS

The total number of new job openings expected over the Sixth Plan period is about 191,700 jobs, while replacement needs to fill positions left vacant by those leaving employment because of retirement, serious illness or death, are expected to amount to 148,700 jobs. Thus, total expected job openings during the Sixth Plan will be 340,400.

Table 6.4 shows the occupational composition of these expected job openings during the Sixth Plan. The professional and technical group will have 102,000 job openings (or 30 percent of all job openings), while a surplus of 17,800 is expected in the service workers category.

Table 6.4

Labor Requirements by Occupation in the Sixth Plan Period (thousands)

	New Jobs	Replacement Needs	Total job opportunities	
			Number	(%)
Professional and Technical workers	**83.5**	**18.5**	**102.0**	**30.0**
- Engineers	2.7	0.8	3.5	1.0
- Technicians	(2.1)	0.7	(1.4)	(0.4)
- Chemists and physicists	(0.2)	0.1	(0.1)	0.0
- Other natural sciences	(1.0)	0.1	(0.9)	(0.3)
- Natural sciences technicians	(0.5)	0.2	(0.3)	(0.1)
- Accountants	29.7	1.0	30.7	9.1
- Economists, Statisticians, Mathematicians & Computer specialists	11.9	1.4	13.3	3.9
- Medical & health personnel	6.6	2.8	9.4	2.8
- Teachers and instructors	13.8	6.3	20.1	5.9
- Other professional	22.6	5.1	27.7	8.1
Management & Administration workers	**31.3**	**4.4**	**35.7**	**10.5**
Clerical workers	**31.4**	**12.2**	**43.6**	**12.8**
- Book keepers	4.8	0.8	5.6	1.7
- Cashiers	15.9	1.5	17.4	5.1
- Secretaries, stenographers and typists	10.5	1.8	12.3	3.6
- Receptionists & telephone operators	(1.8)	0.3	(1.5)	(0.5)
- Office machine operators	1.2	0.1	1.3	0.4
- Data processor operators	(0.3)	0.1	(0.2)	(0.1)
- Other clerical workers	1.1	7.6	8.7	2.6
Sales persons	**47.3**	**19.5**	**66.8**	**19,6**
Service workers	**(76.2)**	**58.4**	**(17.8)**	**(5.2)**
Agriculture & related workers	**23.9**	**19.4**	**43.3**	**12.7**
Production, construction, transport and related workers	**50.5**	**16.3**	**66.8**	**19.6**
- Carpenters	3.1	0.1	3.2	0.9
- Electricians	(0.1)	0.3	0.2	0.1
- Plumbers	(2.5)	0.2	(2.3)	(0.7)
- Mechanics & equipment assemblers	12.5	1.9	14.4	4.2
- Other occupations	37.5	13.8	51.3	15.1
TOTAL	191.7	148.7	340.4	100.0

( ) Numbers in brackets are negative.

6.4 THE SAUDI CIVILIAN LABOR FORCE SUPPLY

6.4.1 SAUDI CIVILIAN LABOR FORCE

As Table 6.5 indicates, the size of the Saudi working-age population is expected to increase from 7.9 million in 1414/15 to 9.5 million in 1419/20. The participation rate for Saudi males in the labor force in the base year is estimated at 54.4 percent, and the female participation rate at 5.5 percent, giving an overall participation rate of about 30.2 percent.

Since the participation rates of the population in the labor force change slowly due to demographic and socio-economic factors, the Sixth Plan assumes that the participation rate for males will reach 54.7 percent at the end of the Plan, while that for females will be 5.8 percent. Thus, the overall participation rate is expected to reach 30.4 percent. As a result, the estimated size of the Saudi civilian labor force in 1419/20 is 2,895,400, an increase of 511,200 over the base year.

Table 6.5

Saudi Working-Age Population and Civilian Labor Force Projections in the Sixth Plan (in thousands)

	1414/1415			1419/1420			Increase in labor force		Average Annual Growth %
	Working -age Population	Participation rate (%)	Labor Force	Working -age Population	Participation rate (%)	Labor Force	Number	(%)	
Males	3,986.2	54.4	2,168.6	4,796.3	54.7	2,622.7	454.1	88.8	3.9
Female	3,919.1	5.5	215.6	4,715.5	5.8	272.7	57.1	11.2	4.8
TOTAL	7,905.3	30.2	2,384.2	9,511.8	30.4	2,895.4	511.2	100.0	4.0

6.4.2 SAUDI NEW ENTRANTS TO LABOR MARKET BY EDUCATION LEVEL

Numerical changes in the size of the labor force between two points in time do not reflect all the changes in the composition of the labor force that are taking place. People withdraw from the labor market because of retirement, illness or death, or a return to the education and training system, or for a variety of other personal or family reasons. New entrants flow into the labor market as a result of graduation or dropout from the education and training systems, while individuals also enter the labor market who were not actively involved previously, or who are retiring from the armed forces.

The total number of Saudi entrants to the labor market over the course of the Sixth Plan is estimated at 659,900 workers, of which 581,200 will be male (or 88.1%) and 78,700 females (11.9%). Table 6.6 shows the projected supply of Saudi new entrants to the labor market by level of education. In general, those leaving the education and training systems will account for 590,100 new entrants (89.4 percent), while other sources will contribute 69,800 (or 10.6%).

Table 6.6

Saudi New Entrants to the Labor Market by Level of Education during the Sixth Plan

Highest Level of Education completed	Male (000)	Female (000)	Total (000)	%
University:(Total) ★	**73.8**	**40.9**	**114.7**	**17.4**
- Engineering	10.1	---	10.1	1.5
- Natural sciences	10.0	5.5	15.5	2.4
- Medical sciences & health	5.5	2.6	8.1	1.2
- Commerce, Mathematics, Computer sciences	12.7	4.1	16.8	2.6
- Agricultural, Zoology & Nutrition sciences	2.6	0.7	3.3	0.5
- Social sciences & Islamic studies	24.9	23.5	48.4	7.3
- Teacher Training	8.0	4.5	12.5	1.9
Technological Colleges	**12.8**	**---**	**12.8**	**1.9**
Secondary Schools:	**209.6**	**11.5**	**221.1**	**33.5**
- General education	172.0	8.9	180.9	27.4
- Technical & Vocational	37.6	2.6	40.2	6.1
Intermediate Schools ★	**119.8**	**7.8**	**127.6**	**19.3**
Elementary Schools ★	**66.2**	**13.8**	**80.0**	**12.1**
Less than Elementary	**62.4**	**4.7**	**67.1**	**10.2**
Pre-Service adult vocational training	**36.6**	**---**	**36.6**	**5.6**
TOTAL	**581.2**	**78.7**	**659.9**	**100.0**

★ Includes students who have withdrawn without completing the next level of education or training program.

6.5 BALANCE BETWEEN THE SAUDI NEW ENTRANTS AND JOB OPENINGS

All jobs currently filled by non-Saudi workers are potentially available to Saudis whose education and skills match the job requirements, provided that they are ready to accept such jobs in the locations and at the salaries on offer.

6.5.1 AGGREGATE BALANCE

During the Sixth Development Plan, job openings resulting from the planned growth in sectoral contributions to GDP are expected to reach about 191,700, and from anticipated replacement needs to reach 148,700. Thus, expected job openings from these two sources during the Sixth Development Plan will be about 340,400 (see Table 6.4). At the same time, some 319,500 non-Saudis will be replaced by Saudi manpower, so that total job openings available to Saudis during the Sixth Development Plan will be 659,900, or the same number of Saudis expected to enter the labor market (Table 6.6). Table 6.7 shows the demand composition of job openings, the sources of manpower supply and the distribution of new employment opportunities for Saudis in the public and private sectors during the Sixth Plan period.

Table 6.7

New Saudi Labor Demand and Supply and the Distribution of New Saudi Employment in the Sixth Plan Period (thousands)

Labor Demand	**Total**
Demand resulting from economic sectors' growth	191.7
Demand resulting from replacement needs	148.7
Sub-Total	340.4
Demand resulting from Saudiization	319.5
Total	659.9
Labor Supply	
Growth in Saudi labor force	511.2
Supply from other sources	148.7
Total	659.9

Distribution of New Saudi Employment (thousands)

Jobs	**Government**	**Private Sector**	**Total**
New Jobs	9.5	182.2	191.7
Jobs from Saudiization	35.1	284.4	319.5
Sub-Total	44.6	466.6	511.2
Replacement Jobs			148.7
Total			**659.9**

6.5.2 OCCUPATIONAL BALANCE

Table 6.8 presents an analysis of the balance between the expected number of job openings in different occupations and the number of Saudis who are expected to join these occupational categories. In the professional and technical occupations, where the expected number of Saudis newly entering the labor market is less than the expected number of job openings, 1,700 additional non-Saudi workers must be recruited to cover the anticipated shortage. Similarly, about 18,900 non-Saudi workers in the agriculture-related occupation category will be needed. For other categories, on the other hand, the situation is expected to be entirely different, with employment terminations expected for 161,700 non-Saudi workers in services, 115,700 in clerical occupations, 35,000 in sales, 15,900 in production, construction and related occupations, and 11,800 in administration and management.

Table 6.8

Occupational Balance between Saudi New Entrants and Job Openings during the Sixth Development Plan (thousands)

Occupational groups	Saudi New Entrants to the Labor Market	Job Openings	Balance (Supply in excess of demand)
Professional & Technical	100.3	102.0	(1.7)
Administrators & Managers	47.5	35.7	11.8
Clerical workers	159.3	43.6	115.7
Sales workers	101.8	66.8	35.0
Service workers	143.9	(17.8)	161.7
Agricultural/related workers	24.4	43.3	(18.9)
Production, construction, & related workers	82.7	66.8	15.9
TOTAL	**659.9**	**340.4**	**319.5**

( ) Figures in brackets are negative.

6.6 LABOR MARKET POLICY MEASURES

A large number of public and private institutions are involved in the education and training of the Saudi labor force. The main agencies in this field include the Ministry of Education, the Ministry of Higher Education, GOTEVT, the General Presidency of Girls' Education and the Institute of Public Administration (IPA). The Chambers of Commerce and Industry are also involved in this field through the provision of training courses.

With respect to the labor market, three government agencies are responsible for developing and implementing labor market policies, for employment regulations concerning both Saudi and non-Saudi workers, and for providing services to match job seekers with available jobs. The Ministry of Labor and Social Affairs (MOLSA) is responsible for enforcing the provisions of the Labor and Workmen Law, providing employment placement and counseling services to Saudi nationals looking for work, and regulating the employment of non-Saudi workers in the private sector. The Civil Service Bureau is responsible for recruitment and employment regulations in the civilian public sector, while the Manpower Council is responsible for developing labor market policies and coordinating the manpower-related activities of all government agencies.

The replacement of non-Saudi labor and the private sector's creation of job opportunities for Saudis are high on the list of government priorities in the Sixth Plan. The achievement of these high priority objectives will require the establishment and follow-up of an integrated combination of labor market policy measures. These can be classified into three main categories aimed at the supply side of the labor market (manpower development), the demand side (replacement of non-Saudis), and the improvement of labor market services and information.

6.6.1 SAUDI MANPOWER DEVELOPMENT POLICIES

The following policy measures will address the qualitative development of Saudi manpower through the acquisition of skills and qualifications commensurate with the needs of the national economy.

General and Higher Education: The concerned agencies will study aspects of general education that adversely affect the quality of the labor force, the elimination of illiteracy according to a specific time schedule, and making primary education mandatory for all boys and girls. The reasons for dropout at all educational stages and training centers will be studied during the Sixth Plan period, in order to establish the necessary measures for reducing this problem and its associated financial waste and to eliminate it as an indirect source of unskilled labor. This study will examine the impact of the system of incentives on this phenomenon.

Policy measures in the field of higher education will include the re-consideration of admissions policies at the universities through the establishment of specific criteria to be agreed upon by the universities, and within the framework of studying the future of post-secondary education. Furthermore, applied and practical terms will be expanded in the university curricula, so that graduates can acquire some skills prior to joining the labor market. Chapter 10 (Human Resources Development) addresses all issues and policies pertaining to education and training in a more detailed manner.

Scientific Specializations: To achieve greater consistency between the needs of the labor market and the education profile of new labor market entrants, a shift is needed in the balance between scientific

and literary specializations. More students will be encouraged to enroll in scientific specializations that are currently in demand in the labor market, such as medicine, dentistry, auxiliary medical sciences, engineering, computer science, electronics, physics and chemistry. The admissions policies of the universities will be guided by these development requirements, and university bursaries will be restricted to students in these fields of specialization. Other measures for promoting scientific specializations include the creation of new scientific specializations for girls in universities and colleges, in medical science, health management and other areas. The private sector will be encouraged to establish colleges and institutes specializing in scientific and technological disciplines.

Technical Education and Vocational Training: Technical education and vocational training plays an important role in the occupational structure needed for further development. The Kingdom's rapid development has highlighted the shortage of national technical manpower and the consequent need to recruit non-Saudi technical workers on the one hand, and the difficulty of replacing these workers with qualified Saudis on the other. Therefore, efforts will be made during the Sixth Development Plan to raise the quantity and quality of the technical education and vocational training system, so that a greater proportion of students will be motivated to pursue technical studies. At each educational stage beyond the intermediate level, the proportion of students that should be directed towards technical education will be identified by a committee to be established by the Manpower Council. New secondary technical and vocational institutes will be established to accommodate more intermediate level graduates, while competent students will be permitted to pursue their studies in technological colleges. New technological colleges and institutes will be promptly established, while the capacities of existing colleges will be expanded.

Pre-Service and In-Service Training: Graduates whose qualifications do not match existing job opportunities will be re-trained through intensive and specialized training courses. In this context, MOLSA will coordinate with the Chambers of Commerce, GOTEVT, the universities and some large establishments and companies in order to enhance the pre-service and in-service training programs for Saudis in the private sector. At the same time, the CSB will continue coordinating with training institutions that will devote a large share of their resources to the efforts required for Saudiization plans in the government sector. In addition, the role of GOTEVT's on-the-job training programs will be expanded.

6.6.2 POLICIES FOR THE REPLACEMENT OF NON-SAUDIS BY SAUDIS (SAUDIIZATION)

The success of the Saudiization process cannot be left to market forces alone, either in the public or private sectors. Therefore, a twofold policy approach for the replacement of non-Saudis by Saudis will be adopted, combining both incentives and mandatory measures, as follows:

- Financial and other support measures provided by the government to private sector establishments will be linked to commitments for the training of Saudis and the achievement of Saudiization targets.

- The concerned government agencies will implement and follow up the decisions of the Manpower Council regarding the size of the non-Saudi labor force and the positions which should be restricted to Saudi citizens. In addition, annual minimum targets for the employment of Saudis and ceilings for the number of non-Saudis will be set for private firms of various sizes.
- The recruitment of foreign labor will be restricted to skilled and semi-skilled workers, thus reducing the demand for non-productive workers in community and personal services.
- A national information campaign will be adopted aimed at encouraging job seekers to work in the private sector and identifying new areas of employment for women in conformity with the Islamic Sharia.
- Women will be encouraged to invest in and practice their professions in private clinics, translation offices or any other industrial or service project whose feasibility is proven.
- The Civil Service Bureau will continue to implement decisions and policies concerning Saudiization in the government sector, and follow-up Saudiization plans which will be implemented annually by each government ministry and agency. Particular emphasis will be placed on vital government utilities, on increasing job opportunities for women, and on finding appropriate solutions to the problems of employment and Saudiization outside the cities, together with the necessary transfer of vacant positions in the government sector.

6.6.3 LABOR MARKET INFORMATION AND SERVICES POLICIES

The following policies will be implemented in order to make the provision of employment services more responsive to market needs.

- The financial and human resources of the Deputy Ministry for Labor Affairs will be expanded to facilitate its inspection tasks, the registration of job seekers, following up on their conditions of employment, the provision of pertinent advisory services and the establishment of a national center for information about job vacancies.
- Advisory services for students regarding appropriate professional specializations will be provided.
- Further efforts will be exerted for the regular collection of data and information on the population and the labor market, while a comprehensive population and housing census will be conducted every ten years and a sample population survey every five years.
- Regular labor market information will be provided for employers, education and training institutions, individual members of the labor force and students, to enable them to choose an appropriate career.
- The present system of job classification will be standardized to conform with the Saudi classification of occupations and will be used by all agencies.

CHAPTER 7

NATURAL RESOURCES DEVELOPMENT

7. NATURAL RESOURCES DEVELOPMENT

This chapter highlights the achievements of the Fifth Development Plan in the water, energy and mineral resources sectors. The chapter also deals with the key issues to be addressed during the Sixth Plan period, the replacement of non-Saudi manpower by Saudis, economic efficiency and opportunities available for the private sector. Finally, the chapter outlines the objectives, policies and programs of these sectors in the Sixth Plan period.

7.1 WATER

7.1.1 PRESENT CONDITIONS

In the environment and climatic conditions of the Kingdom, water is the most important of all natural resources and the scarcity of potable water is one of the main constraints on socio-economic development. Under these conditions, the development of water resources is determined by a complex pattern of demand and supply relationships. On the one hand, population growth, rising living standards and economic development in general determine the volume of water demand; on the other hand, the availability, quality and cost of water influence both the potential for growth and the nature and scope of long term economic development. Water planning is, therefore, an integral part of a comprehensive planning process.

Water resources in the Kingdom can be divided into four categories: surface water, ground water, desalinated sea water, and reclaimed waste water. Surface water occurs mainly in the west and south-west of the Kingdom, where periodic rainfall is sufficient to produce run-off. There are two types of ground water aquifer in the Kingdom: renewable aquifers, where ground water is stored in the sediments of valleys and the cracked rocks below them, and non-renewable aquifers, where ground water is stored in the sedimentary rock areas in 16 principal and secondary aquifers which receive only limited re-charge. According to 1414/15 estimates, surface and shallow ground water supply only 13.8 percent of the Kingdom's total needs, while non-renewable ground water supplies around 81.5 percent of the Kingdom's total water needs. Desalinated sea water has reached an advanced stage of development in the Kingdom, which now has the largest desalination plants in the world. This source, however, supplies only 3.9 percent of current water needs. Finally, reclaimed waste water is still in its early stages of development and supplies only 0.8 percent of current needs.

The following developments were undertaken in the water sector during the Fifth Plan period:

- The Kingdom's desalination plants continued to operate at optimal production capacity, producing about 1.9 million cubic meters per day of desalinated sea water. Construction started on four new plants that will add another 1 million cubic meters per day to existing capacity.

- In the area of natural water resources development, three new dams were completed, bringing the total number of dams in the Kingdom to 183, with a total holding capacity of 450 million cubic meters. Other dams with a holding capacity of 325 million cubic meters, including the Custodian of the Two Holy Mosques dam at Wadi Bisha, are also currently under construction.
- Some of the existing water legislation and regulations were reviewed and updated, and a resolution was issued prohibiting water drilling in selected areas of the Kingdom which already suffer from the depletion of non-renewable ground water.
- Many medium-sized water projects have been completed, such as those at Afif and Ad Dawadmi, Sudair Al Kabir, Nafi and Dhurma/Al Mazahimiyah.
- Water continued to be provided to all consuming sectors from available resources.

7.1.2 KEY ISSUES

While the achievements described above confirm the substantial progress made in satisfying the water needs of the Kingdom, the continuing rapid increase in water consumption raises some key policy issues for the further development of the water sector in the Sixth Plan period and beyond:

- The steady increase in the consumption of non-renewable ground water has further worsened the national water balance and has reduced the quality of remaining reserves in some areas;
- Agriculture continues to consume almost 90 percent of water from all sources, and the expansion in grain production has been heavily dependent on non-renewable ground water in most areas;
- The hydrological and hydrogeological studies needed to support and update the water data base have still not been implemented, while the National Water Plan has still not been issued;
- There has been a serious depletion in the natural water springs used by the Al Hasa Irrigation and Drainage Authority;
- The shortage of national manpower trained in modern water technologies still continues.

7.1.3 SAUDIIZATION

During the Fifth Plan, the water sector continued its program of Saudi manpower development and reinforced the process of Saudiization in coordination with other related agencies. As a result, the share of Saudis in occupied jobs approved under Chapter 1 of the MOAW and SWCC budgets increased from 94 percent at the beginning of the Fifth Plan to 96 percent by the end of the Plan, and is expected to reach 99 percent by the end of the Sixth Plan.

7.1.4 ECONOMIC EFFICIENCY

The government's policies in the water sector aim to raise productivity through the continuous development of manpower, the establishment of necessary targets for the economic utilization of water, the conservation and control of water resources, and the adoption of effective techniques and advanced technologies for the efficient distribution of water to the various categories of end user.

Labor productivity in the desalinated water sub-sector improved in the Fifth Plan period, as output per employee increased from 3,512 cubic meters per day in 1409/10 to 3,696 cubic meters per day in 1414/15, an average annual increase of one percent. The production of desalinated water was also made more efficient in the Fifth Plan period through the substitution of fuels from high-cost diesel to natural gas in the East coast plants.

Other measures for raising economic efficiency and attaining the optimal utilization of water resources in the Sixth Plan include the completion of the National Water Plan and the implementation of water consumption rationalization measures, such as the adoption of a new tariff system for water consumption, efficient maintenance to reduce water loss, the expansion of sewerage networks and the re-use of reclaimed waste water for agricultural purposes.

7.1.5 PRIVATE SECTOR OPPORTUNITIES

The government agencies responsible for managing and planning water affairs performed their tasks successfully in the Fifth Plan period, and adopted a policy of giving the private sector opportunities to participate in the development process through:

- undertaking many of the economic activities directly financed by the government, such as water supplies and services projects and the construction of desalination plants;
- operating and maintaining the existing water facilities currently operated by the government;
- providing support and technical advisory services that enable the private sector to operate more effectively and flexibly.

During the Fifth Plan period, the private sector implemented many projects financed by the state budget, such as:

First: Water Services and Supplies Projects (MOAW - Water Affairs):

- drilling of 245 wells for drinking water and the construction of three reservoir dams;
- implementing water supply projects in large and medium-sized cities and towns, as well as in 107 villages and hamlets in five regions of the Kingdom;

- supplying and installing 254 pumping units in wells;
- providing water by tankers an average of 430,000 times per year, as well as the leasing of 50 indigenous projects;
- operation and maintenance of 183 dams with a total holding capacity of 450 million cubic meters of water;
- operation and maintenance of 1,010 drinking water projects in villages and hamlets;
- operation of the program to re-use reclaimed waste water for agricultural purposes in Riyadh area, with a capacity of 300,000 cubic meters per day;
- operation and maintenance of 9 purification plants.

The total cost of these projects during the Fifth Plan period amounted to about SR 3,800 million.

Second: Desalination Plants and related facilities construction (SWCC) :

- starting to implement four new plants with a capacity of 1 million cubic meters per day.

The total cost of these projects was estimated at SR 15,300 million during the Fifth Plan period.

In the Sixth Plan, the private sector will have the opportunity to implement the water projects approved within the Water Development, Services and Supplies program, and is expected to play an important role in the construction of desalination plants.

7.1.6 DEVELOPMENT STRATEGY

The overall development strategy of the water sector will be implemented through the following objectives, policies and programs.

7.1.6.1 Objectives

The main objectives for the development of the water sector include the following:

- To provide sufficient quantities of good quality water to meet the needs of the population, the producing sectors and other public services in a more efficient manner;
- To conserve water resources -- particularly non-renewable ground water -- and to develop these resources to meet current and future demand;
- To improve the management, operation and maintenance of operating water facilities, such as desalination plants, and to reduce their costs as much as possible;

- To increase the efficiency and utilization of non-conventional water resources, such as desalinated water, treated waste water and agricultural drainage water, so as to maintain the natural water resources in the Kingdom;
- To raise labor productivity in the water sector and to train Saudi manpower to adapt to the continuous development in water technologies.

7.1.6.2 Policies

The following policies will be adopted in order to achieve these objectives:

- Water should be considered as the most basic and valuable resource, and as an important factor in measuring the economic efficiency of public and private sector projects.
- The water studies program will be resumed to update the hydrological information on water aquifers, and the water potential studies for some areas.
- The National Water Plan will be issued as soon as possible, based on the review and updating of previous studies on available water resources, and sectoral demand patterns will be determined so that appropriate water policies can be formulated.
- Rules will be established for the operation and maintenance of existing water resources in order to preserve their productive efficiency.
- The implementation of water supply projects will be continued, while giving priority to the population's need for potable water.
- Expanded use will be made of reclaimed waste water for agricultural and recreational purposes, and its potential use for industrial purposes will be studied.
- Suitable training programs will be prepared for the manpower working in the sector.
- Regulations and legislation with respect to the organization of water consumption for all purposes and on an economic basis will continue to be issued, in order to promote the conservation of water resources.
- A revenue collection program will be developed according to a system of water consumption tariffs for various consumer categories to provide financial resources that are sufficient to cover the operating expenses of water production and distribution.

7.1.6.3 Main Programs

The main programs for the water sector will be implemented by three executive agencies during the Sixth Development Plan, as follows:

The **MOAW - Water Affairs Department** has three major programs:

- *Water Resources Development :* includes the hydrological and hydrogeological studies, the re-use of waste water, digging wells, constructing dams, and preparing the National Water Plan.
- *Potable Water Supply :* aims at establishing potable water networks and projects to meet the basic water needs of the population in areas that have no water departments and that still suffer from a shortage of water supplies.
- *Operation and Maintenance :* of potable water networks, projects and facilities, and supplying potable water by tanker to rural and remote areas.

The **Saline Water Conversion Corporation (SWCC)** has two main programs : the establishment of new desalination plants, and the operation and maintenance of existing plants.

The **Al Has: 'rrigation and Drainage Authority** programs include:

- *Water . esources Development, Research and Studies :* aimed at providing accurate data and information about water; conducting hydrological studies to define the optimal use of water resources; rationalizing the use of irrigation water; identifying the water requirements of crops; and digging wells to meet additional water needs.
- *Operation and Maintenance* of existing water facilities.

The main programs of the **Ministry of Municipal and Rural Affairs (MOMRA)** will include the further expansion, operation and maintenance of the water network, completing the installation of house connections and the waste water treatment system.

7.1.7 Sixth Development Plan Targets

The main targets in the water sector in the Sixth Plan period are the reduction in total water consumption from 18.2 billion cubic meters in 1414/15 to 17.5 billion cubic meters in 1419/20, and a decline in the use of non-renewable ground water from about 14.8 billion cubic meters to 13 billion cubic meters over the same period. These targets are to be achieved by reducing the rate of water consumption in agriculture at an average annual rate of 2.2 percent and achieving balanced consumption rates for other purposes.

The targeted national water balance in the Sixth Plan period is shown in Table 7.1.

Table 7.1

Targeted National Water Balance in the Sixth Development Plan
(million cubic meters per year)

	1414/15	1419/20	Average annual rate of growth %
Water Demand			
Municipal and Industrial	1,800	2,800	9.2
Agriculture	16,400	14,700	(2.2) ★
Total	18,200	17,500	(0.8) ★
Available Water Resources			
Renewable water (surface and shallow ground water)	2,500	3,000	3.7
Non-renewable ground water	14,836	13,040	(2.6) ★
Desalinated Sea Water	714	1,150	10.0
Reclaimed Waste Water	150	310	15.6
Total	18,200	17,500	(0.8) ★

★ negative growth rate

7.2 ENERGY

7.2.1 PRESENT CONDITIONS

The energy sector occupies a central position in the Saudi economy since the Kingdom is a major producer and exporter of oil and possesses the largest proven oil reserves in the world. It is a main determinant of the Kingdom's trade policy, which endeavors to maximize oil revenues while defending its share of the world oil market. Despite the progress made in reducing the dependence on crude oil exports as the main source of national income and in diversifying the national economy, oil revenues will continue to be a major source of income for years to come. As a result, the energy sector will remain as the primary driving force of economic development.

Owing to concerns about potential cuts in oil supplies from the region, the world oil markets were in a state of instability both prior to and during the Gulf crisis. In response, the Kingdom and other oil producers with available capacity quickly raised their production levels to replenish world oil supplies and thereby restore market stability. This action conformed to the Kingdom's declared strategy to maintain stability in the world oil markets.

The Kingdom's crude oil production reached about 8 million barrels per day (mbd) in 1413/14, or 13.4 percent of world production and 32.6 percent of OPEC production (Table 7.2). Oil and gas exploration programs undertaken during the Fifth Plan contributed a net addition of 3.9 billion barrels to the Kingdom's crude oil reserves, which reached 261.4 billion barrels in 1413/14. Natural gas reserves rose by 160 billion cubic meters over the same period.

These additions to reserves came from both existing fields and new fields discovered in the Central region south of Riyadh city. These new discoveries are especially significant, since their crude oil is the lightest type ever discovered in the Kingdom and has a very low sulfur content. Furthermore, hydrocarbon reserves have been discovered in the Red Sea coastal plain at Jizan, Al Madinah and Al Wajh, as well as in the north-west region at Kahf near Jawf. The use of the latest exploration and data analysis techniques made an important contribution to these positive outcomes.

In the refining sector, primary distillation capacity was maintained at 1.57 mbd, while the production of refined products increased at an average annual rate of 3 percent in the first four years of the Fifth Plan (Table 7.3).

Total domestic consumption of primary energy rose at an average annual rate of 7.8 percent, from 412 million barrels of crude oil equivalent in 1409/10 to 557.4 million barrels in 1413/14, with the consumption of refined products growing at 6.8 percent, crude oil for direct burning at 15 percent and natural gas at 7.2 percent (Table 7.3).

A number of significant developments were implemented in the Fifth Plan period, the most important of which were:

- the consolidation within Saudi ARAMCO of all refining, distribution and marketing activities, inside and outside the Kingdom; this step aims at achieving an integrated petroleum industry and will provide greater flexibility in dealing with developments in local and international oil markets, and for further improvements in efficiency and productivity.
- the addition of substantial new oil transport and storage capacities; the number of oil tankers owned by ARAMCO increased from 4 to 23, with a capacity of 52 million barrels in 1413/14. The capacity of the East-West crude oil pipeline was also increased from 3.2 mbd to 5 mbd during the Fifth Plan period, while the export capacity of the crude oil terminal at Yanbu was raised by 60 percent, to reach 4.2 mbd.
- the establishment of joint venture refining and marketing operations with two companies: Sang Yang in South Korea and Petron in the Philippines; two international marketing companies were also established in the U.K. and Japan.

These steps have been taken in the context of policies that aim to maintain and extend the role of Saudi oil in the world market.

Table 7.2

Crude Oil and Natural Gas Indicators in the Fifth Plan

	1409/10	1413/14	Average Annual Growth 1409/10 - 1413/14 %
Crude Oil Production (mbd)	5.06	8.05	12.3
Cumulative crude oil Production (billion barrels)	57.2	68.5	4.6
Crude oil reserves (billion barrels)	257.5	261.4	0.4
Natural gas reserves (billion cubic meters)	5,106	5,265.8	0.8
Kingdom's share of crude oil production (%)			
— OPEC production	23.2	32.6	8.9
— World production	8.3	13.4	12.7

Table 7.3

Refining Capacity and Domestic Energy Consumption in the Fifth Plan

	1409/10	1413/14	Average Annual Growth 1409/10 - 1413/14 %
Refining capacity (mbd)	1.76	1.57	(2.8)
Refined products production (million barrels)	487.6	548.8	3.0
Refining capacity utilization (%)	76.3	96.1	5.9
Domestic consumption of primary energy (million barrels of crude oil equivalent)	412.0	557.4	7.8
of which:			
- Refined products	215.4	280.1	6.8
- Crude oil for direct consumption	40.6	71.1	15.0
- Natural gas	156.0	206.2	7.2

( ) negative value

7.2.2 KEY ISSUES

The energy sector faces the following key issues :

Pattern of Domestic Demand for Oil

The pattern of domestic energy consumption is inhibiting the maximization of potential economic returns from the production and marketing of crude oil and its products, as well as the optimal operation of refineries. The use of crude oil and diesel as fuel for electric power generation and desalination plants, instead of lower quality and abundant heavy fuel oils or natural gas, puts unnecessary pressure on domestic supplies of higher value diesel and reduces its export potential.

Domestic Pricing Levels

Low prices for oil products and crude oil in the domestic market have led to rapidly rising consumption, thus hindering rationalization of such consumption and the conservation of national resources, while imposing a high opportunity cost in relation to export prices. These low prices reflect a high level of indirect subsidies for oil products in the domestic market, which have reached as high as 77 percent in the case of diesel, 76 percent for crude oil and 41 percent for gasoline in 1413/14 (1993).

Financing Oil Sector Investments

Expanding and maintaining oil production capacity require substantial amounts of investment. The Public Investment Fund (PIF) has played a major role in providing the required finance to the sector. Saudi ARAMCO has also financed some expansions in the past through its own resources. However, the required investments are substantial and entail reviewing all potential sources of finance, including local sources, and utilizing such sources in a manner that achieves the most efficient expansion of investment.

Redefining the Role of Petromin

Following the restructuring of the Saudi oil industry and the consolidation of refining, distribution and marketing activities within ARAMCO, and the re-organization of the lube oil and mining activities, it has become necessary to review the future role of Petromin.

7.2.3 SAUDIIZATION

All operating companies in the petroleum sector, and most prominently ARAMCO, play a leading role in the education and training of the work force, with the twin objectives of improving their productivity and effectiveness, and advancing the process of replacing non-Saudis with Saudi nationals

in all technical and administrative positions. In 1412/13, Saudis constituted 73 percent of ARAMCO's work force of 58,301 and 94 percent of the 738 employees of the Ministry of Petroleum and Mineral Resources.

It is expected that the process of re-structuring in the sector will further advance the Saudiization process during the Sixth Plan period and, in the Ministry of Petroleum and Mineral Resources, Saudis are expected to make up 96 percent of the work force by 1419/20.

7.2.4 ECONOMIC EFFICIENCY

Enhancing economic efficiency in the energy sector is one of the principal motives behind its recent restructuring. Building an integrated petroleum industry and consolidating lube oil activities are not objectives in themselves; rather, they are ways of enhancing economic efficiency and managerial effectiveness through the rational use of resources and an effective response to the requirements of the domestic and international petroleum markets. The restructuring process will be completed in the Sixth Plan period by consolidating the steps already taken and completing those currently being implemented.

7.2.5 PRIVATE SECTOR OPPORTUNITIES

The private sector is a primary partner in the various activities of the energy sector. It undertakes all support activities and provides the equipment, systems and materials used by the oil, gas and refining industries. Furthermore, the private sector participates directly in the distribution and retailing of petroleum products and in the manufacturing and marketing of lube oils. The complementary role of the private sector in the energy sector is expected to expand in the Sixth Plan period. Programs will be implemented to inform the private sector of the energy companies' various service needs. In addition, local banks will be encouraged to extend loans to the private sector for investment in support services and other activities associated with the petroleum industry.

7.2.6 DEVELOPMENT STRATEGY

The development strategy of the energy sector will be implemented through the following general objectives, policies and programs during the Sixth Development Plan:

7.2.6.1 Objectives

- to enhance the role of oil in world energy markets ;
- to achieve the optimal use of energy in the domestic market ;
- to ensure self-sufficiency in basic oils and improve their export potential, while producing a greater number of high quality lubricants and greases ;

- to encourage more private sector participation in the petroleum industries ;
- to promote the development of qualified Saudi manpower ;
- to employ appropriate technologies for protecting the environment from possible pollution in the production, transportation, storage and refining stages of petroleum products ;
- to conserve water resources and rationalize its use in the various production processes.

7.2.6.2 Policies

The objectives of the energy sector will be achieved through the following policies :

- Support the pricing of crude oil and oil products, both domestically and internationally, with the aim of achieving maximum economic returns and thereby enhancing national income, while preserving the share of oil in the world energy market.
- The Kingdom will make all necessary efforts in its international relations to oppose the imposition of excessive and discriminatory taxes on oil and oil products.
- Support will be given to scientific and technological activities aimed at limiting the impact on the natural environment of energy use in general, and oil in particular.
- The process of restructuring the Saudi oil industry will be completed, in order to achieve a higher level of integration and improved performance.
- The rational consumption of energy will be encouraged, by directing consumers of internationally high-priced crude oil and refined products towards low-priced products.
- The Kingdom will participate in the ownership of oil refineries and marketing outlets in major markets, constructing or upgrading refineries both inside and outside the Kingdom.
- The development of a domestic pipeline network to transport and distribute oil products will be studied with a view to implementing what is practical and economical.
- A study will be undertaken to review the upgrading of domestic refineries to produce light and clean products.
- The production capacity of basic oils in the Kingdom will be raised, with a view to increasing Petromin's share in local and international markets.
- The Saudiization program will be continued.
- The private sector will be acquainted with the support activity needs of the oil companies, while local banks will be encouraged to grant loans and facilities to the private sector for investment in such supporting activities.
- Local, regional and binding international environmental codes will be applied, and environmental awareness promoted among workers in the oil sector.

7.2.7 GROWTH TARGETS IN THE SIXTH PLAN

Local consumption of primary energy is expected to grow at an average annual rate of 5.3 percent during the Sixth Plan, from 1.55 mbd (of crude oil equivalent) in 1414/15 to 2.0 mbd in 1419/20. Refined products are expected to account for 42.1 percent of total consumption, crude oil for direct burning 14.2 percent, natural gas 30.7 percent and liquid gas for 13.0 percent in 1419/20 (Table 7.4).

Other major targets for the energy sector in the Sixth Plan also include :

- to increase the production capacity of basic lubricating oils from 1.8 million barrels in 1414/15 to 3.8 million barrels in 1419/20;

Table 7.4

Forecast Indicators for the Energy Sector in the Sixth Plan

	1414/15	1419/20	Average Annual Growth Rate (%) 1414/15 - 1419/20
Local consumption of primary energy (thousand barrels of oil equivalent per day)	1,548.0	2,007.0	5.3
Percentage share in total consumption (%):			
- Refined products★	50.5	42.1	(3.6)
- Crude oil for direct burning	12.5	14.2	2.5
- Natural gas	30.3	30.7	0.3
- Natural gas liquids	6.7	13.0	14.3

★ including lubricating oils ;
( ) negative value

7.3 MINERAL RESOURCES

7.3.1 PRESENT CONDITIONS

The diversification of the economy has been a consistent objective of the Kingdom's development plans and in this regard the development and utilization of the country's extensive mineral wealth has an important role to play. The state has made great efforts to ensure the appropriate development of mineral resources and adequate levels of investment in the mining industry.

In the course of previous development plans, exploration efforts by the government led to the discovery of many mineral deposits with promising long term economic potential for the establishment of a substantial and advanced mining industry (Figure 7.1). Thus, the number of active mines has been increasing and the mining sector's contribution to GDP has grown accordingly.

A thriving mining industry has an important role to play in the diversification of the Kingdom's economy and it can make a positive contribution to the balance of payments. At the same time, the output from the mining industry has important linkage effects with other parts of the domestic economy, particularly with the construction sector, and can stimulate the establishment and expansion of new intermediate and manufacturing industries. Finally, it can play an important role in generating employment and training opportunities and in supporting the economic development of the regions.

In the Fifth Plan period, the **Deputy Ministry for Mineral Resources** ★ evaluated some of the economically promising mining deposits. Several studies were completed, including the feasibility study for the phosphate deposits in Al Jalamid, the pre-feasibility study for bauxite (for aluminum) in Az Zubayrah, the pre-feasibility study for zinc in Al Khunayqiyah, and a feasibility study to improve the quality of iron ore in Wadi Al Sawawin. Four other pre-feasibility studies for industrial mineral deposits were also undertaken.

Within the framework of geological services, the Deputy Minstry for Mineral Resources extended its geological survey of the Kingdom, focusing in recent years on the sedimentary cover-rocks and continued to provide geological information for the benefit of society as a whole. A major achievement was the publication of the Atlas of Industrial Minerals and Mineral Resources of Saudi Arabia. Direct services to the community included the issue of a geo-technical map of Riyadh city, the installation and operation of eight advanced seismic stations for earthquake observation around Al Madinah, and the provision of ongoing advice to communities about the risks from geo-hazards.

To identify the direction of future exploration and geological survey work, 5,000 documents have been reviewed and evaluated, 33 technical reports have been issued on the present conditions of all mineral deposits in the Kingdom, and recommendations have been made relating to future activities. The sector has been further supported through the activities of the Deputy Ministry for Minesal Resources Mining Investment Department, which is currently administering 16 mining leases (issued by Royal Decree), 5 small mining licenses, 5 exploration licenses and 22 reconnaissance permits.

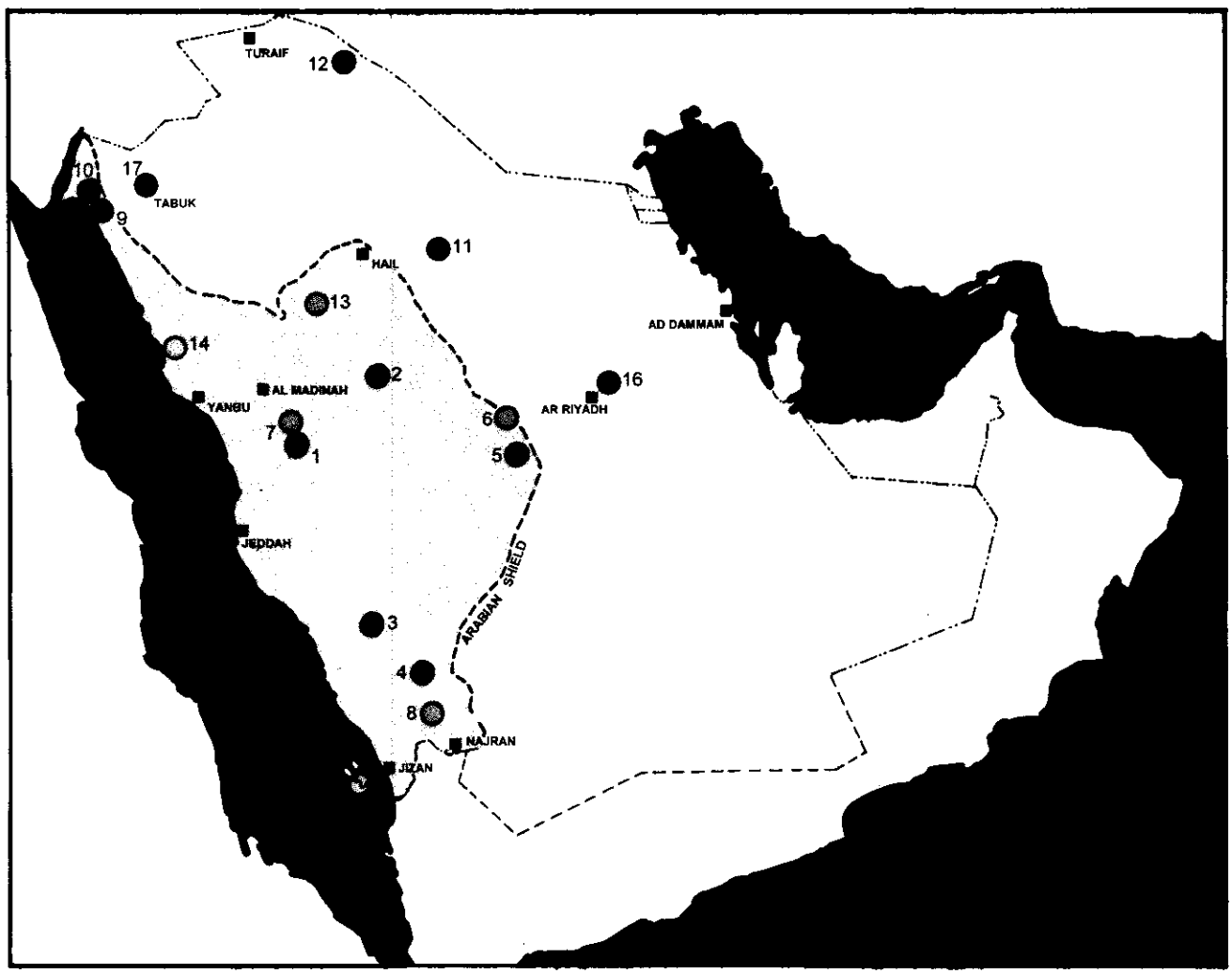
The mining activities of Petromin developed considerably during the Fifth Plan. In 1413/14, the ore extracted from Mahd ad Dhahab mine (a 100% Petromin project) reached 189,353 tons, which exceeded design capacity by almost 50 percent. Net gold production, all of which is sold to SAMA, amounted to almost 670,000 ounces between 1408/09 and 1413/14.

The first gold bar from Sukhaybarat mine (where Petromin holds a 50 percent share) was poured in 1411/12, while the gold produced at this mine amounted to 81,868 ounces in 1413/14. The exploration activities near the mines were encouraging, as they will lead to an increase of exploitable

★ Within the ministry of petroleum and mineral resources

Figure (7-1)

MAJOR MINERAL DEPOSITS



Siliça

16- Al Butayn
17- Tabuk

Magnesite

13- Zarghat

Potasium

14- Ras Karkoma
15- Farasan Island

Aluminum

11- Az Zubayrah

Phosphate

12- Al Jalamid

Rare Earth Elements

9-Al Ghurayah

Iron

10- Wadi Al Sawawin

Copper & Zinc

6-Al Khunayqiyah
7- Jebal Sayid
8- Al Masani

Gold & Silver

1- Mahd Ad Dahab
2- Sukhaybarah
3- Al Hajar
4- Hamdah
5- Al Amar

ore reserves or even to the development of new mines. After completion of the positive feasibility studies for the Al Amar, Al Hajar and Hamdhah gold projects, as well as the Zarghat magnesite deposit, (where Petromin will hold the exploration licenses) more mines will be developed and brought to production during the Sixth Plan.

7.3.2 KEY ISSUES

Despite the sector's successes, a number of key issues must be addressed if the goals of developing a sound mining industry are to be met.

Limited Contribution by the Private Sector to Mining Development

With the exception of its small mining licenses, quarrying concessions and building materials licenses, the private sector's initiatives and contributions to the development of mineral resources have been limited. Apart from Petromin's mining of gold and precious metals at Mahd ad Dhahab and Sukhaybarah mines, only one major concession has been issued to a private sector company to exploit and utilize base metals (copper and zinc) in the Al Masani area. The main reasons preventing the private sector engaging in mining activities are : the long procedures involved in obtaining mining concessions, the fact that many promising mining deposits are often located in remote areas, and inadequate financial support on borrowings by investors because mining projects are viewed as long term investment projects.

If the private sector is to play a more active role in minerals exploration and mining activities in the future, a more positive investment climate must be created for the benefit of investors. This would include the provision of basic infrastructure in mining areas, the re-consideration of incentives available to mining projects (including those related to income tax regulations), an extension of the customs exemption period, the use of reserves depletion allowances and the carrying forward in financial accounts of losses in accordance with international practice in this field.

Lack of Qualified Saudi Manpower in Mining Exploration

The sector still suffers from a lack of sufficient national expertise in the fields of geological surveys, exploration and mining investment. This has led to a continued dependence on foreign experts and contracts with specialized missions.

Shortage of Infrastructure in Potential Mining Areas

Mining prospects are often situated in remote areas with sparse populations and are therefore burdened by a lack of basic infrastructure such as water, electricity, telecommunications and roads. In recognition of the importance of adequate infrastructure for mining development, the government will increase its efforts to coordinate related agencies when considering priorities for infrastructure projects in mining areas.

7.3.3 SAUDIIZATION

The Deputy Ministry for Mineral Resources Saudiization program has been fully achieved (100 per cent) during the Fifth Plan period for all of the 542 occupied jobs authorized under Chapter 1 expenditure. All 56 job vacancies are expected to be filled by Saudis during the Sixth Development Plan.

7.3.4 ECONOMIC EFFICIENCY

Considering the enormous size of the country, and the limited amount of exploration drilling that has been undertaken, the efficiency of the Saudi mining industry is evident by the high rate of discovery of mineral prospects and deposits. This can be attributed to considerable improvements over the years in the volume and quality of geologic information provided by the Deputy Ministry for Mineral Resources in the form of reports, studies and maps. It is important that this trend be continued so that productivity and efficiency levels in the Saudi mining industry are comparable to best international standards. In the Sixth Plan greater efforts will be made to improve administrative efficiency in this sector through the implementation of extensive training programs. The objective will be to raise the quality of administrative services in line with the needs of the rapidly growing public and private mining activities.

In the case of Petromin's producing gold mines, efficiency has been raised by reducing production costs by about 24 percent in the Mahd ad Dhahab project and 32 percent in the Sukhaybarat project. If this trend can be continued in the future, higher profitability can be expected, although more intensive exploration activities in the license areas will have to be carried out during the Sixth Plan period.

7.3.5 PRIVATE SECTOR OPPORTUNITIES

The role of the government in the mining area is to establish the regulatory and administrative framework for the development and exploitation of mineral resources, in addition to providing a range of geologic services throughout the Kingdom. The Deputy Ministry for Mineral Resources is responsible for exploring for metallic and non-metallic mineral deposits, for establishing a substantial geologic data base, and for conducting a geological survey in all parts of the Kingdom in order to bring the mineral deposits to an economically feasible stage in preparation for exploitation in the near or longer term future.

Currently, the mining of precious metals in the Kingdom is conducted almost exclusively by Petromin, with private sector participation up to the end of the Fifth Plan limited to a single successful joint venture between Petromin and a Swedish company. In the longer term, when the profitability of Petromin's precious metals activities becomes more firmly established, shares in Petromin's minerals company will be offered to private investors.

In the field of base metals, a mining lease has been granted to a national company for the Al Masani copper and zinc deposits. At the same time, new investment opportunities are continuously being created by the completion of feasibility studies for a number of base metal deposits and industrial minerals, followed by the issuing of tender invitations to national and international mining companies.

The private sector plays a major role in the development of other mineral resources, such as construction materials, industrial minerals, and ornamental stones for national consumption. By the end of the Fifth Plan, 548 permits had been issued to the private sector to extract sand, gravel, clay, gypsum, granite, white marble and other materials used largely (but not exclusively) in the construction industry.

The mining of these materials does not normally require advanced technology or major capital inputs and the economic return in such industries is rather quick. In the Sixth Plan, the Deputy Ministry for Mineral Resources Investment Promotion Department will become increasingly active in supporting private sector development activities in this field, in order to stimulate the most effective use of the Kingdom's mineral resources in compliance with existing laws and regulations.

7.3.6 DEVELOPMENT STRATEGY

The development strategy for the mining sector in the Sixth Plan will be implemented through the following objectives, policies and programs.

7.3.6.1 Objectives

The major development objectives for the mining sector in the Sixth Plan are :

- to support regional development through the establishment of a substantial mining industry ;
- to encourage the private sector to invest in the development and economic exploitation of mineral deposits ;
- to provide domestic alternatives to imported raw materials where economically feasible ;
- to develop qualified Saudi manpower capable of establishing a firm foundation for mining activities in the Kingdom.

7.3.6.2 Policies

The development objectives and the necessary support for a national mining industry can be achieved through the following policies during the Sixth Plan :

- Studies will be conducted to evaluate promising economic deposits.
- Exploration for all mineral deposits will be continued and geological survey methods developed in support of inland and off-shore exploration activities.

- The geologic and mining data base will be continuously updated.
- Geological services will be provided for the benefit of society, while geologic information and technical consultations will be supplied to relevant agencies.
- New investment opportunities will be identified for both existing and potential national, joint venture and international private mining companies.
- Investors will be informed periodically of the results of mining studies and encouraged to explore for and invest in mineral deposits.
- Technical and administrative capabilities of the sector will be continuously developed through training and Saudiization, in order to meet the sector's qualified manpower needs and to increase efficiency.

7.3.6.3 Programs

The main programs to be undertaken by the Deputy Ministry for Mineral Resources during the Sixth Plan are as follows :

Exploration and Surveys : This program will continue the data collection and exploration for mineral materials of all kinds, with particular emphasis on the use of modern technology. Geologic information in the form of reports, new and updated maps will be prepared, and technical consultations and advice offered to concerned agencies. Geologic risks will be identified and evaluated in those regions vulnerable to earthquakes and other geo-hazards.

Mining Development and Investments : Under this program, economically promising minerals prospects will be further evaluated. Private and public sector companies will be encouraged to invest in the exploration and exploitation of economically feasible mineral deposits. Executive procedures and mining regulations to control and administer mining activities in the Kingdom will be reviewed and further developed.

Saudi Manpower Development : This program will aim to increase the employment of Saudis in the mining industry, to develop Saudi technical and administrative capabilities in response to the sector's needs, and to raise productivity through ongoing training activities.

7.3.7 SIXTH DEVELOPMENT PLAN TARGETS

As new mines at Al Amar, Al Hajar and Hamdhah and the magnesite deposit at Zharghat come into production, and the efficiency of existing mines is increased, value added in the precious metals sector is expected to grow by up to 40 percent over the Sixth Plan period. The Kingdom's first base

metal mine is scheduled to start production by the end of the plan period and the positive outcome of the tendering process for deposits at the end of the Fifth Plan will give a major boost to growth in this sub-sector. In the quarrying sector of the mining industry, the growth will increase due to the rising demand for locally produced construction materials and the ongoing trend towards import substitution by national mineral products.

The mining sector is expected to grow faster than any other sector in the Sixth Plan period, with value added growing in real terms at an average annual rate of 9 percent.

CHAPTER 8

PRODUCING SECTORS

8. PRODUCING SECTORS

This chapter highlights the achievements of the Fifth Development Plan in the agriculture, industry, electricity and construction sectors. It also deals with key issues that should be addressed during the Sixth Plan period, and the topics of Saudiization, economic efficiency and private sector opportunities. Finally, it shows the objectives, policies and programs of these sectors in the Sixth Development Plan.

8.1 AGRICULTURE

8.1.1 PRESENT CONDITIONS

It has long been recognized that the importance of agriculture to the Kingdom extends beyond its contribution to national output alone. Apart from the strategic significance of increasing domestic food production for a growing population, the planned development of agriculture fulfills other important roles. It contributes to the diversification of the economy and a reduced dependence on oil as the main source of national income. It stimulates growth and employment in other economic sectors, through its demand for farm inputs and other agricultural services and through its supply of agricultural raw materials for the food industry. It raises the incomes and welfare of citizens in rural areas, thereby reducing migration to urban areas and contributing to balanced regional development. Finally, it plays an important role in maintaining the ecological balance through combating the process of desertification.

The expansion of agricultural production over the past fifteen years has been one of the most remarkable successes of the overall development effort in the Kingdom. The private sector responded positively to the range of support measures introduced by the government. Agriculture will continue to play an important role in the diversification of the economy, through expanding economic linkages with other sectors, which is an important element in the Kingdom's overall development strategy. Local manufacturing of fertilizers, pesticides and agricultural implements represents the backward linkages to the agriculture sector, while forward linkages comprise such activities as meat processing, the manufacture of dairy products, the preservation and packing of fruits and vegetables, and the manufacture of oils and fats.

Value added in agriculture rose from SR 22.7 billion in 1409/10 to SR 31.9 billion in 1414/15 (in current prices), while its average annual growth reached 3.1 percent in constant price terms, driven principally by improvements in labor productivity, which grew at an average annual rate of about 2 percent. By the end of the Fifth Plan period, agriculture's share of non-oil GDP had reached 10.9 percent. As indicated in Table 8.1, production of most commodity groups during the Fifth Plan period exceeded both population growth and their Plan targets, with relatively high growth rates achieved in

red meat, eggs, milk and fruits. Although the average annual growth rates of white meat, vegetables and fish production were below their Fifth Plan targets, they are considered as prudent nevertheless. The average annual decline in wheat production, however, at 3.8 percent, did not reach its targeted rate of 7 percent (Table 8.1).

Table 8.1

Production of Basic Food Items in the Fifth Plan

	1409/1410 '000 tons	1414/1415 '000 tons	Target Annual Growth Rate (%)	Actual Annual Growth Rate (%)
Wheat	3,400	2,800	(7.0)	(3.8)
Red Meat	133	195	3.9	8.0
White Meat	276	295	6.0	1.3
Eggs	113	134	1.0	3.5
Milk	475	604	4.0	4.9
Vegetables	1,900	2,500	6.0	5.6
Fruits	848	1,088	4.4	5.1
Fish	52	62	8.0	3.6

( ) negative growth rate

Other factors contributing to the success of agriculture include the rapid development of basic infrastructure in different parts of the Kingdom (including agricultural roads).

8.1.2 KEY ISSUES

Although impressive progress has been made in agricultural production, a number of challenging issues have emerged which, if not addressed, could threaten the sustainable development of agriculture in the medium to long term. Some of these issues have been identified in previous development plans, although the priorities attached to each issue and the associated policy measures needed to address them may change from one plan period to the next.

Gap between Demand for Animal Products and Local Natural Resource Endowments

The growing demand for animal products, as a result of rising per capita incomes and changing consumer tastes, is reflected in average annual imports of SR 6.5 billion during the Fifth Plan. Not only has this growth in the demand for animal products exceeded the rate of growth in population, but this trend is expected to continue into the future also.

Only 8 percent of the Kingdom's 168.5 million hectares of natural grazing land (75 percent of the total land area of the Kingdom) can be classified as top grade, while output from grazing land is constrained by the predominantly dry environment. Total annual fodder production is estimated at around 16 million tons, enough to meet the needs of 1.7 million animal units (one animal unit is equivalent to five goats or sheep, or one camel). The number of animal units is estimated at 2.5 million in 1414/1415, whose feed requirements already exceed the fodder production capacity of the domestic resource base, so that around 5 million tons of barley had to be imported annually by the end of the Fifth Plan period. As the number of animal units in the Kingdom is expected to reach about 3.2 million by the end of the Sixth Plan (1419/1420), a widening gap will emerge between domestic production and consumption of animal feed. However, if the Kingdom were to attempt to produce barley in sufficient quantities to meet this growing demand, about 1 million hectares of barley (around 70 percent of the total cropped area) would be needed. Such an outcome is not compatible with the Kingdom's resources potential, because of the scarcity of water and the imbalance this would cause to cropping patterns. During the Sixth Plan, therefore, the government price and other support mechanisms will be targeted towards limiting local barley production to a maximum of 1.5 million tons a year, while the importation of barley by the GSFMO will continue.

Spatial Expansion and Demand for Limited Water Resources

Contrary to the stated policy to distribute agricultural land only in areas with high-potential renewable water resources, 396,000 hectares were distributed during the first three years of the Fifth Plan, while the land allocated during the whole Fifth Plan period is estimated to be about 807,000 hectares. Most of this land is in areas that depend on non-renewable water. Total holdings of agricultural land over the Fifth Plan period, therefore, rose from 3.1 million hectares to 3.9 million hectares, of which 1.5 million hectares (or 38 percent) were under crops. The water requirements for cultivating 1.5 million hectares exceed the available water resources in the long term. Thus, it is of paramount importance to abide by this stated policy during the Sixth Plan, while taking into consideration the demand for food.

Table 8.2 shows the projected demand for the main food categories in the Sixth Plan. The demand for vegetables and fruits is expected to increase at an average annual rate of 6.7 percent and 5.6 percent respectively, while the demand for meat is expected to increase by 4.5 percent annually and fish at 4.3 percent.

Table 8.2

Projected Demand for Selected Food Items during the Sixth Development Plan ('000 tons)

	1414/1415	1419/1420	Annual Average Growth -- %
Red meat	402	501	4.5
White meat	541	674	4.5
Eggs	107	133	4.5
Milk (fresh)	604	734	4.0
Vegetables	2205	3050	6.7
Fruits	1536	2022	5.6
Fish	101	125	4.3

8.1.3 SAUDIIZATION

Total manpower in the agriculture sector amounted to 377,000 by the end of the Fifth Plan. Although most administrative positions have been filled by Saudis, the majority of technical and professional positions are still filled by non-Saudis.

Agricultural employment is planned to increase at an average annual rate of one percent during the Sixth Plan and the additional jobs created are expected to be filled by new entrants to the labor market. The extent to which Saudis will avail of these opportunities, however, will depend upon the prevailing wage differentials between Saudi and non-Saudi manpower and the availability and effectiveness of training for Saudi new entrants to the labor market. The MOAW and other related agencies will exert their utmost efforts to upgrade the skills of Saudi manpower in this sector through intensive training programs. In particular, maximum efforts will be made in training Saudi professionals, technical staff and skilled labor. The manpower training and development programs conducted by other related government agencies contributed much to improved labor productivity during the Fifth Plan.

Within the MOAW, the GSFMO and the SAAB, Saudis account for about 81 percent of all manpower. However, this percentage is expected to rise to 92 percent by the end of the Sixth Plan. This will be achieved mainly through Saudiization and not by increasing the number of public sector jobs.

8.1.4 PRIVATE SECTOR OPPORTUNITIES

The achievements of the agricultural sector have been realized through the effective participation of the private sector in response to the agricultural policies and supportive measures introduced

by the government, in addition to the effectiveness of the executive government agencies, such as the MOAW, which rendered very important services in the field of agricultural production through agricultural research services and development programs and the MOAW's land distribution based on a comprehensive survey of agricultural resources and potential. The agricultural loans program of SAAB, other government support measures and incentives, and the use of advanced irrigation and cultivation techniques by farmers also played an important role in the successful development of agriculture.

The private sector will continue to play a key role in all agricultural activities, including investment, production and marketing. At the same time, the government will undertake a set of programs which will include agricultural research and services, the provision of credit facilities, and the promotion of technology transfer in the agricultural sector. The government will also continue to support and encourage the private sector's agricultural activities through a package of incentives.

8.1.5 DEVELOPMENT STRATEGY

The Sixth Plan strategy for the development of agriculture will be achieved through the following objectives, policies and programs.

8.1.5.1 Objectives

Development of the agricultural sector during the Sixth Plan will be guided by the following major objectives:

- To contribute to the security of the country's food supply through the diversified production of cereal, vegetable, animal and fish products that are appropriate to the Kingdom's available natural resources and achieve the optimum long-term use of water;
- To increase and diversify agricultural production through the application of large-scale production technology that utilizes renewable water sources and modern irrigation methods most efficiently;
- To achieve satisfactory growth in the yields of major crops and animal and fish products, so as to minimize costs and reduce water consumption per unit of output, particularly those products where the Kingdom possesses promising resources and a comparative advantage (such as fish production);
- To make a significant contribution to the creation of job opportunities for rural citizens, and to improve their welfare;
- To achieve satisfactory growth in labor productivity and realize high Saudiization rates in agriculture;
- To raise economic efficiency in the agricultural sector in general.

8.1.5.2 Policies

The following major policies will be implemented in the agriculture sector during the Sixth Plan:

- Investment will be encouraged in large agricultural projects that depend on renewable water resources, use modern irrigation systems, and consume low quantities of water;
- Land will be distributed in areas with large quantities of renewable water resources; areas with critical ground water depletion rates will be identified; and regulations will be introduced on appropriate water pumping rates;
- The provision of selected agricultural inputs and other support services to farmers will be continued, including agricultural extension services and the distribution of improved seeds and seedlings;
- Marketing channels for small farmers will be improved through the provision of storage facilities for perishable vegetables, while methods to promote private marketing channels will be studied;
- Training will be provided to upgrade the skills of Saudi manpower in different specializations;
- Within a framework of comparative advantage, international competitiveness and the optimal utilization of resources, diversification of the agricultural production base will be encouraged, through increased local production of vegetables and fruits in greenhouses and the expansion of the fishing industry using advanced technology;
- Research on problems specific to the Kingdom's agriculture will continue to be supported, (particularly advanced technology fisheries), with a view to increasing efficiency in resource utilization and enhancing coordination between national, regional and international scientific institutions on the one hand and the concerned executive agencies on the other;
- The collection of data and dissemination of information concerning agricultural resources, prices, production and costs of agricultural commodities will be continued, and the basic data and information base developed;
- The private sector will be encouraged to establish animal feed factories which use imported raw materials, so as to achieve a prudent level of meat production at a relatively competitive cost and with the optimal utilization of local raw materials;
- Joint studies with the GCC states will be conducted to promote cooperation in the production, storage and marketing of the main food items, including fish products, and feasible related projects will be implemented;

- The flora, fauna and fish resources of the Kingdom will continue to be protected and developed in order to maintain the ecological balance.

8.1.5.3 Programs

The following programs represent a coherent framework for implementing agricultural development policies during the Sixth Development Plan:

Agricultural Research: This program aims at improving crop and livestock production, range management, forestry and fisheries, and at achieving the optimal utilization of resources, including the adoption of appropriate advanced water use technologies.

Agricultural Services: This program will provide agricultural extension services, improved seeds, animal vaccines, and agricultural and veterinary quarantine services.

Agricultural Loans and Subsidies: This program will provide interest-free loans for the establishment of agricultural infrastructure and for financing investment and production activities, as well as providing subsidies for the purchase of agricultural machinery and equipment, particularly with a view to raising local fruit and vegetable production through the use of greenhouse technology.

Agricultural Development: This program deals with the development of range and forestry management, as well as the construction and operation of irrigation and drainage facilities to assist small farmers.

Economic Studies and Statistics: This program aims to collect and update information and data about agricultural production, including the establishment of an agriculture data bank and the preparation of marketing, economic and social studies pertaining to farmers, and the publication of such studies. The program will also include surveys of animal, fishery and forest resources and the implementation of a comprehensive agricultural census every ten years.

Grain Silos and Animal Feed Factories: This program aims at maintaining adequate grain storage capacity to cover local consumption of wheat, barley and other grains, with a strategic reserve equivalent to six months' consumption to meet emergency needs, and including the storage of raw materials for animal feed plants in cooperation with private sector factories.

Technical Cooperation and Technology Transfer: This program aims at enhancing the efficiency of the agricultural sector and improving its performance through the adoption of appropriate advanced science and technology, in cooperation with specialized regional and international organizations.

In general, the implementation of these programs will require coordination between the concerned agricultural agencies such as MOAW, GSFMO, NCWCD, and HIDA, as well as coordination between other ministries and agencies such as MOFNE and MOP. Some programs include projects that will require a high level of coordination amongst many government agencies.

8.1.6 SIXTH PLAN TARGETS

The Sixth Plan aims at achieving an annual average real growth rate in value added by the agriculture sector of 3.1 percent. Accordingly, agriculture's share of non-oil GDP is expected to be about 9.9 percent by the end of the plan period. Table 8.3 shows the targeted average annual growth rates for the production of basic food items during the Sixth Plan period. These rates are higher than the expected rate of population growth for the same period. They reflect the expected improvements in productivity that will result from the effective implementation of government policies and programs and the expected continued growth in private investment in agriculture.

Table 8.3

Growth Targets of Basic Food Items in the Sixth Development Plan

	Production in 1414/1415 '000 tons	Annual Average Growth Rates in the Sixth Plan (%)
Red meat	195	4.0
White meat	295	6.0
Eggs	134	5.0
Milk (fresh)	604	4.0
Vegetables	2500	6.0
Fruits	1088	5.0
Fish	62	10.0

Wheat production is expected to decline during the Sixth Development Plan so as not to exceed local consumption at the beginning of the second year of the Sixth Plan. Efforts will be concentrated on the production of high value crops requiring less water but utilizing capital intensive techniques that will raise labor productivity in the agriculture sector.

8.2 INDUSTRIAL SECTOR

8.2.1 PRESENT CONDITIONS

Successive development plans have stressed the importance of industrialization to the achievement of the Kingdom's objectives: to diversify its economic base; to reduce its dependence on the production and export of crude oil; to increase the private sector's participation in the development process; to create new job opportunities; to develop the national manpower resources; and to establish a solid technological base.

The current structural features of the Kingdom's industrial sector were shaped in the earlier stages of development, which saw the emergence of three distinct sub-sectors: the *petrochemicals* industry constitutes the cornerstone of the Kingdom's industrial development; the *oil refining* sector adds value to the crude oil resources and enhances industrial exports; while the *other manufacturing* sub-sector is composed of a large number of factories that produce a broad range of products. Most industrial activity is undertaken by the private sector. At the same time, a number of government agencies are responsible for implementing industrial development policies and programs: the Ministry of Industry and Electricity (MIE), the Saudi Consulting House, the Royal Commission for Jubail and Yanbu, and the Saudi Industrial Development Fund (SIDF).

The joint efforts of the public and private sectors have resulted in considerable achievements by the industrial sector in the Fifth Plan period, as the average annual growth rate reached 4.3 percent for the sector as a whole, with the non-oil industries growing at the average annual rate of 2.2 percent and the oil refining industries growing by 7.5 percent annually on average. By the end of the Fifth Plan, the industrial sector's contribution to non-oil GDP had reached 13.1 percent, of which petrochemicals accounted for about 10 percent, oil refining for 43 percent and other manufacturing for 47 percent.

Over the Fifth Plan period, SABIC's total production capacity of petrochemicals, minerals and fertilizers increased by about 7.3 million tons to over 20 million tons. Between the first year and the fourth year of the Fifth Plan, when its sales reached SR 12.4 billion, SABIC's total production of petrochemicals and minerals rose by 31 percent to 17.1 million tons, while its exports rose by 19 percent to about 8 million tons. This impressive performance was achieved in adverse market conditions of declining world demand and prices, the continuation of customs barriers against Saudi petrochemicals in some markets, and a world surplus of production capacity in some basic petrochemicals.

During the Fifth Plan period, PETROMIN's oil refineries were incorporated into Saudi ARAMCO, which, because of its experience and world reputation in this field, will undertake all refining and marketing activities within the Kingdom. Production of refined petroleum products exceeded 548.8 million barrels in 1413/14.

In the *other manufacturing* industries, 477 new factories were established in the Fifth Plan period, representing a total investment of SR 13 billion, and the SIDF provided loans amounting to SR 8.5 billion for 258 industrial projects.

The two industrial cities at Jubail and Yanbu are now ready to accommodate more new industrial projects. The number of factories at both cities has reached 21 for basic industries, 12 for secondary industries and 112 for light and supporting industries. The total area of the Kingdom's eight industrial cities has reached 32 million square meters, while occupancy rates for industrial projects have risen to 91.5 percent of available space.

The Fifth Plan period also witnessed some administrative developments, such as the creation of the Exports Department, the Investment Development Unit and the International Relations Department at the Ministry of Industry and Electricity. In addition, the Exports Development Center has been established at the Council of Saudi Chambers of Commerce and Industry. Some amendments have also been made to the Foreign Capital Investment Regulation, while support was extended to local factories in the form of a 30 percent reduction in the prices of liquefied gas from the lowest world price.

Within the framework of the Economic Offset Program, 8 agreements were concluded with the British and French governments and with some major American companies specialized in the aviation, electronics and other high technology industries. As a result of implementing the Economic Offset Program's agreements, it is expected that joint investments will reach about SR 30 billion and that 9,000 jobs will be created. The Economic Offset Program concentrates on the following high technology industries: the aviation and space industries, communications and electronics, petrochemicals, the medical equipment and pharmaceutical industries, environmental protection, a range of specialist spare parts and the food industries. The overall aim of the program is not only to transfer the available technology, but also to raise the overall level of quality, profitability, exports, employment and training of Saudi nationals, and generally to exploit the Kingdom's comparative advantages. In general, the Economic Offset Program's projects entail the joint participation of the foreign and Saudi partners.

By end of the Fifth Plan, the Offset Program has some notable achievements. Nine joint companies have been established, of which five are in operation and four are at the start-up stage and are expected to begin operations in the first year of the Sixth Plan. The total joint investment in these companies amounts to SR 2,435 million. There are also three companies in the process of being established, with capital of SR 589 million, while 16 projects are being studied.

The Sixth Development Plan will continue with these efforts, thereby confirming that the formation of a strong and competitive industrial sector lies at the very heart of development in the Kingdom. In this regard, the Sixth Plan focuses on the challenges that lie ahead and on removing the constraints that might hinder the further progress of the industrial sector.

8.2.2 KEY ISSUES

The industrial sector in the Kingdom faces a number of key issues which need to be addressed in order to achieve the industrial development objectives and to increase the sector's contribution to GDP. The most important of these issues are:

Specialization and Diversification

The structure of industry in the Kingdom is characterized by specialization in the oil refining and petrochemicals industries. These industries have large production capacities and together they account for about half of the industrial sector's GDP contribution and more than 60 percent of industrial investment. Notwithstanding the comparative advantages enjoyed by these industries, however, the Kingdom's progress towards a more advanced stage of industrialization will require a more diversified industrial structure. Thus, the long term challenge facing Saudi industry is to develop and specialize in other capital- and energy-intensive industries in addition to oil refining and petrochemicals.

Petrochemicals Industry and International Competition

A significantly improved performance can be expected from the Kingdom's expanding petrochemicals industry in response to growing demand for petrochemicals in local, regional and international markets. With several new producers entering the petrochemicals industry, however, particularly in the developing countries, and the likelihood of continued surplus production capacity, sharp competition in the international market can be expected in the Sixth Plan period. Thus, SABIC must continue to study local and world market conditions closely and to adopt flexible marketing strategies that are consistent with market needs and are supported by its high production capacity and wide range of products. At the same time, the pressure of competition in international markets may prompt more international companies to establish new joint ventures in the Kingdom and SABIC to consider establishing joint ventures with the oil refining industry that provides feed stock for its petrochemical projects.

Industry and the Environment

Industry is often linked with its adverse impact on the environment, as it consumes and depletes natural resources, particularly non-renewable resources, to meet its need for energy and raw materials. Furthermore, industrial activities are normally associated with air and water pollution from gas emissions and industrial waste. Such waste is often generated from the use of technologies that have little consideration for the environment and its absorptive capacity, and because appropriate environmental regulations either do not exist or cannot be enforced.

In the Kingdom, positive steps have been taken to control the relationship between the environment and industrial growth. Examples include, but are not limited to, the achievements of the

Royal Commission for Jubail and Yanbu in applying environmental standards. These achievements won international prizes for the excellent environmental performance of SABIC and Saudi ARAMCO factories in the two industrial cities at Jubail and Yanbu.

The Sixth Development Plan emphasizes the fact that industrial growth targets will be pursued without prejudice to the rights of future generations to a clean environment and the availability of natural resources. This matter requires the generalized implementation of environmental impact evaluations for all industrial projects, from the initial feasibility studies to the selection of technologies that do not pollute the environment or damage natural resources, the improvement of operation and maintenance procedures in the industrial production process, concentration on material-recycling projects, and addressing the adverse environmental impacts from existing industries before they grow any larger.

Ability to Develop Industrial Technology

The Kingdom's industrial development has relied on advanced technologies from the industrialized countries to meet its growing needs, while clearly recognizing the importance of assimilating such technology quickly and reducing the role of manual labor, thereby raising productivity. The importance of improving the quality of products, reducing costs and enhancing the competitiveness of national industries has also been recognized. In the next stage of development, the capacity of national industries to assimilate new technology and production techniques must be further developed, so that they can use their accumulated experience to create and develop their own technologies and thereby reduce their dependence on imported technology on the one hand, and overcome the difficulties in obtaining such technology, on the other.

Industrial Marketing

Although national industrial products have many positive features, such as their high quality and reasonable prices, they are encountering severe competition in both domestic and international markets. It is evident that marketing activities in some industrial establishments are not given as much attention as production activities. In the coming stage of development, greater attention to the marketing of industrial products will be necessary.

Industrial Information and Data Bases

The success of industrial projects, either at the preliminary planning and study stage or at the actual production stage, depends on the availability of information and statistics on markets, technologies, labor, production capacities, investments and costs of production. The development of industrial information systems will become increasingly important in the next stage of development. This will require the continuous encouragement of industrial companies to establish their own integrated information systems which, at the same time, could be linked within a national industrial information network.

Role of Incentives in Industrial Development

The investment incentive package provided by the government has supported industrial growth in the Kingdom. The progressive liberalization of international trade, combined with the need to maintain an effective system of incentives for industrial development, mean that an extensive review of the existing incentive system may now be needed. Furthermore, priorities need to be established so that incentives are directed more specifically towards those industrial projects where support and protection may be needed in the short to medium term, but whose longer term economic potential is firmly established, and is based on the existence of comparative advantage, the manufacture of high quality products, the utilization of advanced technology and the establishment of linkages with existing industries and other sectors of the national economy.

Support for Small Industry

Despite their limited role in the industrial sector's contribution to GDP and their weak links with other manufacturing industries, small industries constitute a large proportion of all manufacturing establishments in the Kingdom. However, small industries do not enjoy the range of incentives provided by the government to large-scale projects. Furthermore, no single specialized government department or agency is responsible for supporting small industries and alleviating their difficulties in obtaining the necessary finance for expansion.

Small industries need further encouragement to play a more effective role in the development of the industrial sector. In this respect, the possibility of establishing specialized institutions to support small industries and to help them overcome their technical, administrative and financial difficulties, will be explored. Wherever possible, programs will be developed to increase the contribution of small industries to the demand of existing larger industries for final and intermediate goods, to attract small investors, to provide job opportunities for Saudi nationals and to diversify the industrial base of the Kingdom. In addition, an Industrial Register System will be created at the Ministry of Industry and Electricity.

Promotion of Industrial Exports

With the exception of petrochemicals and refined oil products, exports of manufactured goods still account for only a small part of the Kingdom's total exports, despite the attention devoted to this subject by both government and industrialists. Intense competition in global markets presents a special challenge to all industrial exporters, as foreign markets expose companies to unfamiliar regulatory, legal and financial environments, entailing considerably increased risks. Thus, it is not surprising that such companies prefer to sell in the home market first, only entering export markets when this is necessary to support their existing business. This is particularly true when the domestic market has offered sufficient growth opportunities up till now.

Specific policies are needed to address this situation, including the design and implementation of institutional measures to encourage the establishment of private companies and organizations specialized in export development and promotion techniques, the expansion of export credit financing facilities for industrial exporters, and more participation at international fairs.

8.2.3 SAUDIIZATION

In the Fifth Plan period, government agencies in the industrial sector made considerable progress in increasing the number of Saudis working in their departments. Saudi nationals accounted for 91 percent of total employment in the Ministry of Industry and Electricity, 98 percent in the Royal Commission for Jubail and Yanbu, and 71 percent in the Saudi Consulting House. Such results indicate the overall success of Saudiization policies and the effectiveness of the training programs and activities undertaken by these agencies, which are expected to continue to achieve their objectives with respect to national manpower development in the years to come.

On the other hand, with the exception of the larger, more advanced, capital-intensive industries such as petrochemicals, Saudi industry's dependence on foreign manpower is likely to remain a feature of industrial development for some time, due to an insufficient supply of national skilled manpower and the low wages of non-Saudi workers, which contribute greatly to the competitiveness and profitability of labor-intensive industrial projects.

The Sixth Development Plan assigns the highest priority to the employment and training of Saudi nationals in private industry, where they now represent only a small percentage of total employment, particularly in production and technical jobs. This will require joint actions by the government and the private sector, and more intensive adoption of measures to encourage Saudi nationals to work in manufacturing industry. Saudi youths also need to be attracted into technical and industrial training, so that they can become qualified industrial workers. At the same time, the private industrial sector will be urged to fulfill its responsibilities towards achieving the national objectives of Saudiization. Industrial manpower policies cannot succeed without the full participation and support of the private sector. In this context, it may be necessary to provide more incentives to those factories that employ or offer regular training programs to a high percentage of Saudi nationals.

8.2.4 ECONOMIC EFFICIENCY

Efficiency improvements in the industrial sector are closely linked to the development of skilled manpower, the utilization of modern technology and the development of management information systems. In this respect, the efforts of government agencies in the industrial sector have had satisfactory results, which are expected to be maintained or even improve in the future. Thus, the MIE, the Saudi Consulting House and the Royal Commission for Jubail and Yanbu will aim to use their available resources with maximum efficiency and commensurate with their growing responsibilities.

In the basic industries, the production capacity utilization rates, the sales/production ratios and the high labor productivity of SABIC companies compares well to international standards for these industries. During the Sixth Plan period, SABIC will continue to consolidate its progress in these areas, after the production capacity expansions undertaken in the later years of the Fifth Plan.

In the case of some manufacturing industries, measures are needed to reduce the demand for labor by raising productivity, and to improve production methods by raising the level of technology used. Other industries are not operating at full capacity because of their marketing deficiencies. In future, it will be necessary to review the performance of such industries and to study the main factors constraining productivity growth, so that appropriate methods for overcoming marketing obstacles can be adopted and overall competitiveness improved.

At present, some industrial cities are operating below capacity, while others -- such as those in Riyadh, Jeddah and Dammam -- are facing capacity constraints. The areas assigned for secondary industries in Jubail and Yanbu are currently under-utilized, even though many of these industries operate in other locations. In the Sixth Plan period, efforts will be made to achieve a better balance in the utilization of space in the industrial cities, so that an optimal geographic distribution of industries and the highest possible levels of efficiency can be achieved.

In general, the achievement of the Sixth Plan's growth targets for the industrial sector will require a combination of investment in new production facilities and the more efficient utilization of existing capacity.

8.2.5 OPPORTUNITIES AVAILABLE FOR THE PRIVATE SECTOR

To a large extent, the task of industrial development is the responsibility of the private sector, with the government's role being confined mainly to establishing an appropriate institutional framework and formulating policies to support the industrialization process. Thus, the government aims to guide the deployment of private resources rather than making industrial investments directly itself, except in a small number of cases where the investment needs are very large and the risks high.

Because the oil sector is of paramount importance to the Saudi economy, government agencies and companies play a central role in the oil refining industry. However, some oil refineries are joint ventures with foreign partners, while other private sector companies are involved in the production of lubricants. In the future, a greater private sector role in the petroleum industry may be possible.

Although the government is the majority shareholder in SABIC, it is anticipated that conditions prevailing in the Sixth Plan period will make the progressive privatization of SABIC possible, without adversely affecting the company's future plans. In this respect, initiatives to privatize some government-owned industrial companies will be one of the major features of the Sixth Plan period.

At the same time, government agencies will continue to perform their role of attracting more private sector investment into manufacturing industry. The Ministry of Industry and Electricity will continue to support industrial development and the diversification of the industrial base, through the issuing of new industrial licenses, the provision of needed infrastructure in the industrial cities, and the preparation of some industrial studies. The SIDF will continue to extend loans to industrial projects according to specific lending criteria, while the Saudi Consulting House will provide industrial investors and businessmen with technical, economic and management consulting and research services. The Royal Commission for Jubail and Yanbu will continue completing the infrastructural facilities and services projects in Jubail and Yanbu industrial cities and follow-up the operation and maintenance of such projects. It will also acquaint potential investors, both domestic and foreign, with available investment opportunities to establish various types of industries and services in the two cities.

The private sector will be called upon to exploit the favorable investment climate provided by the government and to engage in activities that will accelerate the pace of industrial development towards new horizons. Thus, the private sector is expected to invest in new industries that utilize modern technology and generate high levels of value added, in addition to expanding its investments in import substitution and export-oriented industries, including basic, supporting and downstream metal industries, and basic and intermediate petrochemicals.

8.2.6 DEVELOPMENT STRATEGY

The industrial development strategy will be implemented through the following objectives, policies and programs.

8.2.6.1 Objectives

The major objectives for industrial development in the Kingdom during the Sixth Development Plan are:

- to increase the industrial sector's contribution to GDP and the diversification of the national economy;
- to expand industrialization based on locally available raw materials and to diversify the industrial structure through more intensive development of upstream and downstream industries;
- to expand the economic linkages between the industrial sector and other producing sectors, particularly agriculture and mineral resources;
- to increase the industrial sector's contribution towards meeting the local demand for consumer and capital goods through developing economically feasible import substitution industries;

- to increase the industrial sector's contribution to the diversification of exports;
- to create new job opportunities for Saudi citizens and to replace non-Saudi manpower with Saudis.

8.2.6.2 Policies

The following policies will be implemented by government agencies to achieve these objectives:

- Encourage Saudi industries to develop their own capabilities in industrial studies, research and development, particularly in capital-intensive industries;
- Continue conducting comprehensive periodical reviews of the institutional policies, administrative measures, incentives, lending policies, licensing and customs duty exemptions, in order to increase industrial investments by the Saudi and GCC private sectors, and adopt the necessary measures to deal with unfair competition;
- Encourage the balanced diversification of industrial activities, with emphasis on horizontal and vertical expansion in petrochemicals and the development of industries with linkages to other economic sectors;
- Support and encourage the transfer of modern technology in joint-venture industrial projects through the foreign capital investment regulation and the Offset Programs;
- Continue establishing industrial cities in locations with favorable growth potential, and expand the capacity of existing industrial cities where infrastructure is coming under heavy pressure;
- Continue the completion of infrastructural facilities in the industrial cities of Jubail and Yanbu to meet the expected increase in demand;
- Continue improving the quality and analysis of industrial statistics and information, and the preparation of economic indicators, through industrial surveys;
- Conduct studies on investment opportunities for the private sector;
- Continue the development of national manpower particularly with respect to the technical skills needed in modern industry;
- Encourage industrial companies to prepare advanced training programs for periodically upgrading the technical skills of Saudi workers, and adopt necessary measures to support factories where a high percentage of technical employees are Saudis;
- Improve the production capacity utilization rates of existing factories and raise the economic efficiency of industrial enterprises;

- Develop the necessary measures and regulations to support small industries and study the possibility of establishing an agency with responsibility for supporting their development;
- Encourage greater concentration on marketing and market research, through more emphasis on the study of market conditions, competitor behavior, advertising, after-sales service, and the development of export marketing techniques;
- Deepen the concept of environmentally friendly industrial development and its impact on present and future generations.

8.2.6.3 Programs

The following major programs will be implemented during the Sixth Plan:

Petrochemical Industries: This program aims at the optimal utilization of feed stocks and energy for expanding existing production capacities in primary, intermediate and final petrochemical industries and downstream industries. It also aims at the addition of new products to meet local, regional and international market needs, the development of existing markets and the search for new markets in order to generate maximum economic returns.

Basic Metal Industries: This program aims at expanding the existing production lines of the basic iron and steel industries, and studying the feasibility of establishing other energy-intensive basic metal industries, commensurate with market demand and in coordination with other GCC countries to avoid unnecessary competition.

Industrial Cities and Infrastructure: This program aims at the completion of infrastructure and the provision of services and utilities in the existing industrial cities, as well as the establishment of new industrial cities and the expansion of some existing ones. Within this program, the Royal Commission for Jubail and Yanbu will expand the capacities of the infrastructure, utilities and services in the two industrial cities, in line with the requirements of industrial development and the expected population growth in the two cities.

Other Manufacturing Industries: This program aims to strengthen the manufacturing sector by offering credit facilities for the establishment and expansion of projects, as well as the improvement of existing operations. It also covers the provision of advisory services to factories for the development of production methods and quality improvement techniques. The identification of investment opportunities in small and medium-sized industries in the Kingdom is also included as part of this program.

Industrial Investment: This program will acquaint investors at local, GCC, Arab country and international levels, with the investment opportunities available in import substitution and export-oriented industries, through the preparation of initial investment profiles for feasible projects.

Industrial Studies, Research and Development: This program will encourage the research and development activities of existing industries and carry out industrial research and studies. It will also develop the information systems required for industrial sector development.

Industrial Exports: This program aims at encouraging and developing export-oriented industries through the establishment of more private companies specialized in international marketing techniques, the preparation of studies for the promotion of Saudi industries in international markets, the study of foreign trade regulations, the adoption of export financing methods and participation at international fairs.

Manpower Development: This program aims at the development and training of Saudi industrial manpower, at increasing the number of Saudi workers employed in industry and improving their efficiency, and at increasing Saudiization in all specialist fields through appropriate training.

Privatization of Industrial Companies: This program will study the possibility of privatizing industrial companies owned by the government, and will include a specific schedule that takes into account the social and economic impacts of privatization.

8.2.7 GROWTH TARGETS DURING THE SIXTH PLAN

The industrial sector as a whole is expected to grow at an average annual rate of 4.9 percent during the Sixth Plan, with petrochemical industries growing at an average annual rate of 8.3 percent, oil refining at 3.9 percent and other manufacturing at 4.9 percent.

8.3 ELECTRICITY

8.3.1 PRESENT CONDITIONS

Electricity is a basic source of socioeconomic development and is considered as a distinguishing feature of economically advanced countries. As a clean form of energy with a high degree of flexibility and ease of transmission, distribution and use, electricity constitutes a basic input to all sectors of the economy and is a primary factor for enhancing economic productivity and improving the standard of living and quality of life. Over the course of the first five development plans, substantial efforts have been made by the government to extend the benefits of electricity to all sectors and regions of the Kingdom.

During the Fifth Plan, all major indicators of the electricity sector witnessed notable progress (Table 8.4) and, in some cases, exceeded the plan targets as a result of unforeseen developments that emerged during the plan period. Electricity was provided to 559,000 additional customers, bringing the overall electrification rate to 83 percent of the population in 1414. Electric energy consumption

grew at an average annual rate of 7.7 percent between 1409 and 1413, thus exceeding the growth of GDP. The non-coincident peak load grew at an average annual rate of 7.9 percent over the same period, reaching over 15,707 megawatts in 1413/14, while total electricity consumption per residential customer grew at an average annual rate of 3.6 percent.

Table 8.4

Main Electricity Indicators in the Fifth Development Plan

	1409/10	1413/14 Actual	1414/15 Estimate	Average Annual Growth (%) 1409/10 - 1413/14
Total consumption (Million Kwh)	55,201.3	74,171.0	79,250.5	7.7
Peak load (MW)	11,575.2	15,706.6	17,227.8	7.9
Total customers ('000)	2,259.3	2,686.4	2,817.9	4.4
Total Employees	27,409.0	26,663.0	26,912.0	(0.7)
Percentage of Saudis (%)	54.1	60.1	60.6	2.7
Average total consumed energy per residential customer (Kwh)	28,469.0	32,741.0	33,231.0	3.6
Average peak load per customer (kW)	5.1	5.8	6.0	3.3
Average Customers per employee	82.4	100.8	104.7	5.2

( ) negative value

8.3.2 KEY ISSUES

A number of issues are constraining the future development of the electricity sector and must be addressed in the Sixth Plan period.

Finance: The financial position of the autonomous electricity companies lacks proper balance, as reflected in their unusually high debt to capital ratios and low capital/asset ratios, as well as their high accumulation of outstanding sales and other proceeds. This condition will limit the ability of these companies to meet their future responsibilities efficiently and effectively, and particularly their ability to make use of the financial markets in meeting their future investment requirements, or to continue improving their productivity. Comprehensive financial and administrative restructuring of the industry is now an urgent necessity.

Electricity Tariffs: The reduction of electricity prices leads to an increase in the demand for electricity because low prices do not induce rational consumption patterns and reduce the effectiveness of the tariff structure as a demand management tool. Therefore, it is imperative to review the electricity tariff structure and its level in order to use it as an effective demand management tool and to rationalize consumption, thereby ensuring the continuity of electrical energy supply and the development of electricity services, and to focus on energy conservation, reliability, efficiency and demand rationalization.

Specifications and Standards: Each of the major electricity companies employs its own specifications, standards and procedures which differ from those of the other companies. This leads to an unnecessary rise in costs. It is important, therefore, that unified standards, specifications and procedures be developed at the overall sector level in order to upgrade efficiency, enhance productivity and rationalize the supervisory and regulatory functions of the concerned government agencies. Necessary actions are now needed to achieve this objective as soon as possible.

Fuel: The economic development and operation of the electric power generation plants depends to a large extent on the relative prices of the various available fuels. In this respect local fuel prices are not conducive to optimal investment and operation decisions, due to the fact that these prices are inconsistent with world market prices. For example, in contrast to most countries where diesel prices are highest, the price of heavy fuel oil in the domestic market exceeds that of both crude oil and diesel oil, while the price of the latter is the lowest. Thus, there is a need to rationalize the structure of local fuel prices, while economically efficient fuels should be made available in the quantities required by the generating sector.

Northern Region Utilities: There are 14 electric utilities operating in the Northern region, of which six are autonomous companies and the rest are managed by the General Electricity Corporation (GEC). Because of their small size and the special nature of their concessions, these companies lack the necessary technical and administrative resources to enhance their economic efficiency. During the Sixth Plan period, therefore, the reorganization of these utilities should be studied, with a view to improving the quality of service, enhancing productivity and raising the efficiency of the electricity sector in the Northern region.

8.3.3 SAUDIIZATION

Productivity improvements in the electricity companies were accompanied by a decline in employee numbers by am annual gvarage of 0.7 %, from 27,409 in 1409/1410 to 26,663 in 1413/1414. Over the same period, however, the participation rate of Saudis in the work force rose from 54.1 percent to 60.1 percent. During the Sixth Plan, the work force is expected to grow at an average annual rate of 1.6 percent, to 29,188 employees in 1419/1420, of whom 70 percent will be Saudis.

8.3.4 ECONOMIC EFFICIENCY

Higher productivity and improved operating efficiency are ongoing objectives and a major focus of development in the electricity sector. The ratio of customers to employees grew at an average annual rate of 5.2 percent, from 82 in 1409/1410 to 101 in 1413/1414, while the electricity production cost per unit sold decreased at a similar rate. Productivity is expected to keep rising during the Sixth Plan, when employment growth will be less than the expected growth in peak load, production and customers. The number of customers per employee is expected to reach 119 in 1419/1420, while the average cost of service is expected to decrease at an annual rate of 3.1 percent during the Sixth Plan. The various training programs made available by the electricity companies to their employees contribute much to the continuous improvement in productivity. Around 34,840 trainees are expected to graduate from different training programs during the Sixth Plan.

8.3.5 PRIVATE SECTOR OPPORTUNITIES

The private sector participates in the equity ownership of most electricity companies in the Kingdom whose shares are publicly traded. Furthermore, the private sector provides all the support services to the electricity companies and the GEC, from project implementation to the supply of equipment, materials and systems. In the Fifth Plan period, the commercial banking sector greatly expanded its role in the sector by providing finance for some major generation plants, such as Rabigh power plant in the Western region, and a similar deal is being arranged for a large power generating plant in the Central region.

During the Sixth Plan, the private sector will increase its participation in financing, building and operating the electricity facilities, particularly the major generation projects whose investment cost is estimated at around SR 21 billion. On the other hand, the financial requirements for the transmission network program, which are expected to be financed through the private sector, are about SR 27 billion during the Plan period.

Finally, a study will be conducted during the Sixth Plan on the feasibility of increasing the private sector's role in the ownership and management of the Kingdom's electric utilities, gradually leading to the full privatization of the electricity companies in accordance with the Kingdom's strategy aimed at maximizing the role of the private sector in the national economy.

8.3.6 DEVELOPMENT STRATEGY

The development strategy for the electricity sector will be implemented through the following objectives, policies and programs.

8.3.6.1 Objectives

- the provision of electricity at a suitable level of quality and reliability to all consumers, with special emphasis on those areas with no service as yet;
- adherence to the principle of providing an electricity service at least cost;
- full privatization of the electric utilities in the medium to long term;
- development of a regional integrated network by linking the national network with those of neighboring countries.

8.3.6.2 Policies

These objectives of the electricity sector, and the resolution of the key issues constraining its future development, will be realized through implementation of the following policies:

- Electricity services will be provided at levels of reliability that balance the costs of service with the type and nature of electric loads;
- A flexible pricing policy will be adopted based on periodic tariff reviews, with the structure and level of prices focused on energy conservation and demand rationalization;
- A mechanism for enhancing efficiency and productivity will be introduced into the structure and level of the operating subsidy, until its eventual abolition;
- The private sector's participation in the ownership and management of the electric utilities will be increased;
- The private sector will be given the opportunity to participate in the energy generation sector through the establishment of energy generation companies;
- An appropriate organizational framework will be provided for improved coordination and cooperation among the electricity companies, in terms of sharing experience and knowledge and developing unified standards and specifications;
- More effective training programs will be introduced in order to raise productivity and boost the process of replacing non-Saudis by skilled Saudi workers.

8.3.6.3 Programs

The main programs to be implemented in the electricity sector in the Sixth Plan are:

Generation: This program aims at providing the generating capacity needed to meet the expected growth in electric loads.

Transmission Networks: This program covers facilities of Extra High Voltage (EHV) and High Voltage (HV) networks through which further interconnections will be implemented in the various regions of the Kingdom.

Distribution: This program will enhance and expand the distribution networks.

Communication and Control Systems: This program encompasses the activities related to the despatch, monitoring and control functions in the power networks, in addition to the other communication tasks necessary for the management and operation of the electric utilities.

Administrative Development: This program includes manpower development activities, as well as support services such as buildings and offices.

8.3.7 GROWTH TARGETS IN THE SIXTH PLAN

Some of the factors upon which the electricity sector's growth forecast for the Sixth Plan is based are: the national and regional economic outlook for the plan period and beyond; population growth and consumption patterns.

During the Sixth Plan, total electricity consumption is expected to grow at an average annual rate of 6.4 percent (Table 8.5), with total consumption per residential customer increasing from 33,231 Kwh in 1414/15 to 36,778 Kwh in 1419/20 -- an average annual growth rate of 2 percent. Furthermore, the non-coincident peak load in the Kingdom is expected to grow at an average annual rate of 6.2 percent, increasing from 17,228 MW in 1414/15 to 23,310 MW in 1419/20.

Table 8.5

Forecast Indicators in the Electricity Sector during the Sixth Plan

	1414/15	1419/20	Average Annual Growth (Percent)
Consumption (Billion Kwh)	79	108	6.4
Peak load (MW)	17,228	23,310	6.2
Actual Generation Capacity (MW) ★	18,238	25,273	6.7
Customers ('000)	2,818	3,472	4.3
Total number of employees	26,912	29,188	1.6
Share of Saudis (%)	60.6	69.8	2.9
Average total consumption per residential customer (Kwh)	33,231	36,778	2.0
Average Peak Load per customer (KW)	6.1	6.7	1.9
Average number of customers per employee	105	119	2.6

★ Excludes the firm power export capacity of SWCC's dual purpose desalination plants, which will reach 3,416 MW in 1419/1420.

8.4 CONSTRUCTION

8.4.1 PRESENT CONDITIONS

The construction sector plays an important role in the overall development and diversification of the economic base through its direct contribution to infrastructure development and fixed capital formation, and its indirect contribution to the development of other economic sectors -- especially mining and manufacturing -- through wide-ranging linkages with these sectors. In Saudi Arabia, the massive investment in physical infrastructure and housing has been the driving force behind the establishment, development and diversification of the rapidly expanding building materials industry, which not only supplies the domestic market but has also begun to export to other countries in the region.

The construction sector witnessed stable activity during the Fifth Development Plan period as a whole, despite the achievement of positive growth rates of 3.8 percent and 1.8 percent in the first two years respectively. This was physically evident in many different areas of both private and public sector construction, with the establishment of new commercial and housing developments, recreation areas and large capacity expansions in the oil and petrochemical industries. As a result, construction's share of non-oil GDP stabilized at 13 percent at the end of the Fifth Plan period.

As part of the government's contribution to the construction sector's development during the Fifth Plan period, the Deputy Ministry of Housing supervised the completion of 4,570 public housing units. It also handed over to the Real Estate Development Fund (REDF) the main part of the public housing stock and completed several research and design studies. The Deputy Ministry of Contractor Classification issued around 940 new classification certificates and re-classified approximately 1,000 Saudi construction companies. The Deputy Ministry of Public Works (DMPW) supervised the construction of about 340 public buildings and designed 364 projects for various government agencies. Its laboratories carried out around 21,000 studies and tests in fields such as material testing and quality control, and provided consultant services to about 200 public and private sector buildings in need of repair. The DMPW also studied 77 standard specifications and participated in around 50 technical committees for government projects.

8.4.2 KEY ISSUES

Several key issues still need to be addressed if the construction industry is to maintain its critical role in the economic development of the Kingdom:

Quality Standards: Rising living standards are often linked to demands for higher quality buildings. However, efficiency has been impeded by the lack of updated quality specifications and unified standards for construction projects, building equipment and materials. Procedures for issuing new

standards and for enforcing quality control are often not adequately applied and procedures for laboratory testing of building materials need to be re-considered, updated and developed. Furthermore, locally produced building materials are often limited to the lower and middle levels of quality and technology. Production methods that use higher quality standards and advanced technology are needed.

Construction Data Base: Data collection and management is performed by various agencies and lacks coherence as a result. Information on the newest products, research results, industry trends and investment opportunities is not yet widely and easily available. Periodical statistical reports on the construction sector are needed because the general lack of this kind of information acts as a major constraint on the establishment of small and medium-sized construction services enterprises.

8.4.3 SAUDIIZATION

The overall Saudiization rate in the Ministry of Public Works and Housing (MOPWH) at the end of the Fifth Plan period reached 79.4 percent of the labor force. Within the various job categories, Saudi nationals accounted for 100 percent of administrative jobs, 97 percent of clerical jobs, 66 percent of professional jobs and 73 percent of semi-professional jobs. In the engineering field, Saudis accounted for only 51 percent of employees. During the Sixth Plan period, the Saudiization rate in professional jobs will be increased to 84 percent and to 82 percent in semi-professional jobs. In addition, the private sector will be encouraged to replace non-Saudi manpower with Saudi nationals.

8.4.4 PRIVATE SECTOR OPPORTUNITIES

In the past, the government has been a major source of demand for the construction industry, through a wide range of public construction projects of varying size. It has also been the role of government to provide the regulatory framework for a free market environment, to develop some technology used in the construction sector, to standardize laboratory testing procedures and specifications for building materials, and to update the data base for the construction industry.

During the Sixth Development Plan, the private sector is expected to become more efficient in the implementation of planned construction projects. In this respect, the private sector can avail of many investment opportunities, either through its own resources or in conjunction with relevant government agencies and according to the results of feasibility studies. Such investment opportunities may include private sector participation in financing and building some public facilities and then leasing them to government agencies and transferring them after a specified period to the relevant agencies.

Private sector investment opportunities in the construction sector will also be enhanced by a more efficient and expanding financial sector, in which growth is expected in the investment loan activities of the specialized credit institutions and the commercial banks.

8.4.5 DEVELOPMENT STRATEGY

The development strategy in the construction sector will be implemented through the following objectives, policies and programs:

8.4.5.1 Objectives

The main objectives for the construction sector during the Sixth Plan are as follows:

- to develop the technical skills of Saudi manpower in all fields of the construction sector and to increase their share of total manpower;
- to adapt the construction activity profile of government agencies to the planned structural changes with due emphases on project management and supervision, maintenance and renovation;
- to increase the participation of Saudi contractors and engineering consulting offices in implementing and maintaining construction projects during the Sixth Plan;
- to raise efficiency and quality standards throughout the construction sector;
- to support the expansion and dissemination of scientific research in construction-related activities;
- to support the ongoing development of the local building materials industry and other national products linked to construction sector needs.

8.4.5.2 Policies

The following policies will contribute towards the achievement of the development objectives for the construction sector during the Sixth Plan:

- The capacities of all technical education, vocational training and specialized polytechnic institutions will be expanded to increase the supply of technically skilled Saudis in line with the construction sector's needs;
- Appropriate incentives will be introduced to encourage the private sector to employ and train more Saudis in the building materials industry and in construction services;
- Financial support will be made available to small and medium-sized entrepreneurs in the fields of building materials industry and construction related services at the foundation stage of their enterprises;

- In cooperation with other relevant agencies, the central office for construction in the Ministry of Public Works and Housing (Central Construction Bureau) will contribute to raising the level of business intelligence about the construction sector, conducting applied research and studies and making them available to the private sector.

8.4.5.3 Programs

Laboratory Tests: This program aims to define and evaluate the role of MOPWH laboratory tests and to intensify cooperation and coordination with other public testing institutions, such as SASO, the universities and the King Abdul Aziz City for Science and Technology. This program will concentrate on laboratory tests which are not undertaken by the private sector, and will develop unified standards and specifications for testing laboratories for each type of building material.

Contractor Classification: This program will continue the classification of contractors by assessing the activity and contract implementation capability, and will start a consultants classification scheme in coordination with related agencies, thereby helping to raise productivity.

Information Center: The MOPWH will contribute to the creation of a comprehensive data base on the construction sector, including information about housing, contractors and consultants. Information gathering and analysis and the conduct of applied research and studies needs highly qualified and specialized professionals, who are already available in the MOPWH. These functions can be organized and established with the cooperation of the Central Bureau for Construction, and with the further cooperation and coordination of other concerned agencies.

Studies and Technical Cooperation: This program aims to provide the necessary technical assistance to implement the functions of the Deputy Ministry for Public Works and the Deputy Ministry for Contractors Classification.

Construction: This program aims to complete ongoing projects, to re-locate laboratories and modernize their equipment.

8.4.6 GROWTH TARGETS DURING THE SIXTH DEVELOPMENT PLAN

Output of the construction sector is targeted to grow at an average annual rate of 4.0 percent in the Sixth Plan, and employment in the sector will continue to account for around 15 to 16 percent of total employment. A sufficient quantity of commercial buildings (offices and shopping centers) is expected to be supplied.

CHAPTER 9

SERVICES SECTORS

9. SERVICES SECTORS

This chapter examines the major achievements of the Fifth Plan period in commerce, tourism, standards and specifications and statistical services. It discusses the key issues to be addressed in these sectors during the Sixth Plan period, and addresses the main themes of Saudiization, economic efficiency and opportunities available for the private sector. The chapter also highlights the objectives, polices and programs for the development of these sectors in the Sixth Plan period.

9.1 COMMERCE

9.1.1 PRESENT CONDITIONS

The commercial sector is composed of the wholesale and retail trades, hotels and restaurants. It plays an essential role in achieving the general objectives and strategic principles of the socioeconomic plan by providing goods, materials and services to citizens in all regions of the Kingdom and enhancing the sources of national income. Thus, the commercial sector can be seen as the life blood of all other economic activities.

The importance of this sector in the national economy is reflected in the value added by the wholesale and retail trades, hotels and restaurants in the last year of the Fifth Development Plan (1414/1415), when it amounted to more than SR 32 billion, or 11 percent of non-oil GDP. These activities account for more than one million jobs, employing 15 percent of the total labor force.

A large number and range of individual enterprises are registered in the Commercial Register. These enterprises can conduct their commercial affairs with a great deal of freedom within the institutional framework and commercial regulations of the Kingdom. The Ministry of Commerce is responsible for regulating the Kingdom's domestic and non-oil foreign trade. Its responsibilities include the supervision and organization of the commercial sector, and the licensing, registering and monitoring of a wide range of companies and commercial establishments, including: general services offices, scientific and technical offices, representation offices and commercial agencies, financial and business service offices, commercial exhibitions, jewelry and gold stores, bakeries and the Chambers of Commerce and Industry.

The Ministry of Commerce also engages in a wide range of other activities: it enforces the protection of trade marks and controls commercial fraud; it studies and reviews existing commercial regulations and enacts new laws; it regulates hotels, rest houses and national exhibitions, and supports the participation of Saudi companies at international fairs; it monitors the availability and supplies of the Kingdom's basic commodity needs and ensures that such commodities conform with Saudi standard specifications; it is responsible for developing quality control laboratories and for monitoring markets

to ensure that consumers are protected; it provides a range of necessary services to business services offices; it regulates the operations of insurance companies in the Kingdom. The Ministry is also responsible for developing and strengthening the Kingdom's commercial relations with other countries through its participation at meetings of the joint committees, and for preparing economic and commercial agreements with these countries. The Chambers of Commerce and Industry represent the interests of companies and commercial establishments operating in this sector.

During the Gulf war, the importance of the commercial sector's institutional organization became apparent, as it succeeded in providing basic commodities and consumer items to citizens, while maintaining a strategic stockpile sufficient to cover the Kingdom's needs for a longer period.

The commercial sector's major achievements in the Fifth Plan period are summarized as follows:

First, at the sector level, supplies of consumer and capital goods remained plentiful and, despite the large influx of expatriates into the Kingdom, no supply bottlenecks emerged. At the same time, export activity continued, as the number of certificates of origin issued between the start of the Fifth Plan and the end of 1414 reached more than 200,000.

Second, at the Ministry of Commerce level, new laboratories have been equipped and opened in Ar'ar and Salwah, while new nuclear radiation checking sections have been added to most of the Kingdom's laboratories. A number of national and foreign exhibitions were organized in some cities of the Kingdom, while the Kingdom also participated in about four international exhibitions each year. In addition, executive rules were issued for the professional firms regulation and the chartered accountants regulation.

The Ministry of Commerce was also responsible for ensuring the supply of commodities from the best sources and at the most appropriate prices, as well as for monitoring the quality of both imported and domestically produced materials and commodities through laboratory tests and analysis in its quality control laboratories.

Third, at the level of the Chambers of Commerce and Industry, several training courses were implemented and marketing and investment opportunity studies completed in coordination with the Ministry of Commerce.

9.1.2 KEY ISSUES

Despite these achievements, some key issues need to be resolved by the concerned agencies during the Sixth Plan period, so that this sector can make an effective contribution to the achievement of the national development objectives. These key issues include:

Low Rates of Saudiization in the Commercial Sector

Low rates of Saudiization in the commercial sector are associated with the steadily increasing number of non-Saudi workers. Thus, measures are needed to encourage greater dependence of commercial establishments on national manpower and more use of advanced technology.

Limited Administrative Capabilities in Some Commercial Establishments

Some commercial establishments lack experience in the disciplines of planning, administration and finance, and are slow to introduce modern work practices. As a result, productivity has been low. Greater cooperation is needed between the Ministry of Commerce, the Chambers of Commerce and Industry and individual commercial establishments to provide the training programs needed to raise efficiency and to enhance administrative capabilities.

Commercial Licensing Procedures

A license is needed for most commercial activities in the Kingdom. Under the current licensing system, enterprises are required to deal with more than one government agency and, as a result, multiple procedures must be followed before a commercial license can be issued. These rules and procedures must be simplified so that the entire licensing system can become more efficient.

9.1.3 SAUDIIZATION

It is estimated that Saudis constituted only 16.2 percent of total employment in the commercial sector in 1414/15. Due to the low percentage of Saudi manpower in this sector, it is imperative that further efforts be made to implement decisions relating to Saudiization. The percentages of non-Saudi employees must be identified, and guidelines for the replacement of non-Saudis and the training of Saudis implemented in private sector establishments and companies, so that more national manpower can be employed during the Sixth Plan years. It is expected that the percentage of Saudis employed in this sector will rise to about 25 percent in 1419/20.

9.1.4 ECONOMIC EFFICIENCY

The number of cancellations from the Commercial Register reached about 13 percent of the accumulated number of registered establishments up to 1413/14. These cancellations can be attributed to the fact that some enterprises lack basic viability and the ability to adjust to new market conditions and developments in the national economy. At the same time, however, the total number of registered enterprises rose from 282,954 in 1409/10 to 391,567 in 1413/14. This vigorous growth in registrations indicates the existence of many investment opportunities.

Intensified training programs by the Chambers of Commerce and Industry will help to improve the viability and raise the efficiency of those commercial establishments now suffering from a lack of experience in planning, administration and finance.

Value added in the trade sector grew at an average annual rate of 1.3 percent during the Fifth Plan period, while employment grew at an average annual rate of 2.4 percent. Thus, productivity -- as measured by the value added per employee -- showed a remarkable decline in these years. The Sixth Development plan aims at reducing the average annual growth in the number of workers in this sector to 0.5 percent.

At least 80 percent of enterprises registered in the Commercial Register are small businesses. Such companies often lack the financial resources to invest in large projects with good economic potential. In the Sixth plan period, mergers of small establishments into larger entities and the establishment of more joint-stock companies will be encouraged.

9.1.5 OPPORTUNITIES AVAILABLE FOR THE PRIVATE SECTOR

In accordance with the government's free market principles, the private sector undertakes almost all activity in the commercial sector. The Ministry of Commerce supports the private sector's role in the development process by supervising domestic trade and non-oil foreign trade, by addressing the constraints that impede the growth of the private sector and by developing procedures and regulations for the practice of commercial activities.

In the Sixth Plan period, the Ministry of Commerce will continue to issue regulations, resolutions and executive by-laws and will review commercial regulations currently in force. It will also continue its responsibility for the official registration of all commercial companies and establishments, registering and monitoring boycotted ships and companies, registering scientific and technical offices, representation offices, branches of foreign companies, companies contracted to the government, as well as regulating the activities of hotels. The Ministry of Commerce will continue to support the role of the Chambers of Commerce and Industry and the Chambers' Council in providing companies and establishments with necessary information and services and strengthening the relations between businessmen, in addition to the necessary training courses organized by the Chambers to upgrade the efficiency of manpower in the sector.

In the Sixth Plan period, more support will be extended to the private sector to enable it to undertake a greater role in the Kingdom's comprehensive development and to encourage it to invest in establishing, operating and managing some projects currently operated by the government. Citizens will be informed about available investment opportunities, and will be encouraged to establish financial companies to invest funds inside the Kingdom and to establish joint investment ventures. Support will

also be given to the Chambers of Commerce and Industry to enable them to perform their tasks. By the end of the Sixth Plan period in 1419/20, it is expected that the number of registered establishments and companies will increase by 86,448, the number of commercial agencies will increase by 2,691, the number of trade-marks will increase by 5,524, the number of professional offices will increase by 789 and the number of hotels will increase by 30.

9.1.6 DEVELOPMENT STRATEGY

The commercial sector's development strategy will be implemented through the following objectives, policies and programs:

9.1.6.1 Objectives

The main objectives for the development of the commercial sector are:

- to ensure that the formulation and implementation of commercial regulations are consistent with the needs of the national economy and aim at promoting maximum economic efficiency at minimum cost;
- to promote the training and development of Saudi manpower and the improvement of productivity;
- to increase the role of the private sector in the further development of commercial activities and the implementation of the sector's development programs;
- to provide local markets with needed goods and services and to ensure that consumers obtain products of good quality in sufficient quantity and at reasonable prices.

9.1.6.2 Policies

The following main policies will be adopted to achieve these objectives and to address the key issues identified above:

- *Commercial Regulation*

Existing regulations and rules will be reviewed in order to promote improved commercial practices and to protect consumer interests. The Ministry of Commerce will coordinate with concerned agencies and the General Secretariat of the GCC with respect to the implementation of the Unified Economic Agreement.

- *Training of Saudis and Replacement of Non-Saudis*

The private sector will be encouraged to develop and implement training programs in coordination with the Council of Saudi Chambers and the Chambers of Commerce and Industry. The Ministry of Commerce will cooperate with the Ministry of Labor and Social Affairs and the Chambers of Commerce and Industry in joint efforts to reduce the dependence on foreign workers and to replace them by Saudi manpower.

- *Support for Private Sector Expansion*

The government will encourage the establishment of more joint stock companies and the consolidation of small commercial establishments into larger, more efficient economic units. Permanent exhibitions will be held in the major cities of the Kingdom for the promotion of national products. The Ministry of Commerce will strengthen its relations with the Chambers of Commerce and Industry, who will be encouraged to increase their contribution to the development of the private sector, to expand their services rendered to commercial establishments, and to develop relations with their counterparts in other countries.

- *Supply and Quality Control*

The Ministry of Commerce will continue to monitor supply and demand movements and the strategic stockpile of food and other consumer items. It will also continue its monitoring activities with respect to local markets, quality control, prices and the control of commercial fraud.

9.1.7 GROWTH TARGETS DURING THE SIXTH DEVELOPMENT PLAN

The trade sector is expected to grow at an average annual rate of 6.2 percent during the Sixth Plan period, while its share of non-oil GDP is expected to reach 11 percent at the end of the plan. The main services provided by the Ministry of Commerce are expected to grow at the following annual growth rates: registration of establishments and companies (4%), commercial agencies (9%), trade marks (4%), professional offices (5%), hotels (2%), sample testing services in quality control laboratories (16.8%), issuance of certificates of origin for manufacturing industries (12%).

9.2 TOURISM SERVICES

9.2.1 PRESENT CONDITIONS

Tourism is a fast growing and important service industry in many countries, where it is regarded as a major source of income and generator of employment. Domestic tourism services in the Kingdom are also regarded as an effective means of preserving the unique values, traditions and identity of Saudi

society. In addition, the development of the tourist industry conforms with the main objectives of long-term economic development aimed at the diversification of the Kingdom's economic base and expanding its sources of income.

The Kingdom is rich in resources and is well endowed with natural, cultural and environmental features, in addition to an advanced transportation network. The development of recent years has also seen the emergence of high quality tourism services such as public parks, hotels and restaurants, as well as exhibition centers, museums and mountain resorts.

Areas with great tourism potential include the Red Sea coast with its coral reefs, the Gulf coastal area near the major urban centers of the Eastern Province, and the Sarawat mountains in the Asir and Baha regions. Health resorts have also been established around the mineral springs of Al Ahsa, Jawf, North Hail and near Al Madinah. Together, the combination of all these natural, social and economic assets provides the potential for a substantial expansion of tourism within the Kingdom, both for Saudi and non-Saudi residents and for citizens of the GCC countries (see Figure 9.1).

A number of government agencies have responsibilities related to the development of tourism, such as the Ministry of Education, which supervises the historical sites, and the Ministry of Agriculture and Water, which supervises the Kingdom's forests. The General Directorate of Hotels and the Ministry of Commerce evaluate investment feasibility studies for hotel projects and perform a range of regulatory functions in the hotel sector, such as the granting of operating licenses, the classification and grading of hotels into different price categories, and the inspection of facilities to maintain standards of quality and safety.

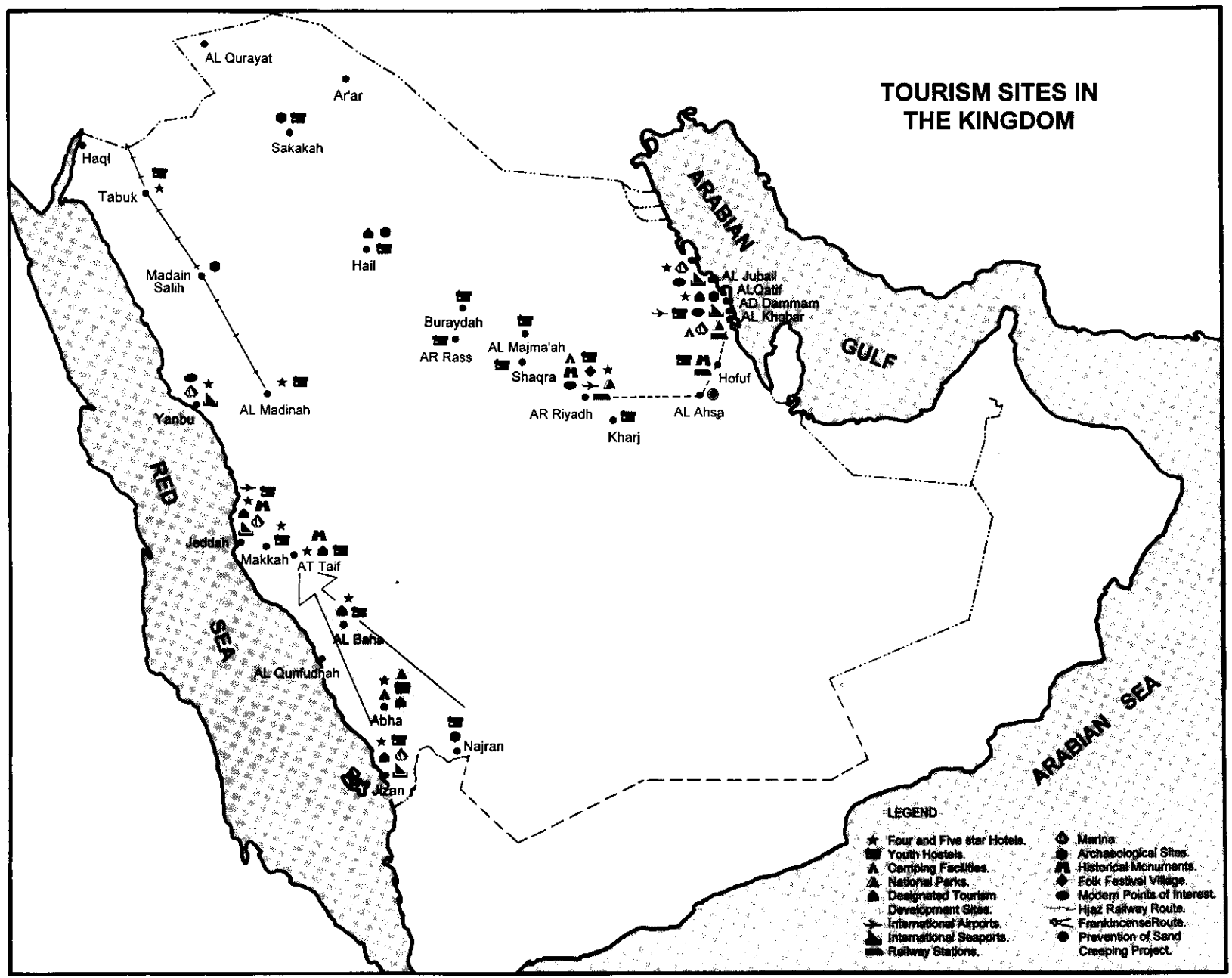
A major expansion in the provision of tourism services occurred during the Fifth Plan period. The private sector responded positively to a wide range of government support measures for the development of tourism, such as the provision of loans on favorable terms, continuous encouragement for the establishment of hotels and tourism companies, and the allocation of construction plots for these projects in designated tourism areas.

Due to the availability of a wide range of tourism services, the Kingdom is now capable of hosting international and regional conferences, meetings and sports events. Local residents and tourists alike can now enjoy a variety of leisure activities, whether in the desert or at coastal resorts, or in Asir, Baha and Taif as summer resorts, or in other tourism areas.

9.2.2 KEY ISSUES

At present, there is no government authority responsible for the planning and promotion of tourism in the Kingdom. Thus, although the potential for expanding domestic tourism is widely recognized, there is a need for greater institutional support for private sector investors in identifying suitable

Figure (9-1)


TOURISM SITES IN THE KINGDOM
AL Qurayat
Ar'ar
Sakakah
Haql
Tabuk
Hail
Madain Salih
Buraydah
AR Rass
AL Majma'ah
Shaqra
AR Riyadh
Kharj
AL Ahsa
Hofuf
AL Jubail
ALQatif
AD Dammam
AL Khobar
ARABIAN
GULF
Yanbu
AL Madinah
RED
SEA
Jeddah
Makkah
AT Taif
AL Baha
AL Qunfudhah
Abha
Najran
Jizan
ARABIAN SEA
LEGEND
Four and Five star Hotels.
Youth Hostels.
Camping Facilities.
National Parks.
Designated Tourism Development Sites.
International Airports.
International Seaports.
Railway Stations.
Marina.
Archaeological Sites.
Historical Monuments.
Folk Festival Village.
Modern Points of Interest.
Hijaz Railway Route.
FrankincenseRoute.
Prevention of Sand Creeping Project.

investment opportunities, in determining the possible future patterns of demand for tourism services and in domestic tourism development to encourage citizens to enjoy their holidays and vacations inside the Kingdom. In this regard, the Provincial Council of each region which possesses significant potential to develop tourism, in conjunction with the board of the local Chamber of Commerce and Industry in that region, must encourage the private sector to expand its investments in tourism.

9.2.3 SAUDIIZATION

The tourism services sector is currently characterized by a small share of Saudi manpower in total employment, particularly in hotels. In 1414, the total number of employees in hotels amounted to 12,516, of whom only 864, or 7 percent, were Saudis. However, through the establishment and implementation of suitable training programs and adequate incentives, employment opportunities for Saudi nationals in this steadily growing sector could be significantly expanded.

9.2.4 PRIVATE SECTOR OPPORTUNITIES

In conformity with the priorities of the Sixth Development Plan to establish policies for encouraging the private sector to invest within the Kingdom, the government undertakes the following measures to support the private sector in the development of tourism:

- providing loans for the establishment of hotels and tourism areas;
- providing physical infrastructure in the tourism areas, such as roads, communications, telephones, electricity, fresh water, in addition to establishing gardens and parks in regions that have significant tourism potential;
- allocating land and implementing land use regulations in tourism development areas;
- organizing athletic and cultural festivals that encourage domestic tourism, such as the heritage and cultural festival in Al Janadriyah and the athletic festivals organized by the General Presidency for Youth Welfare.

Against this background of government support, the private sector was able to establish the Saudi Company for Hotels and Tourism, a major joint stock company with share capital of SR 500 million, specialized in tourism development. Ten other joint venture companies in the hotels and tourism sector have also been established, with total capital of SR 1,214 million. The Saudi Company for Hotels and Tourism participated in the construction of hotels, tourism villages, sports clubs, commercial exhibitions and other similar services.

The Kingdom has witnessed remarkable developments in the field of tourism as a result of continuous private investment with government support. The number of hotels in the Kingdom rose

from 259 in 1410/11 to 287 in 1413/14, while the number of hotel bedrooms rose from 23,005 to 24,730 over the same period. These hotels, located in the main cities, include 22 in the five-star category, 56 in the four-star category, 81 in the three-star and 121 in the two-star categories, while 7 are rest houses. Furthermore, there are sports clubs and tourism villages on the Red Sea and Arabian Gulf coasts, and many furnished rental units in these areas.

Tourism activity is expected to expand during the Sixth Plan period, and the private sector will continue to establish more hotels, rest houses, tourism villages and recreational communities. Many tourism projects are currently being undertaken in different parts of the Kingdom and these are expected to be completed during the Sixth Plan. For example, two tourism projects are being established in At Thoal and others on the Sulayman Gulf shore and the Red Sea coast. Also, a major tourism project will be established on the Red Sea coast north of Jeddah, while tourism housing units are being constructed at Azizia shore on the Arabian Gulf, the Buhayrah recreational project is being established in Dammam and a coastal resort area in Al Khobar.

Future plans of private sector companies indicate that the following projects will also be established: Sawdah tourism center, Habalah tourism center and cable cars, Al-Qurala tourism center, Zarah mountain, Shamsan project, Khamis Mushayt recreational city project, and coastal projects, exhibition centers and other tourism projects in different parts of the Kingdom.

9.2.5 DEVELOPMENT STRATEGY

The development strategy for the tourism sector in the Sixth Plan will be implemented through the following objectives, policies and programs.

9.2.5.1 Objectives

The objectives for the development of tourism in the Sixth Plan are:

- To develop the tourism sector into one of the major economic sectors capable of creating self-generating sources of income and contributing to economic and social progress;
- To develop tourism and recreation areas in a manner which does not conflict with protection of the Kingdom's natural resources, historical sites and social traditions;

9.2.5.2 Policies

These objectives will be pursued through the following policies:

- The expansion of diverse tourism facilities and the provision of recreational services in the tourism development areas will continue to be encouraged;

- The facilitation of private sector participation in the development of tourism will be continued;
- Tourism-related agencies will cooperate in the active promotion of domestic tourism and the provision of high quality services;
- Tourism and hotel management study programs will be established in the universities and the IPA to prepare training programs for Saudi nationals in the field of tourism activities.

9.3 STANDARDS AND SPECIFICATIONS

9.3.1 PRESENT CONDITIONS

Standards and specifications are key instruments for measuring the scientific and technological progress of nations. The establishment and implementation of standards and specifications is a prerequisite for ensuring the quality of both imported and local products and for protecting the consumer against low quality goods.

The commitment to quality standards in the Kingdom has evolved with the growth in its international trading activities, as attention focused increasingly on the quality of imported goods and their conformity to established international standards. At the same time, the adherence of national products to specific standards has boosted their competitiveness against imported products and has inspired consumer confidence in these products both within the Kingdom and abroad.

The unique environmental conditions of the Kingdom, combined with Islamic values and the prevailing Arab traditions and culture, provided an incentive for developing a Saudi system of specifications. Accordingly, the Saudi Arabian Standards Organization (SASO) was established by Royal Decree NO.(M/10) in 3/3/92, to develop and publish Saudi standards and specifications for manufactured goods, to develop testing methods and calibration and metrology procedures, to follow up standards and specifications of other international organizations, to introduce a system of "quality marks", "conformity certificates" and services approval, and to enhance cooperation with Arab and international organizations on matters related to standards and specifications.

The Fifth Plan objectives of SASO included the preparation of 500 draft specifications and the approval of 250 specifications in their final form. During the plan period, SASO prepared 900 standards and thus exceeded the plan target. It also approved 225 specifications, in addition to the updating or modification of 26 standards, thus achieving the plan target. This increased the total number of specifications issued by SASO up to the end of the Fifth Plan to more than 800. The specifications

approved during the Fifth Plan covered many fields: food items (101), building and construction materials (6), electrical products (27), mechanical products (31), chemical and petroleum products (57), spinning and weaving products (9), measurement and calibration (14), and quality management systems (6).

During the Fifth Plan, SASO continued to issue licenses for the use of quality marks, with 75 Saudi factories producing 180 goods being granted such licenses. SASO also continued the approval of conformity certificates for many imported goods, the provision of technical advice, the analysis and testing of samples in its laboratories, the issuing of export certificates for food products and customs clearance for some goods. In addition, SASO examined newly issued industrial licenses so that the availability of approved specifications pertaining to the products and activities of such licenses could be identified.

SASO also continued its participation in various standards organizations at Arab, regional and international levels. As the Secretariat of the Gulf Arab Standards Organizations, SASO contributes to the preparation of standard Gulf specifications. It also participates in the specifications activities of the Arabian Industrial Development and Mining Organization's technical committee. SASO also continued its role as a member of the International Standards Organization (ISO), the International Electrotechnical Commission, and the International Organization for Legal Metrology, amongst others.

9.3.2 KEY ISSUES

To boost the activities of the standards and specifications system and to increase its contribution to development, the following issues must be addressed during the Sixth Plan period.

Shortage of Technical Capabilities and Expertise

The preparation and approval of a wide range of standards and specifications, in addition to the other activities of SASO, involves many stages and requires the services of experienced technical manpower. At present, there is a shortage of such skilled personnel, thus hampering the ability of SASO to carry out its tasks efficiently.

Simplification of Procedures and Development of Work Methods

The prolonged technical procedures required for the preparation of draft specifications has led to delays in their final approval. Such procedures must be simplified, particularly for items that do not require changes in each specification, since many of them are not important to local environmental and social conditions. In this regard, SASO must enlist the assistance and participation of experienced concerned agencies to improve and expand the base of approved Saudi specifications.

Introduction of Standard Specifications (ISO 9000)

The set of International Standard Specifications (ISO 9000) has acquired special significance recently because economic groups, such as the European Union, give priority to imported products that conform to ISO 9000. SASO has already initiated the first steps to introduce these specifications as Saudi and Gulf specifications and will increase its efforts in this domain in the Sixth Plan, so as to ensure the export success of many Saudi products and industrial facilities.

9.3.3 SAUDIIZATION

By the end of the Fifth Plan, 94 percent of SASO's total staff were Saudis. At different levels within the organization, Saudis accounted for 87 percent of administrative jobs, 94 percent of professional jobs, 83 percent of the skilled technical positions. Although SASO had great success in Saudiizing clerical and manual jobs, its continuing need for outside technical expertise affected its efforts to Saudiize the professional and skilled labor jobs which represent the majority of its positions. Such circumstances are expected to prevail during the Sixth Plan period due to the nature and expanding scope of SASO's work and the different types of expertise required. In the Sixth Plan no new positions will be created and SASO will try to recruit Saudis to fill existing vacancies. As a result, total employment at SASO is expected to increase, and 96.5 percent of whom will be Saudis. Administrative positions will be fully Saudiized, while Saudis will account for 97 percent of professional and 84 percent of skilled technical jobs.

9.3.4 ECONOMIC EFFICIENCY

A variety of indicators can be used by SASO to measure productivity levels in its various activities, and hence to develop methods needed to upgrade and improve these levels, such as the ratio of approved specifications per employee or the ratio of approved to draft specifications.

The organization is expected to continue with the tasks it has been entrusted with during the Fifth Plan, including the customs clearance of some goods and the issuance of export certificates, in addition to its basic tasks pertaining to the preparation and approval of draft specifications, the operation of quality and calibration laboratories, the simplification of procedures and reducing the various stages between draft specification and final approval.

With the expected increase in employment and the enhancement of employee skills through intensive training programs, SASO will be able to perform its tasks more effectively and to raise its productivity levels.

9.3.5 PRIVATE SECTOR OPPORTUNITIES

SASO has established a broad base of national standards and specifications and has provided several quality improvement advisory services to the private sector and national industries. Private sector industries applied these specifications, while SASO continued its efforts to convince concerned parties of the advantages of compliance with standard specifications. In this regard, it is the mutual responsibility of SASO and the private sector to develop awareness of the importance of specifications and the application of quality standards.

Although there is no private specialized institution in the field of specifications, there are seven private quality control laboratories approved by SASO at the end of the Fifth Plan. This number is expected to increase steadily during the Sixth Plan period. These laboratories provide services to the commercial and industrial sectors, as well as to individuals in different fields.

9.3.6 DEVELOPMENT STRATEGY

The development strategy of the standards and specifications system in the Kingdom will be implemented through the following objectives, policies and programs.

9.3.6.1 Objectives

- to meet the increasing requirements of Saudi commercial, industrial and other sectors for Saudi standards and specifications;
- to protect consumers by ensuring that both locally produced and imported goods meet appropriate quality standards;
- to improve the competitiveness of national products by ensuring that they satisfy high quality standards;
- to boost the Kingdom's foreign trade through abolishing technical barriers arising from differences in specifications.

9.3.6.2 Policies

To achieve its Sixth Plan objectives, SASO will implement the following policies:

- Preparation of standards and specifications commensurate with the Kingdom's environmental conditions;
- Approval of Saudi standards and specifications for both imported and locally produced goods, testing methods and calibration and metrology procedures, technical codes and terminologies;

- Updating Saudi standards and specifications when necessary, to keep abreast with technological developments and limiting inappropriate specifications as far as possible;
- Continue to apply the system of *quality marks* and *conformity certificates* for goods and to approve services that conform with the quality criteria specified by Saudi standards and specifications;
- Enhancement of SASO's capabilities to monitor its level of commitment towards the approved standards;
- Continue supporting private laboratories which have the capability and efficiency to perform the required tests.

9.3.6.3 Main Programs

SASO will implement these policies through the following four main programs:

Management, Operation and Specifications: This program deals with the basic operations of SASO in the preparation and approval of specifications and standards, in addition to its administrative activities.

Maintenance and Operations: This program concentrates on managing and supervising the maintenance and operation of SASO's facilities and equipment.

Manpower Development: This program aims at the development of SASO manpower through appropriate training programs in accordance with SASO's requirements for qualified technical manpower in the field of standards and specifications.

Quality Control: This program aims at completing the establishment of SASO's quality control laboratories and the establishment of some specialized laboratories for the private sector. It also aims to continue applying *quality marks* and *conformity certificates* systems for products, organizing customs clearance and granting export certificates for food products.

9.4 STATISTICAL SERVICES

9.4.1 PRESENT CONDITIONS

Successive development plans have highlighted the need for accurate and comprehensive statistics in the development planning process and in the measurement of economic progress through the implementation of these plans. In this respect, the various statistical services in the Kingdom have played an important role up till now. As the economy becomes more diversified and advanced, however, the Kingdom's statistical services will need to expand beyond their earlier focus on the enumeration of a limited

range of socioeconomic data towards the preparation of advanced statistical and analytical studies of social and economic developments, and to make more intensive use of modern communication methods in the timely provision of data to users.

The statistical information sector, which is composed of different government agencies and some private sector establishments that collect, compile and distribute statistics in their own specialized fields, generally follows international organizational arrangements and practices. The Central Department of Statistics (CDS) within the Ministry of Finance and National Economy is the main agency responsible for the collection, preparation and dissemination of social and economic statistics.

During the Fifth Plan period, the CDS developed and consolidated its systems of data collection and statistical reporting in different fields. Its two major achievements in this period were the Population Census of 1413 and the Establishment Survey of the same year. The Population Census provides substantial new information that will be indispensable for research and planning purposes, such as demographic indicators, employment statistics and housing data. The Establishment Survey covered more than 150 cities and villages and was more extensive than the earlier survey of 1401, thus contributing to greater understanding of the private sector's size and role in economic development. Other CDS activities during the Fifth Plan period included the collection and dissemination of statistics on foreign trade, national accounts, prices, and government services, in addition to the publication of its annual reports and statistical yearbooks.

Statistical yearbooks have also been published by other government agencies, such as the Ministries of Interior, Health and Education, and the General Organization for Social Insurance. These statistical yearbooks have been improved in terms of the range and quality of data. Information bases have also been established by other agencies through such studies as the comprehensive national transport study undertaken by the Ministry of Planning, the labor market study of the Manpower Council, and the field studies on employment in the Kingdom undertaken by the Chambers of Commerce and Industry and the Institute of Public Administration.

9.4.2 KEY ISSUES

Despite these achievements, a number of key issues need to be addressed during the Sixth Plan period. The key issues have been discussed in detail in Chapter 3, so that two issues are discussed only briefly here:

Gaps in Information Coverage

Effective policy making, planning and decision-making in both the public and private sectors is constrained by continuing information gaps. There is a lack of data on some development issues,

such as the regional distribution of economic activities, natural resources, investment opportunities and production. There is an urgent need to develop data and information on vital economic structures and indicators.

Data Collection and Dissemination Intervals

The collection and updating of data take place on an irregular basis, thus leading to gaps in time series data that limit their use. There is also a need to reduce the elapsed time between data collection and the availability of information to users and to expand the publication and dissemination of processed data.

9.4.3 SAUDIIZATION

In the CDS, the central government agency in the field of statistical services, Saudi nationals accounted for 92.6 percent of total employment at the end of the Fifth Plan period. The planned training and scholarship programs of the CDS will ensure the full replacement of non-Saudis by the end of the plan period, so that all employees will be Saudis.

9.4.4 PRIVATE SECTOR OPPORTUNITIES

Although government statistics are widely used by the private sector, investment decisions could be better informed if the private sector itself were to undertake more economic, commercial, marketing and financial studies and surveys, particularly with respect to industrial surveys, product marketing and available investment opportunities. Such surveys could be conducted in coordination with the CDS. In this regard, greater coordination is required between the government statistical services and the needs of the private sector.

There will be opportunities for the private sector to participate in many research studies to be undertaken by the CDS in the Sixth Plan period, such as manpower studies and economic studies related to commercial and industrial establishments. The CDS can employ the private sector to conduct some or all field surveys and to undertake data processing and analysis. In addition, other government agencies may also employ the services of the private sector to conduct statistical surveys.

9.4.5 DEVELOPMENT STRATEGY

The development strategy for statistical services will be implemented through the following objectives, policies and programs.

9.4.5.1 Objectives

Since the availability of accurate statistical information has become a prerequisite for economic and social transformation, the important role of agencies that prepare and provide such statistics

is clearly evident. Particularly important in this regard is the Central Department of Statistics, for its crucial role in providing statistical surveys to serve management, planning and research purposes, and in providing the necessary frameworks to achieve the following objectives:

- to diversify and expand the statistical base for the national economy;
- to develop and coordinate statistics related to the private sector;
- to develop statistical services in both the public and private sectors.

9.4.5.2 Policies

The expansion and improvement of the statistical services will require the implementation of the following policies:

- Users will be provided with reliable and updated information about economic, social and demographic structures and their future trends.
- The quality of field research will be improved and its continuity maintained.
- There will be better coordination between official statistics and private sector users.
- The timely collection, processing and dissemination of data will be facilitated by the adoption of appropriate technologies and administrative techniques.
- The financial and human resources of the statistical departments at government agencies will be increased, particularly in the CDS, and there will be better coordination between the CDS and other government agencies.
- The private sector will be supported and encouraged to undertake more field studies aimed at stimulating investment and rationalizing decisions.
- Citizen awareness will be promoted, so that they can give reliable information to the CDS.

9.4.5.3 Main Programs

These policies will be implemented through the following programs:

Population Research: This program covers studies and research related to the population and labor force, in terms of population characteristics and demographic indicators at both Emirate and Kingdom levels, in addition to the structure and distribution of the labor force by sector and occupation. This program also covers household budget surveys, Government services surveys and updating of information.

Economic Research: This program deals with economic research and studies at government and private sector levels, and will include the private sector establishment survey, which may be either

comprehensive in its coverage or based on samples conducted at different times. In addition, there will be a qualitative census of these establishments classified by economic activity. The program will also include economic research at national level on various price indices, national accounts and foreign trade.

Support Analysis, Studies and Research: Through this program, statistical studies will be diversified, both quantitatively and qualitatively, particularly following the availability of the economic and population data base in the population and housing census completed by the CDS in 1413. Similarly, the data base available after the completion of the establishments survey will deepen the statistical material available for economic analysis and population studies during the Sixth Plan period.

9.4.6 GROWTH TARGETS DURING THE SIXTH PLAN

The CDS will exert further efforts during the Sixth Plan to address the key issues which impede the development and expansion of the statistical services. The CDS will also undertake many studies and research on economic and population matters, including:

(A) Population Studies

1) Analytical studies based on the Population and Housing Census;

2) Demographic studies on birth rates, mortality rates, immigration and emigration, education and health, in order to identify population characteristics and growth rates;

3) Labor force research by sex, age and occupation;

4) Annual Hajj statistics on pilgrims from inside the Kingdom, and the number and type of vehicles in the holy places;

5) Household budget surveys and consumption expenditures every five years;

6) Government services survey and annual updating of information.

(B) Economic Studies

1) Economic research about the private sector, including a comprehensive private establishment survey every five years; annual economic surveys of national industries and establishments; economic surveys of private sector companies in the commercial services and distribution sectors, construction, financial services, real estate, gas and water sectors; annual and monthly sample surveys of private establishments.

2) Statistics on price indices including cost of living, wholesale prices, producer prices, house rents, export and import prices; preparation of international comparisons; the collection of such statistics on a monthly and yearly basis.

3) National accounts, including income, output and expenditure, capital formation, capital balances, and the preparation of Input-Output tables every five years.

4) Foreign trade, including the tabulation of customs data by volume, value and origin/destination; the publication of quarterly and biannual reviews on foreign trade.

In addition to these studies, the CDS will undertake statistical analysis of such research and on other statistical reports it receives, and will continue to issue its regular reports and reviews.

CHAPTER 10

HUMAN RESOURCES DEVELOPMENT

10. HUMAN RESOURCES DEVELOPMENT

The development of human resources is the basic pillar for realizing the objectives and aspirations of the development process. This is attributed to the fact that education and training raises the quality and productivity of the work force, as well as contributing to the cultural and personal development of the individual. This chapter addresses the present conditions, key issues, objectives, policies and programs that will guide the development of human resources throughout the Kingdom in the Sixth Plan period in the following sectors:

- *General Education,* which extends from kindergartens to secondary education, and includes some teacher training colleges for males and females;
- *Higher Education,* which covers education in universities and colleges;
- *Technical Education and Training,* which covers the various stages of technical education and vocational training as wall as professional training in both the public and private sectors;
- *Science and Technology,* which covers agencies involved in science and technology and their role in the economic development process.

10.1 GENERAL AND HIGHER EDUCATION

The government provides general education for both boys and girls, through the Ministry of Education (MOE), the General Presidency for Girls Education (GPGE) and some other government agencies. The private sector is also active in the provision of general education. The Ministry of Education and the General Presidency for Girls Education also provide educational opportunities such as (special education) for certain social groups, as well as literacy programs and adult education. The government also provides higher education (post secondary) through the universities, GPGE colleges, military and security colleges, and some other government agencies and GOTEVT colleges.

The government provides free general and higher education, and financial bursaries for male and female students in some areas of general education. University students receive financial bursaries and free housing, along with meals, books and transportation at subsidized prices, while female students are provided with free transportation.

10.1.1 PRESENT CONDITIONS

Based on the fact that investment in human capital is the corner stone for future economic growth and social prosperity, the government has accorded its utmost care and attention to the development of the education sector. This is reflected in the expenditures on education through the state budgets, as more than SR 153 billion has been allocated for education over the Fifth Plan period, or about 18 percent of approved budgets over this period.

These allocations have enabled the education sector to achieve high growth rates across a range of education variables, as shown for the General Education sector in Table 10.1 during the period 1409/10-1413/14. Student enrollments at the elementary stage increased at an average annual rate of 3.8 percent for males and 4.6 percent for females over this period. Enrollments at intermediate stage rose at an average annual rate of 7.4 percent for males and 10.1 percent for females, while at the secondary stage, enrollments increased by 5.4 percent for males and 11 percent for females over the same period. Enrollments at teacher training colleges increased at an average annual rate of 12.5 percent for males and 20.3 percent for females.

The considerable expansion in the intermediate and secondary stages of general education, in response to social demand, is clearly shown in Table 10.1 and is particularly pronounced in the case of girls' education. This growth in student numbers has been accompanied by rapid growth in the total numbers of male and female teachers.

Table 10.1

Average Annual Growth in General Education
(1409/10 - 1413/14)

	Elementary		Intermediate		Secondary		Teacher Training	
	Boys (%)	Girls (%)	Boys (%)	Girls (%)	Boys (%)	Girls (%)	Male (%)	Females (%)
Enrollments	3.8	4.6	7.4	10.1	5.4	11.0	12.5	20.3
New entrants	2.5	8.7	7.1	11.2	5.9	11.8	12.0	24.3
Graduates	6.2	6.9	8.5	10.1	8.0	12.0	2.7	14.8
Classrooms	3.6	7.5	7.0	10.0	6.7	11.8	---	---
Saudi Teachers	6.4	9.0	10.0	13.6	13.1	11.9	3.6	5.3
Total Teachers	5.5	7.0	8.7	10.8	11.4	13.7	6.0	8.2

The infrastructure of the MOE and the GPGE also expanded considerably during the Fifth Plan period. Between 1409/10 and 1413/14, the number of elementary schools increased from 8,370 to more than 10,000, the number of intermediate schools increased from 2,884 to more than 4,000, the number of secondary schools from 1,103 to about 1,700, and the number of teacher training colleges from 40 to 43.

Table 10.2 shows the average annual growth rates achieved for a number of variables at the higher education stage over the period 1409/10 to 1413/14. Over this period, the total number of

students increased at an average annual rate of 7.1 percent, while the number of graduates from the system increased at an average annual rate of 5.3 percent. This growth in the number of students has been accompanied by growth in the numbers of teaching staff, with Saudi staff members growing at an average annual rate of 4 percent. These growth rates have been achieved largely in response to the financial allocations to the education sector, which rose from about SR 23 billion in 1409/10 to SR 30 billion in 1413/1414.

Table 10.2

Average Annual Growth in Higher Education (1409/10 - 1413/14)

	Bachelor Level %	Post Graduate %
Total Students	7.1	1.7
New Entrants	4.6	12.4
Graduates	5.3	8.1
Saudi Teaching Staff★	4.0	---
Non-Saudi Teaching Staff★	5.3	---
Admin. & Technical Staff★	-0.02	---

★ Providing services at both bachelor and post graduate levels

The Kingdom's education sector also witnessed significant developments at policy implementation and decision-making levels in the Fifth Plan period:

- The establishment of the Higher Education and Universities Council by a Royal Decree on 4/6/1414 to act as the highest administrative authority for regulating, coordinating and supervising post-secondary education at all levels.
- Private sector participation in the construction of government schools according to the measures specified by executive and financing agencies.
- To support the balanced development of post-secondary education, work is currently under way by the Ministry of Planning, in collaboration with the Ministry of Higher Education and the universities, to prepare an overall plan for the development of post-secondary education. This overall plan will address most of the higher education issues through the preparation of an integrated policy framework and the identification of appropriate solutions.
- Expansion in the kindergarten programs by both the public and private sectors.
- Upgrading the intermediate colleges affiliated to the Ministry of Education and the General Presidency for Girls Education into colleges that offer Bachelor Degrees.

- Annexation of the GPGE's developed colleges to the Girls colleges.
- Transferring the responsibility of special girls' education to the General Presidency for Girls' Education.
- The introduction of librarian studies into girls' schools.
- Replacement of the advanced secondary education system for boys by the departmental system.
- Replacement of the credit hour system in universities by the academic term.
- Expanding computer and information technology programs at the secondary level.

10.1.2 KEY ISSUES

The significant growth and achievements of the education sector in the Fifth Plan period have been accompanied by a number of key issues for which remedial measures are needed, so that the education sector can fully realize its development objectives. The most significant of these issues are described below.

GENERAL EDUCATION ISSUES

Internal Efficiency

Although both the Fourth and Fifth Plans stressed the importance of improving the output of the education system, data concerning the 1406/07-1411/12 cohort analyzed during the preparation of the Sixth Plan, indicate the following:

a) Continuous high repetition rates, particularly in the first and fourth grades of the elementary stage, the second grade of the intermediate stage, and the third grade of the secondary stage.

b) Continuous high rates of drop-out, particularly in the first and fourth grades of the elementary stage, and notwithstanding the minor improvements in the internal efficiency of education compared with earlier years; this phenomenon does not conform with the sixth basic strategic principle that calls for mandatory primary education for all boys and girls.

c) A decline in the internal efficiency of the system as a result of high repetition and drop-out rates.

d) An increase in the average number of years invested in graduating students from the elementary stage to the secondary stage.

Pre-Elementary Education

The capacity to learn in school is determined in part by a child's pre-school learning experience. Many education studies have stressed the importance of pre-school education in providing children with the knowledge and experience to cope with the school setting. Therefore, it is imperative to expand pre-elementary education programs, along with encouraging the private sector's contribution in this direction.

Preparation and Training of Saudi Teachers to Replace Non-Saudi Teachers

The teacher is considered to be the cornerstone of the educational process. Thus, more attention should be given to the educational preparation of the teacher, so as to provide him with the necessary basic skills in his field of specialization. Mere educational preparation is not sufficient in this regard, however. Teachers should also continue to acquire knowledge of science and culture, and thereby gain sufficient practical experience of education following their formal preparation. It is beyond dispute that the proper education of teachers requires a period of in-service training.

Thus, it is important not only to provide Saudi teachers with adequate educational preparation and training, but also to emphasize that practical experience is needed no less than theoretical preparation, and that proper class management requires experienced, capable and well-trained teachers.

Curriculum Development and Teaching Methods

Notwithstanding the ongoing efforts of agencies involved in the development of academic curricula, greater efforts must be made in reviewing the curricula and teaching methods of theoretical subjects, and in adopting modern methods that concentrate on understanding, assimilation, thinking, derivation and problem solving.

HIGHER EDUCATION ISSUES

The following key issues are facing the higher education sector:

University Education for Saudi Girls

The rapid expansion in the institutions of girls' education has been a great success, in both quantitative and qualitative terms. However, because the role of post-secondary educational institutions is a comprehensive one, contributing as they do to intellectual and cultural heritage as much as to the preparation of individuals to meet the needs of development, the education programs for Saudi girls need to be thoroughly reviewed, in conformity with social demands, development needs and Islamic Sharia teachings.

Capacity of Post-Secondary Educational Institutions

With the increasing number of male and female students graduating from the secondary stage, the post-secondary educational institutions are facing a growing social demand for education. This is a controversial matter amongst education officials. Some believe that universities should be capable of accommodating all male and female students who wish to continue their education, while others think that universities should accommodate only restricted numbers of those secondary stage graduates who are efficient, capable and willing to continue university study. During the Sixth Plan, universities shall continue to admit students in conformity with the Plan's objectives and strategies. At the same time, the plan for the development of post-secondary education currently under preparation will establish the policy framework to be followed by the post-secondary education institutions in this regard.

Internal and External Efficiency

The accelerating growth of higher education has been accompanied by lower internal and external efficiency. Evidence for this lies in the high number of years spent by some students prior to graduation, the high average number of educational years invested per graduate and the mis-match between the qualifications and experience of graduates and those required in the labor market.

Coordination between Post-Secondary Educational Institutions

Enhanced coordination between post-secondary educational institutions, in terms of educational programs, subject areas of specialization and admission policies, is considered a vital issue during the Sixth Plan period. This coordination process is undertaken by the Council of Higher Education and Universities established by Royal Decree No. M/8 of 4/6/1414.

Expansion in Post-Graduate Studies

During the Fifth Plan period, some higher education institutions expanded their post-graduate studies in a manner that was inconsistent with their capabilities, while others refrained from expanding even though they had acquired adequate facilities and capabilities. Thus, there is a need for an accreditation system -- both internally within the Kingdom's higher education system, and externally in conjunction with internationally recognized institutions -- whereby these post-graduate programs can be evaluated and upgraded according to the availability of pertinent resources of sufficient quality, such as teaching staff, laboratories and scientific reference books, text books and periodicals. Furthermore, it is imperative that the standard of research prepared for scientific theses be properly evaluated, and that the scope of such research deal with development issues.

Links between Higher Education Institutions and the Private Sector

This issue concerns the many dimensions of the desired links between the private sector and the higher education institutions, taking into account the potential benefits of such cooperative links and the needs of both sectors for educatian in the context of national development:

- Given that the private sector (i) benefits from the output of the higher education institutions through the employment of graduates, and (ii) already provides practical training for students of these institutions during the summer holidays, consideration should be given to the inclusion in the curriculum of an on-the-job training period, in order to complement -- and make more relevant to private sector needs -- the existing education and skills acquired on graduation. At the same time, the higher education institutions could also provide applied research and development in the producing and service sectors for the benefit of the private sector.
- It is through this linkage that the performance of the graduate can be continuously evaluated by the private sector and that the programs, curricula and teaching methods for the preparation of these graduates could be re-considered.

Role of Continuing Education

Continuing education has an important role to play in expanding the knowledge of both specialists and non-specialists without the need to develop academic programs granting degrees or diplomas. It is an important way of keeping the work force up-to-date on changing technology and other developments in their fields. With the exception of some colleges with continuing education units, insufficient attention has been paid to this type of education by the higher education institutions.

10.1.3 OPPORTUNITIES FOR THE PRIVATE SECTOR

Although the government will continue to be the main provider of education services to citizens, it will further encourage the private sector to expand its activities in this field. In this regard, the private sector has opened 1,100 private schools for boys and girls, while the students attending these schools account for between 6 and 7 percent of total school enrollments. The government has provided these private schools with various kinds of financial and other assistance, with financial assistance amounting to about SR 432 million during the Fifth Plan period. The government also constructed 400 schools through direct financing by the private sector, at a cost of around SR 6 billion. The government operates these schools on a lease basis for 10 years, after which time their ownership will be transferred to the government. During the Sixth Plan, the government will provide the following opportunities for greater private sector participation in the delivery of education services:

- continuation of the policy of private sector financing of some school and education facilities construction projects; construction projects in the education sector amounting to over SR 23 billion are expected during the Sixth Plan period;
- the opening of more private schools, so that student enrollments in these schools will reach 10 percent of total enrollments Kingdom-wide;

- the opening of more kindergarten schools;.
- the establishment of private university colleges or technical colleges;
- participation in the application of a cooperative education system;
- expansion in school transportation services;
- provision of maintenance services for vehicles of those government agencies undertaking educational services, in addition to preventive maintenance for technical machinery and equipment in use.

10.1.4 DEVELOPMENT STRATEGY

The development strategy for the education sector in the Sixth Plan period will be implemented through the following objectives, policies and programs:

10.1.4.1 OBJECTIVES

General Education:

- To continue providing education opportunities and related services to all citizens;
- To ensure that the general education system is responsive to the Kingdom's religious, economic and social needs;
- To reduce illiteracy rates;
- To continue to improve the responsiveness of the general education system to the requirements of socio-economic development;
- To provide educational facilities at least possible cost;
- To continue updating the school curricula in response to the rapid developments taking place in various branches of knowledge;
- To ensure that the general education system places sufficient emphasis on quality;
- To continue the replacement of non-Saudi administrators and teachers by qualified Saudis.

Higher Education:

- To provide university places to citizens who can demonstrate their efficiency, their scientific and mental capabilities, and their willingness to continue their studies;
- To raise the quality and efficiency of the higher education institutions in order to improve the standard and content of the educational process;

- To ensure that the activities of the higher education institutions are responsive to social and economic development needs;
- To expand the absorptive capacity of higher education institutions to meet the needs of social and economic development;
- To expand the base of higher education and to diversify its programs to serve development issues;
- To improve the coordination and cooperation amongst post-secondary education institutions so that they can realize their own particular objectives and those for development in general;
- To provide, maintain and operate university facilities at lowest possible cost, while maintaining quality and improving performance;
- To promote research in science, technology and the arts, and to find adequate solutions to the economic, social and technological challenges that lie ahead;
- To promote literary works that extend the boundaries of knowledge and the understanding of Islamic thought, thereby enabling the Kingdom to fulfill its leading role in the enrichment of human culture, with due regard to the task of translating literary works of scholarship and science for the benefit of the maximum number of citizens;
- To continue the development of Saudi manpower in terms of both quality and quantity, and the replacement of non-Saudis by Saudi nationals.

10.1.4.2 POLICIES

The Sixth Plan includes a range of policies aimed at achieving the objectives of the general and higher education systems, all of which are in accordance with the main strategic themes of the plan and the needs of long term development :

- to raise economic efficiency;
- to enhance the private sector's role in the national economy; and
- to develop Saudi manpower and expand their employment opportunities.

The following policies have been formulateal in light of the general objectives and strategic bases of the sixth Development plan mainly to address the key issues identified above.

(A) GENERAL EDUCATION POLICIES

Improving Internal Efficiency

The internal efficiency of general education could be improved by:

- studying the application of an automatic promotion system between grades, particularly at the first grades of the elementary stage, without affecting academic quality and standards;
- using more flexible individual criteria for evaluating students' progress;
- emphasizing the guidance and counseling of students who are low achievers, and identifying weaknesses early in order to address the phenomena of repetition and drop-out;
- promoting better links between parents and schools in following up the educational standards of students, so that students can be provided with the knowledge and skills needed to solve their scientific, psychological and other personal problems;
- continuing to concentrate on and expand extra-curricular activity as a key instrument in the educational process, along with providing the necessary financial and human resources.

Improving the Quality of Education

The following measures will be undertaken to improve the quality of education:

- The academic curricula and teaching methods will be reviewed, improved and made more consistent with student needs, so as to encourage creativity and promote problem solving skills.
- Integration between curricula development and teacher training will be improved.
- Improved teacher performance and professional commitment will be emphasized through scholarships and ongoing training.
- The criteria and methods for evaluating schools will be reviewed.
- The introduction of computer science at secondary stage will be continued, and will be widely taught at both intermediate and elementary stages.
- School textbooks will be renewed and updated on an ongoing basis, and generally made more attractive through the use of pictures, graphs and colored text.
- The general principles of military education will be taught in coordination with the security and military agencies.
- Basic subjects relating to general principles of maintenance will be introduced into the curriculum at the intermediate and secondary school levels.
- Efforts to reduce the disparity in the regional distribution of educational facilities and to ensure that all educational facilities meet minimum standards will be increased.

- The scope for decentralized management in the delivery of education services will be studied.

Expansion of Pre-Elementary Education

Pre-elementary education programs could be expanded through:

- Increased private sector provision of high quality programs for preparing children for their entry into elementary education;
- Adding kindergarten classes to existing schools and encouraging working women to continue with their jobs, thereby utilizing their experience through teaching.

Optimal Use of Education Resources

The following policies will aim to ensure the optimal use of education resources :

- Optimal use will be made of available human and financial resources through efficiency and productivity improvements in the education system and improved teacher performance.
- Education services will be provided at minimum cost through improved internal efficiency and reducing the average number of educational years spent per student.
- Intensive information programs will be prepared at national and regional levels on the role of the individual and society in general in educating the nation's children.
- Private educational institutions will be encouraged to maximize their potential to expand their provision of educational services, in conformity with the regulations of the general education system, and to continue to finance the construction of schools and other educational facilities.
- Efforts will be made to make the general education system self-sufficient in terms of Saudi teachers, supervisors and management staff.

(B) HIGHER EDUCATION POLICIES

Improving Internal and External Efficiency

Closer links between the output of the higher education system and the requirements of social, economic and technological development will be promoted by improving the internal and external efficiency of higher education institutions and their quality through the following steps:

- Ensuring that students complete their education within the specified time;
- Linking student stipends and bursaries to their performance and providing incentives to industrious students who complete their studies within the specified period;

- Continually reviewing admissions policies, taking into account the results of the secondary stage exams and other criteria relevant to the changing needs of the development process;
- Encouraging students to enroll in technical and scientific colleges;
- Enhancing the links between higher education institutions and the private sector in order to upgrade the external efficiency of the sector.

Enhancing Links with Public and Private Sector Agencies

Higher education institutions will enhance their links with public and private sector agencies through:

- Identifying the manpower requirements of both sectors and exerting the utmost effort to meet these requirements;
- Providing fee-based technical, research and other consulting services to the government and private sectors;
- Establishing an information base on students trained at private sector establishments, so that they can improve their educational programs and curricula to cope with technological developments in the private sector;
- Discussing the relative contributions of both public and private institutions in financing scientific research centers, academic grants and various types of construction projects.

10.1.4.3 PROGRAMS

The Sixth Plan programs for the education sector are as follows:

Educational Process and Development

This program covers the major tasks of the educational institutions with respect to the educational process and its development, scientific research and its development, and the qualitative development of these tasks.

Manpower Development

This program aims at the maximum utilization of manpower, staff development and the Saudization of management and technical positions through scholarship programs, training, symposia and conferences.

Student Services and Activities

This program provides services to students and includes all extra-curricular and cultural activities.

Community Services

This program covers all the activities of the higher education institutions in the field of community services.

Operation and Maintenance

This program covers the expenditures on staff and materials necessary for the maintenance, cleaning and operation of all buildings and equipment in the higher education sector.

Management and Administration

This program includes management and administration services and the use of advanced technology in providing a cost-effective administrative system.

Construction

This program aims at constructing, equipping and expanding buildings, laboratories, research centers, experiment stations and school classrooms, as well as the provision of other pertinent facilities.

10.1.5 GROWTH TARGETS IN THE SIXTH PLAN

Tables 10.3 and 10.4 show the Sixth Plan targets for male and female students (new entrants and graduates) in the general education sector by academic stages over the period 1414/15 to 1419/20.

Table 10.5 shows the Sixth Plan targets for male and female students (new entrants and graduates) in higher education by university over the plan period (1414/15-1419/20).

Table 10.3

Sixth Plan Targets for Male and Female New Entrants in General Education ('000)

New Entrants (Males)

		Sixth Plan Years				
Stage	**1414/15**	**1415/16**	**1416/17**	**1417/18**	**1418/19**	**1419/20**
Elementary	174	181	188	195	201	209
Intermediate	124	129	132	137	143	153
Secondary	74	77	80	84	87	90
Teacher Colleges ★	5	6	6	6	6	7

★ Four academic years after secondary stage; graduates are granted bachelor degrees.

New Entrants (Females)

		Sixth Plan Years				
Stage	**1414/15**	**1415/16**	**1416/17**	**1417/18**	**1418/19**	**1419/20**
Elementary	191	202	211	221	233	244
Intermediate	122	128	136	141	148	155
Secondary	65	74	80	89	97	107
Teacher Colleges ★	8	9	11	12	13	14

★ Two academic years after secondary stage; graduates are granted diplomas.

Table 10.4

Sixth Plan Targets for Male and Female Graduates in General Education ('000)

Male Graduates

Stage	1414/15	Sixth Plan Years 1415/16	1416/17	1417/18	1418/19	1419/20	Plan Total
Elementary	141	144	148	150	153	157	752
Intermediate	89	92	95	97	101	104	489
Secondary	40	43	47	51	56	61	258
Teacher Colleges ★	4	5	5	6	6	6	28

★ Four academic years after secondary stage; graduates are granted bachelor degrees.

Female Graduates

Stage	1414/15	Sixth Plan Years 1415/16	1416/17	1417/18	1418/19	1419/20	Plan Total
Elementary	135	143	152	163	171	181	810
Intermediate	79	89	95	105	113	125	527
Secondary	51	55	59	64	70	77	325
Teacher Colleges ★	6	7	8	10	11	12	48

★ Two academic years after secondary stage; graduates are granted diplomas.

Table 10.5

Sixth Plan Targets: Higher Education New Entrants and Graduates at Bachelor Level by University (1415/16-1419/20)

University	New Entrants			Graduates		
	Male	Female	Total	Male	Female	Total
KSU	26,000	14,595	40,595	21,880	9,730	31,610
KAAU	27,176	17,936	45,112	15,002	12,970	27,972
KFU	6,833	4,538	11,371	3,418	3,129	6,547
KFUPM	6,000	---	6,000	3,322	---	3,322
Islamic Universty	5,990	---	5,990	4,300	---	4,300
Imam University	33,280	7,285	40,565	24,515	4,085	28,600
Umm AL-Qura University	10,825	9,195	20,020	6,945	6,340	13,285
Girls Colleges	---	75,396	75,396	---	50,885	50,885
Total	116,104	128,945	245,049	79,382	87,139	166,521

10.2 TECHNICAL EDUCATION AND VOCATIONAL TRAINING

10.2.1 PRESENT CONDITIONS

The Kingdom has long recognized the development of human capital as a crucial goal in its overall planning strategy. The formation of a skilled labor force raises productivity levels and thereby makes an important contribution to economic development. This recognition is reflected in the tremendous efforts to expand the Kingdom's training system, both quantitatively and qualitatively, to meet the challenges of economic development and technological change. It is the task of this system to produce a flexible labor force that is capable of acquiring new skills in response to the changing needs of the national economy. The acquisition of such skills benefits both the individual -- through higher earnings and enhanced employment mobility -- and society as a whole, through higher productivity and the ability to exploit new opportunities through the use of advanced technology. The wide-scale acquisition of technical skills is particularly important for safeguarding the longer term development of the Saudi economy for the benefit of future generations.

Vocational and technical education and training in the Kingdom is provided by a number of public and private sector agencies and institutions. The General Organization for Technical Education and Vocational Training (GOTEVT) and the Institute of Public Administration (IPA) are the largest training agencies in the Kingdom. The IPA provides mainly pre-service training programs, short term in-service training for civil service employees and some training programs for the private sector, in addition to research and consulting services to improve public administration practices. General occupational preparation is provided by GOTEVT through its technical education and vocational training programs, which range in duration from short-term (up to 18 months) at the vocational training centers to 3 years at the secondary level and 2 years at the post-secondary level. It is noteworthy that the Riyadh Technology College grants bachelor degrees in applied engineering through programs directed towards secondary stage graduates and other programs directed towards technical secondary graduates.

GOTEVT is also responsible for the technical training of manpower to fill some positions through short-term courses and for upgrading skills through short-term pre-service and in-service training programs. In addition, a number of government ministries and agencies operate in-house training institutes or centers to meet their own specialized training needs. The universities provide specialized training courses for professionals upon requests from government agencies or private sector establishments. Some other agencies also have specialized training institutions. For example, the Ministry of Health runs 41 secondary health institutes for boys and girls, enrollments at which exceeded 7,000 during the Fifth Plan period, while four intermediate colleges offering a range of programs, such as management and psychotherapy, have been created. The MOPTT operates three postal institutes, three training centers and two intermediate telecommunications colleges. The postal institutes offer one-year and three-year training programs. The Presidency of Civil Aviation runs two colleges and one training center. SAUDIA has five training centers, while the Saudi Ports Authority has two training centers. The Human Resources Development Institute at Jubail organizes intensive 18-months training programs. Enrollments in these programs reached 1,000 trainees. ARAMCO operates 15 training centers and organizes training courses for 9,000 staff members each year. Jubail Industrial College accommodates 1,200 trainees while Yanbu Industrial College accommodates 1,000 trainees.

The banking sector has its own training centers such as the Banking Training Institute, which is run by SAMA and offers short and long-term training courses with the participation of around 4,000 employees.

With respect to the training available for women, the General Presidency for Girls Education administers technical education and vocational training for females. The tailoring training centers have been upgraded to institutes and new programs have been provided according to the needs of Saudi women and in conjunction with the Sharia. Enrollments in these courses increased from 1,532 in 1409/10 to 1,625 in 1413/14. Furthermore, more than 4,000 female trainees attended IPA training courses in 1413/14.

The Ministry of Health runs 20 female institutes and work is underway to transform these institutes into intermediate health colleges.

Some private sector companies offer specialized training programs for women, particularly in fields related to business and computers. Some large business establishments operate and maintain training centers to train their own employees.

The training system has expanded significantly over the last twenty-five years, in terms of both quantity and quality, thanks to government efforts in this area since the First Development Plan (1390/91-1394/95) and its incentives for trainees, such as allowances and free housing. Some of the major achievements made over this period were:

- The number of enrollments at all technical education stages, and short pre-service and in-service training programs, increased from about 6,000 to over 120,000 (i.e. twenty-fold), while the number of graduates reached around 80,000. The number of students enrolled at schools and institutes of technical education supervised by GOTEVT rose from 4,640 in 1400/1401 to more than 28,000 in 1414/15, while the number of graduates reached 8,623 in the same year.
- The number of students enrolled at the vocational training centers rose from 378 trainees in 1390/91 to 11,543 in 1414/15, while the number of graduates reached 7,684 in 1414/15.
- The number of graduates from IPA training programs rose fifteen-fold in the past 25 years, reaching 9,850 in 1413/114.

In the Fifth Plan period, enrollments in the technical colleges run by GOTEVT increased at an average annual rate of 19 percent, while average annual enrollment growth in secondary industrial, commercial and agricultural programs was 4 percent, 10 percent and 18 percent respectively. Enrollments at IPA programs also grew at an average annual rate of 6 percent during this period. This period also saw the expansion of the training sector's infrastructure and the participation of the private sector in training activities under specific programs. The higher commercial education programs have been incorporated in the programs of the technical colleges, and eight new technical secondary institutes have been opened during the Fifth Plan period.

10.2.2 KEY ISSUES

It is to be expected that the rapid growth witnessed by the training and technical education sector over the past two decades should be accompanied by a number of key issues that need to be addressed in the Sixth Plan period, through a range of policies, programs and projects. These issues are as follows:

Vocational Awareness and Work Behavior

Vocational development is closely linked with citizens' vocational awareness and social status. During the first three development plans, the emphasis of technical education and training was on generating the maximum possible number of graduates and providing them with necessary occupational and technical skills. Less emphasis was placed on qualitative aspects, such as work attitudes and behavior. The Sixth Plan will stress the need to upgrade the occupational awareness of citizens, by paying special attention to the educational and vocational awareness and guidance programs for students and trainees.

Private Sector Training Programs

Training in the private sector is a key element in the development of Saudi manpower, through upgrading performance standards and reinforcing the basic skills acquired during technical education and vocational training. In this respect, as the major user of advanced techniques, the private sector has an important role to play through on-the-job training. Thus, the Sixth Plan emphasizes the importance of training within private sector establishment (particularly on-the-job training), so that they will come to rely increasingly on national manpower instead of continuing to depend on a non-Saudi labor force.

Internal Efficiency

Repetition and dropout rates remain high in the technical education and training sector, while student / teacher and trainee/instructor ratios are low and vary between training institutions. This lowers the internal efficiency of the system and raises operating costs. Thus, the Sixth Plan will aim to address these issues.

Coordination among Training Institutions

Coordination among the government's technical education and training institutions is important for identifying the role and responsibilities of individual institutions in accomplishing manpower development objectives. Coordination acquires an added significance in establishing a uniform admissions policy that would regulate student/trainee transfers between institutions. This will lead to a reduction in dropout rates, particularly in the first grades. Thus, it is imperative to develop policies to ensure effective coordination among the various training institutions.

Standards and Accreditation System

There is an urgent need for an occupational standards and accreditation system across training institutions Kingdom-wide. The Sixth Plan will emphasize the establishment and development of an occupational inspection system that will develop standards for each occupation. Attention will also be given to the international accreditation of technical education and training programs.

10.2.3 PRIVATE SECTOR OPPORTUNITIES

Although the government has been both the major provider and user of technical education and vocational training services in the past, a significant shift towards the private sector as both producer and user of these services is expected in the Sixth Plan period. While the government will continue to provide basic training services, the private sector will be encouraged to become more active in the provision and use of training services. At the same time, however, close coordination will be needed between the government's training institutions and private sector employers in order to enhance the skill mix of graduates, to review curriculum contents and to assess the functional skills acquired by trainees. Such coordination will also raise the training institutions' awareness of the needs of private sector employers and their plans to introduce new technology.

The private sector will be encouraged to take on greater responsibility for the training of Saudi manpower in the Sixth Plan. Because most technological innovation enters the Kingdom through private enterprise, the development of new skills to operate this new technology is primarily the responsibility of the private sector. The following activities represent opportunities available for the private sector over the Sixth Plan period:

- the establishment of more technical education and training institutions;
- the provision of on-the-job training for employees;
- participation on the national consulting committees on the training system;
- contributions towards financing some training programs, as well as offering grants and donations;
- study the provision of academic grants by the private sector;
- contributions towards financing and implementing some projects proposed for GOTEVT;
- participation in cooperative education programs through which employers shall shoulder part of the education costs.

10.2.4 DEVELOPMENT STRATEGY

The development strategy for the training sector in the Sixth Plan will be implemented through the following objectives, policies and programs:

10.2.4.1 Objectives

The major objective of technical education and vocational training is to contribute to socio-economic development by upgrading national manpower skills, thereby enabling the national work force to perform their tasks effectively in an economy that continues to be influenced by the forces of technological change and global competition. More specifically, the following training objectives will be pursued in the Sixth Plan:

- To improve the efficiency and effectiveness of the training system by raising the quantity and quality of its output and by developing its management and technical staff.
- To emphasize quality in technical education and training programs, particularly with respect to modern technology at all levels in response to the needs of the national economy.
- To stress the fact that training is an on-going process of providing national manpower with the flexibility needed to adapt quickly to advances in technology.
- To expand the system of technical education and vocational training both horizontally and vertically, with due emphasis on on-the-job training in both public and private sectors to meet the national need for qualified manpower, through the expansion of the absorptive capacity of training programs in an efficient manner and the provision of a better training environment in the private sector;
- To provide trainees with occupational counseling and guidance programs.
- To promote better cooperation and coordination between technical education and training institutions and agencies.
- To contribute towards the evaluation and financing of cooperative education programs.
- To form technical committees that will contribute to the development and expansion of technical education and training.

10.2.4.2 Policies

The Sixth Plan policies for the technical education and training system aim to achieve these objectives and to address the key issues identified above. These policies also aim at the continuous development of the technical education and training system and to make it more responsive to changes in the labor market and advances in technology, thereby helping to meet the economy's need for highly qualified and well-trained Saudi manpower. Accordingly, the following policies will be implemented:

1. **Development of Vocational Awareness**

   This policy is made up of the following elements:

   - Identification of the work attitudes of students since early education stages;
   - Acquiring occupational skills;
   - Identification of the relationship between the stage of preparation for an occupation and the following stage of training.
   - Understanding the varied interests and needs of the trainees and their professional capabilities through which their work attitudes could be identified and modified.

2. Improving Training Efficiency

This policy covers the following:

- Re-orientation of the training system to become more responsive to labor market needs through the formation of consulting committees at national level, comprising representatives from employers and training institutions;
- The periodic development of curricula to cope with advances in technology;
- The development of vocational standards in priority fields;
- The follow-up of graduates and evaluation of their employment services along with the enhancement of links with employers;
- Improvements in the quality and quantity of training outputs;
- The expansion of on-the-job training activities as a basic element in the Saudiization strategy;
- The use of training resources in an effective manner;
- The adoption of a selective admissions policy, taking into account student selection, guidance and counseling as significant factors in this regard.

3. Horizontal and Vertical Expansion of Technical Education and Training Programs

It is imperative to concentrate on the following regarding this policy:

- Expansion of post-secondary technical education programs to provide a highly trained technical labor force.
- Concentration on short-term training programs (up to six months) for unskilled adults and youths not enrolled in schools, in order to realize their pre-service vocational preparation.
- Emphasizing in-service training in both public and private sectors.
- Making training programs and curricula more flexible and responsive to the requirements of changing technology.

4. Improving Utilization of Available Training Capacity

This can be accomplished through:

- Use of short and more intensive training modules, that promote the efficient utilization of training spaces and the reduction of training opportunity costs per trainee.

- Provision of cooperative educational training systems taking into account the full-year academic term system (three terms) in order to increase the absorptive capacity.
- Expansion in the number of daily training periods to make use of available spaces.

5. **Review and evaluate technical education and training programs and curricula at all levels to cope with general trends in the philosophy of on-going training and the development strategy.**

6. **To emphasize the significance of coordination among training institutions in both public and private sectors through:**
   - Regulating admissions procedures in training institutions.
   - Developing regulations for the transfer of technical education and training students from one agency to another.
   - Continuing to encourage students and trainees through an "open door" policy for higher levels, thus paving the way for vocational secondary school graduates to study in higher education.

7. **Pursue the strategic objective of Saudiization, through:**
   - Continued expansion of training programs through the implementation of an apprenticeship system that utilizes the capacities of non-Saudi manpower with the aim of Saudiizing private sector jobs.
   - Providing pre-service training programs based on demand, through cooperative education and summer training.
   - To develop the incentive system for establishments and individuals with the aim of realizing Saudiization effectively through training.

10.2.4.3 Programs

The Sixth Plan of GOTEVT includes six main programs that specify all activities required for the operation of the organization. These programs are:

Education and Training: This program represents the primary function of GOTEVT and comprises all activities which will be implemented through its education and training units.

Research and Studies: This program covers all research, development and planning activities aimed at the collection, processing and dissemination of data related to main functions. The program also includes the establishment of a database, preparation of studies that measure the internal efficiency

of the technical education and training system, as well as the internal efficiency of GOTEVT administrative staff. It also covers follow-up of graduates and translation and publication of specialized books in the field of training.

Management and operation : This program aims at developing the administrative organization through creation of new units and improving the efficiency of the existing units. The program also covers administration, finance, public relations and other functions of management and operatian.

Manpower Development: This program seeks to develop and improve manpower efficiency through training courses, seminars, university education by scholarships, participation in local and international scientific meetings, and the adoption of an effective system for medium and long-term Saudization.

Operation and Maintenance: This program covers maintenance and janitorial services of main and branch buildings, in addition to maintenance of equipment and machines.

Construction: This program aims at completion of the construction projects currently under implementation, as well as construction of new facilities and renovation of the existing ones.

The Sixth Plan of the IPA comprises five programs that specify the activities required for its operation:

Administrative Development: This program represents the primary function of the IPA and aims at management and organization development in government agencies through sub-programs of training, consultation, administrative reform and research.

Management and Operation: This program aims at developing the administrative organization through creation of new units and improving the efficiency of the existing units. This program also covers the functions of administration, finance, public relations, and other functions of management and operation.

Manpower Development: This program seeks to develop and improve manpower efficiency through training courses, seminars, and university education through scholarships, participation in local and international scientific meetings, and adoption of an effective system for medium and long-term Saudiization.

Operation and Maintenance: This program covers maintenance and janitorial services of main and branch buildings, in addition to maintenance of equipment and machines.

Construction: This program aims at completion of the construction projects currently under implementation, as well as construction of new facilities and renovation of the existing ones.

10.2.5 GROWTH TARGETS IN THE SIXTH PLAN

Table 10.6 shows growth targets regarding the number of new entrants and graduates of technical education, while Table 10.7 shows targets of enrollments and graduates of vocational training. Table 10.8 shows growth targets for training new entrants and enrollments at other government agencies and the private sector.

Table 10.6

Sixth Plan Growth Targets for New Entrants and Graduates of Technical Education: GOTEVT

New Entrants

Field of Study	1414/1415	1415/1416	1416/1417	1417/1418	1418/1419	1419/1420	Total
Technical Colleges	3,258	4,354	4,661	5,218	5,965	6,993	27,191
Industrial Secondary Schools	3,134	3,992	4,374	4,920	5,767	7,191	26,244
Commercial Secondary Schools	4,664	5,952	6,632	7,564	8,922	10,883	39,953
Agricultural Secondary Schools	326	548	642	741	845	1,005	3,781
Technical Supervisors Institute	646	1,101	1,189	1,306	1,480	1,751	6,827
Electronics Institute	228	360	403	452	507	567	2,289
Total	12,256	16,307	17,901	20,201	22,486	28,390	106,285

Graduates

Field of Study	1414/1415	1415/1416	1416/1417	1417/1418	1418/1419	1419/1420	Total
Technical Colleges	1,945	2,147	2,362	2,653	2,985	3,362	13,509
Industrial Secondary Schools	2,100	2,740	2,952	3,189	3,457	3,758	16,096
Commercial Secondary Schools	2,250	2,927	3,220	3,610	4,150	4,943	18,850
Agricultural Secondary Schools	226	303	373	446	521	598	2,241
Technical Supervisors Institute	476	506	576	682	843	1,101	3,708
Electronics Institute	---	---	180	200	230	260	870
Total	6,997	8,623	9,663	10,780	12,186	14,022	55,274

Table 10.7

Sixth Plan Growth Targets for Enrollments and Graduates of Training

Vocational Training Enrollments

Type of Training	1414/1415	1415/1416	1416/1417	1417/1418	1418/1419	1419/1420	Total
Morning Training	7,909	8,809	8,989	9,313	9,875	10,857	47,843
Evening Training	3,614	3,909	4,172	4,515	4,907	5,678	21,381
Instructor Preparation	100	105	110	116	121	128	580

Vocational Training Graduates

Type of Training	1414/1415	1415/1416	1416/1417	1417/1418	1418/1419	1419/1420	Total
Morning Training	5,022	5,176	5,326	5,512	5,886	6,542	28,442
Evening Training	2,662	2,851	3,039	3,281	3,608	4,084	16,863
Instructor Preparation	72	85	90	95	100	110	480
Total	7,756	8,112	8,455	8,888	9,594	10,736	45,785

Enrollments on IPA Programs

Type of Training	1414/1415	1415/1416	1416/1417	1417/1418	1418/1419	1419/1420	Total
Preparatory Programs	2,150	2,400	2,500	2,600	2,700	2,800	13000
In-service training	11,588	12,500	12,800	13,100	13,400	13,700	65500
Special Programs	500	500	525	550	575	600	2750

Table 10.8

Sixth Plan Growth Targets for Training in Other Government Agencies and the Private Sector

	1414/15 New Entrants	1419/20 New Entrants
Other government agencies:		
Ministry of Health :		
- Health training Institutes (Male)	3,500	3,700
- Health training Institutes (Female)	3,000	3,500
MOPTT:		
- Two Telecom Institutes	500	1,000
- Postal Secondary Institutes	200	200
Ministry of Defense and Civil Aviation		
(Presidency of Civil Aviation)		
- Civil Aviation Institutes & Centers	500	500
	Enrollments	Enrollments
Others ★	25,000	40,000
Training in Private Sector	20,000	35,000

★ Includes Agricultural centers, banking institute, SAUDIA, Saudi Government Railroad Organization, Training Center of Saudi Ports Authority.

10.3 SCIENCE AND TECHNOLOGY

10.3.1 PRESENT CONDITIONS

Throughout the world, science and technology is fundamentally important to the material advance and socio-economic development of nations. At the same time, there is constant competition between nations in the development of science and technology and a major feature distinguishing the developed from the developing countries is their capability to manage and develop science and technology. This is widely reflected in the close link between a country's scientific and technological capabilities and its economic strength and role in the international economy.

In recognition of its special role in the economic development process, the General Objectives and Strategic Principles of the development plans have always focused on the need to apply the latest available technology that is appropriate to the characteristics of the national economy and its capital-intensive requirements, on the development of production methods using extensive automation, on the use of treated water in agriculture and on support for centers and programs of applied research in the Kingdom.

In pursuing its development objectives, KACST has supported a wide range of scientific and technological research activities. Since 1410, it has supported four annual award/grant schemes covering 83 research activities, thus bringing to 14 the total number of annual grant programs since 1399 covering 337 research schemes. It also supported three national research projects, including phases six and seven of the traffic safety project and the establishment of a comprehensive data base for scientific books written in and translated into Arabic, thus bringing to 14 the total number of supported national projects. By encouraging the spirit of innovation among researchers and inventors, KACST protects patent rights in the Kingdom, with the number of registered patent applications reaching 2,716 by 1414, and has provided 1.73 million British and American patent documents.

In the energy sector, KACST has adopted intensive programs for the development of solar energy research in the Kingdom. A pilot solar energy station for desalination and pumping of ground water has been designed and the design, installation and preliminary operation of a solar energy hydrogen production station have been completed. A dual solar wood-burning oven has also been designed. A survey has been initiated in some areas of the Kingdom to identify possible locations for establishing wind power generation facilities, while in the field of natural resources and environmental research, soil, water and plant research and study laboratories have been established, two fresh water fish stations have been established at Dirab and Qassim, and maps have been prepared showing the locations of wells and other basic information. The national project for water treatment in the Kingdom has been completed. In the oil and petrochemical industries, compounds of benzene derivatives have been developed and improved, which are used in the production of rubber and plastic, while laboratories have been equipped to start developing catalysts for de-sulphurizing oil derivatives. The Saudi remote sensing center (operated by KACST) has processed and analyzed space information received from satellites, and has provided concerned government agencies with such information. This center has also studied the earth crust movement and has monitored locations and directions of oil slicks during the Gulf crisis. In the domain of astronomy and geophysics, three crescent monitoring projects at Makkah, Tabuk and Al Wajh have been equipped and operated, along with the selection of a site for the national astronomical

observatory project at share mountain, east of Khamis Mushait. The Saudi laser observatory at the solar village in Uyaynah has also been established and equipped. Finally, 10 seismic monitoring sub-stations have been established and equipped at Tabuk and Jizan within the national network for seismic monitoring supervised by KACST.

10.3.2 KEY ISSUES

In spite of the rapid progress made over previous development plans, a number of issues need to be addressed in the Sixth Plan in order to improve the Kingdom's status in the field of science and technology.

Technology Gap

The most prominent science and technology issue concerns the gap between the level of technology used in the Kingdom and that which Saudi Arabia can adapt or produce itself. Many sectors of the economy have introduced and applied the most advanced technologies quite successfully. However, the capability to develop such technologies falls far behind either that of the industrial countries or the rapidly advancing countries of South East Asia. Although it will not be possible to close this gap within a short period, further efforts must be made to reduce it as much as possible. Greater emphasis must be put on science and engineering subjects in the education system, and the completion of the comprehensive national plan for the development of science and technology.

Manpower Shortage in Science and Technology

Although the Kingdom has established many universities, technical colleges and technical and vocational training centers aimed at creating a sound manpower base for advancing technological development in the Kingdom, there still exists a shortage of good scientists, engineers and technicians to ensure substantial future development.

Inadequate Utilization of Scientific Research Centers

Many research activities in these research centers are not being targeted sufficiently at the problems and constraints of the Kingdom's development process. The successful transfer, assimilation and development of technology requires cooperation and coordination between many different agencies, and in particular, between research institutes at universities and other government agencies and the industrial sector. With the exception of the oil and petrochemicals industries, however, much of the output from these research centers has had little direct relevance to the industrial sector in general. A much more effective mechanism is needed, therefore, to ensure a closer link between the research demands of industry and the activity profile of the research institutes and centers.

10.3.3 SAUDIIZATION

By the end of the Fifth Plan, KACST had achieved the full Saudiization of its employees appointed under the civil service regulation and will maintain this position during the Sixth Plan also. By adding those employees appointed under its operations and maintenance budget, the percentage of KACST's total employees accounted for by Saudis will increase from 65 percent in 1414/15 to 71 percent by the end of the Sixth Plan, in order to meet the needs of KACST's research centers. Furthermore, KACST will continue to support its staff through training and scholarship schemes, whereby 81 employees will be sent on scholarships to obtain M.Sc. and PhD. degrees and to upgrade their efficiency.

10.3.4 TECHNOLOGICAL REQUIREMENTS

The introduction of modern technology in all branches of the national economy has raised the demand for the various science and technology services. Thus, the role of the scientific institutions, particularly KACST, will become more significant in fulfilling the responsibility for the planning and development of science and technology in the Kingdom. The rapid expansion of the industrial sector, for example, particularly in petrochemicals and related products, needs many science and technology services, not only for the purpose of import substitution, but also in order to compete on international markets. The expansion of agriculture needs more research on land reclamation and disease control, as well as the development of new species resistant to such diseases. Furthermore, the expansion in preventive and curative health services needs far more studies and analyses on epidemic and endemic diseases.

The control of environmental pollution linked to the Kingdom's development process or arising from external sources is greatly assisted by the results of scientific research and by enforcing regulations pertaining to pollution hazards. The identification, exploration and optimal utilization of the Kingdom's natural resources requires extensive geological studies, surveys, mapping and analyses of satellite images. Furthermore, because of the Kingdom's location near seismically active areas, it is imperative to carry out geophysical research and studies to identify the risks of earthquakes and landslides and to provide continuous information on the risks arising therefrom.

Thus, the development of the Kingdom's own scientific and technological capabilities becomes very important in the Sixth Plan period. It is imperative at this stage to design policies and to prepare long term plans that will include a clear idea on how to direct the advance along the path of scientific and technological development, and to mobilize the necessary resources to achieve such development.

10.3.5 ROLE OF THE PRIVATE SECTOR

Many economic activities in the Kingdom are experiencing substantial progress in advanced technology applications, a matter which necessitates enhancing the Kingdom's own research and development (R&D) capabilities and addressing any constraints in this regard. The private sector has an important role to play in this respect through innovations and the commercialization of R&D results.

By sharing some of the associated risk, and through its support and promotion of domestic capabilities in the field of scientific research and technology development, the government will continue to encourage the private sector to undertake research in science and technology, and to adapt and improve imported technology.

10.3.6 DEVELOPMENT STRATEGY

The development strategy of the science and technology sector will be implemented through the following objectives, policies and programs.

10.3.6.1 Objectives

The following long term objectives will guide the development of science and technology in the Kingdom according to the overall objectives and strategic principles of the Sixth Plan:

- to develop human resources in the field of science and technology;
- to emphasize the use of technological methods appropriate to the needs of the national economy, such as automation and the use of treated water in agriculture;
- to invest in technology research in activities for which the Kingdom enjoys comparative natural and economic advantages, such as petrochemicals research, water conservation, desalination technology and use of treated water in agriculture;
- to support and expand the national scientific research and technology development base;
- to support and enhance the private sector's research and development activities in the industrial and other producing establishments, as well as facilitating the contribution this sector can make in providing opportunities for scientists and researchers to conduct scientific and technological research, and its collaboration with KACST.

10.3.6.2 Policies

To achieve these objectives, the following policies will be adopted during the Sixth Plan:

- The long term national plan for the development of science and technology will be completed;
- Regulations for the transfer of technology will be finalized;
- The development of qualified manpower in science and technology will be promoted;
- R & D activities oriented towards the development needs of the Kingdom will be promoted and supported;

- The research institutes in the universities and other government agencies will continue to be supported and their activities directed towards the optimal utilization of resources and the solution of major problems and constraints facing the development process in the Kingdom; assistance will also be given in converting and translating scientific results into industrial applications;
- Educational programs and curricula relating to science and technology at all education levels will be expanded and upgraded;
- R&D activity in private industry will be encouraged and supported;
- Improvements will be made in the coordination of scientific research and technology development undertaken by KACST;
- Increasing use will be made of international cooperation agreements in scientific and technological fields;
- Increasing use will be made of the private sector's research and study centers.

10.3.6.3 Programs

The following programs have been designed to implement these policies.

Management and Administration: An ongoing program without projects to cover the administrative and technical expenditures of KACST.

Maintenance and Operation: An ongoing program without projects to cover the costs of maintaining and cleaning KACST's buildings, and the operation and maintenance of equipment at KACST's institutes and laboratories.

National Scientific and Technological Manpower Development: This program aims at the creation of a strong base of qualified manpower capable of driving the process of technological development in the Kingdom.

Planning, Directing and Coordinating Science and Technology Activities: This program aims at preparing a national master plan for science and technology, as well as establishing an adequate mechanism for the proper coordination of scientific and technological activities in different agencies to avoid duplication or waste of resources.

Support and Development of a National Technology Base: This program will encourage innovations and technological development in the national industries and will enhance the innovation capabilities of these industries by encouraging them to establish their own research and development units

and to provide advanced technological training. Saudi industries will be encouraged to undertake technological development studies and to use locally adapted advanced technology. Furthermore, technological consultation will be provided to the national industries. This program will be implemented through cooperation and coordination between KACST, industry and other industrial development agencies.

Enhancement of Scientific Research: This program will promote scientific research and technology development in line with the national development objectives and taking into account the natural and environmental conditions as well as the natural resources of the Kingdom. The program includes the provision of annual grants and support for national applied research, and support for applied postgraduate studies in the universities.

Support Services for Science & Technology: This program aims at boosting information services at KACST, facilitating their provision to specialists, and at deepening public awareness and understanding of science and technology. This will be accomplished through the development of information bases at KACST, the provision of science and technology information through the various types of media, scientific publications, books and magazines, the production of scientific films, and the establishment of scientific exhibitions and centers. Furthermore, a regulation will be developed for the protection of patent rights, intellectual rights and industrial designs, and a national prize for innovation will be awarded. Finally, the scientific appliances center -- one of the most important support services of science and technology -- will be equipped and made operational.

International and Regional Cooperation: This program aims at enhancing technology transfer through international cooperation agreements and expanding links with other countries in similar circumstances, in order to make use of their experience in developing science and technology.

Applied Development Research Activities: This program will enhance and upgrade the technological capabilities of KACST's institutes through implementation of applied research activities in the following fields: electronics and computers, geophysics, natural and environmental resources, petroleum and petrochemical industries, atomic power, solar energy, and astronomy.

Completion of KACST Facilities: This program will complete the remaining stages of KACST projects and facilities, including phase one of the KACST building, facilities, buildings and equipment of the scientific laboratories, seismic monitoring network, oscillation receiving station, as well as the new vital projects, such as equipping KACST's institutes and laboratories, and establishing a communication and control system.

CHAPTER 11

SOCIAL DEVELOPMENT

11. SOCIAL DEVELOPMENT

This chapter highlights the achievements of the Fifth Plan period in the areas of health care, social, youth and information services, culture, and religious and judicial services. The chapter also deals with key issues to be addressed during the Sixth Plan period, Saudiization, economic efficiency, and private sector opportunities. Finally, the chapter outlines the objectives, policies and programs of these sectors over the Sixth Plan period.

11.1 HEALTH SERVICES

11.1.1 PRESENT CONDITIONS

The Kingdom's health services are provided by a wide range of institutions covering many different functions. In broad terms, the provision of health care is organized through a referral system into a Kingdom-wide network of primary health centers, general and specialist hospitals, although a number of government agencies provide health care services directly to their employees. The Ministry of Health is the government agency with overall responsibility for health care in the Kingdom. The National Guard, the Ministry of Defense and Aviation and the Ministry of Interior provide primary, secondary and advanced levels of health care directly for their staff and segments of the general population. The Red Crescent Society provides emergency services and assists pilgrims during the Hajj. High level specialized health care is provided in the Kingdom by specialist hospitals, while the Royal Commission for Jubail and Yanbu provides health facilities for employees at the two industrial cities. School health units attend to the immediate primary health care needs of students. The General Organization for Social Insurance and the Presidency of Youth Welfare provide health facilities for certain parts of the population. Through their programs and medical colleges, the universities provide primary and specialized health care services, conduct essential health research and provide medical education programs. Finally, the medical services of the private sector play an increasingly important role in the Kingdom and are coordinated with the referral network and the regulatory requirements of the health sector as a whole.

In recent years, the health services have made great progress at both preventive and curative levels:

- The emphasis on primary health care has raised immunization rates to 94 percent for poliomyelitis, diphtheria, tetanus and whooping cough, to 99 percent for TB, to 90 percent for measles and to 92 percent for hepatitis. These immunization programs have succeeded in almost eliminating these diseases, while the rates of endemic diseases such as malaria, bilharzia and leshmania have also decreased.

- The incidence of newborns whose weights at birth are not less than 2,500 grams increased to almost 94 percent, while the incidence of children below 5 years of age whose weights are in accordance to their age increased to 92.7 percent.
- The proportion of pregnant women supervised by trained health professionals increased to 86.6 percent, while deliveries supervised by trained health professional increased to 90 percent.

At the same time, great advances have been made in the efficient provision of health services by reducing unnecessary burdens on the hospital services. The referral system and the widespread use of primary health care (PHC) centers in the Kingdom aim to achieve the full integration of health services from the general practitioner (GP) right through to the high level specialized health services. The PHC centers provide basic health services to most patients, enabling the hospitals to concentrate on those cases needing more specialized curative services. The system has had great success in reducing the burden on hospital services at the secondary (general) and tertiary (specialist) levels, thus raising the efficiency of curative services in general and optimizing the use of health service resources in meeting the needs of all citizens. Between 1409»10 and 1413»14, for example, the number of patient visits to primary health care (PHC) centers increased by about 42.2 percent, while the number of hospital visits declined by 28.9 percent (Table 11.1 and Figure 11.1).

Table 11.1

PATIENT VISITS TO PHC AND HOSPITALS

IN MINISTRY OF HEALTH (IN THOUSANDS)

	patient visits ★		
	1409/10	**1413/14**	**% Change**
PHC Centers	36,725	52,222	+ 42.2
Hospitals	19,627	13,956	- 28.9

★ The figures represent number of patient visits.

Resources in the Kingdom's health service have also expanded rapidly between 1409/10 and 1413/14, as shown in Tables 11.2 and 11.3. Thus, the number of hospitals rose by 11.1 percent, the number of hospital beds by 7.3 percent, PHC centers by 4.1 percent, doctors by 22.7 percent, nurses by 24.5 percent and assistant technicians by 13.8 percent (Figure 11.2).By any standards, this is a remarkable achievement.The private sector contributed significantly to this expansion, and at the end of this period accounted for 50 percent of hospitals, 36.4 percent of hospital beds, 47 percent of doctors and 25.9 percent of nurses.

Table 11.2
Hospitals, Hospital Beds and Primary Health Centers

	1409/1410 (number)	1413/1414 (number)	Increase (number)	Increase percent
Hospitals :				
Ministry of Health	162	174	12	7.4
Other government agencies	30	32	2	6.7
Private Sector	61	75	14	22.9
Total	253	281	28	11.1
Hospital Beds :				
Ministry of Health	25,918	26,974	1,056	4.1
Other government agencies	6,592	7,338	746	11.3
Private Sector	6,445	7,477	1,032	16.0
Total	38,955	41,789	2,834	7.3
Primary Health Centers of the MOH	1,640	1,707	67	4.1

Table 11.3
Manpower in Health Services

	1409/1410 (number)	1413/1414 (number)	Increase (number)	Increase percent
Doctors :				
Ministry of Health	12,617	14,563	1,946	15.4
Other government agencies	4,298	5,076	778	18.1
Private Sector	5,718	8,135	2,417	42.3
Total	22,633	27,774	5,141	22.7
Nursing Staff :				
Ministry of Health	28,266	33,373	5,107	18.1
Other government agencies	9,255	12,485	3,230	34.9
Private Sector	8,319	11,232	2,913	35.0
Total	45,840	57,090	11,250	24.5
Health Technicians :				
Ministry of Health	15,125	17,868	2,743	18.1
Other government agencies	6,518	6,899	381	5.8
Private Sector	3,549	3,895	346	9.7
Total	25,192	28,662	3,470	13.8

Figure 11.1
Patient Visits to MOH's PHC Centers and Hospitals

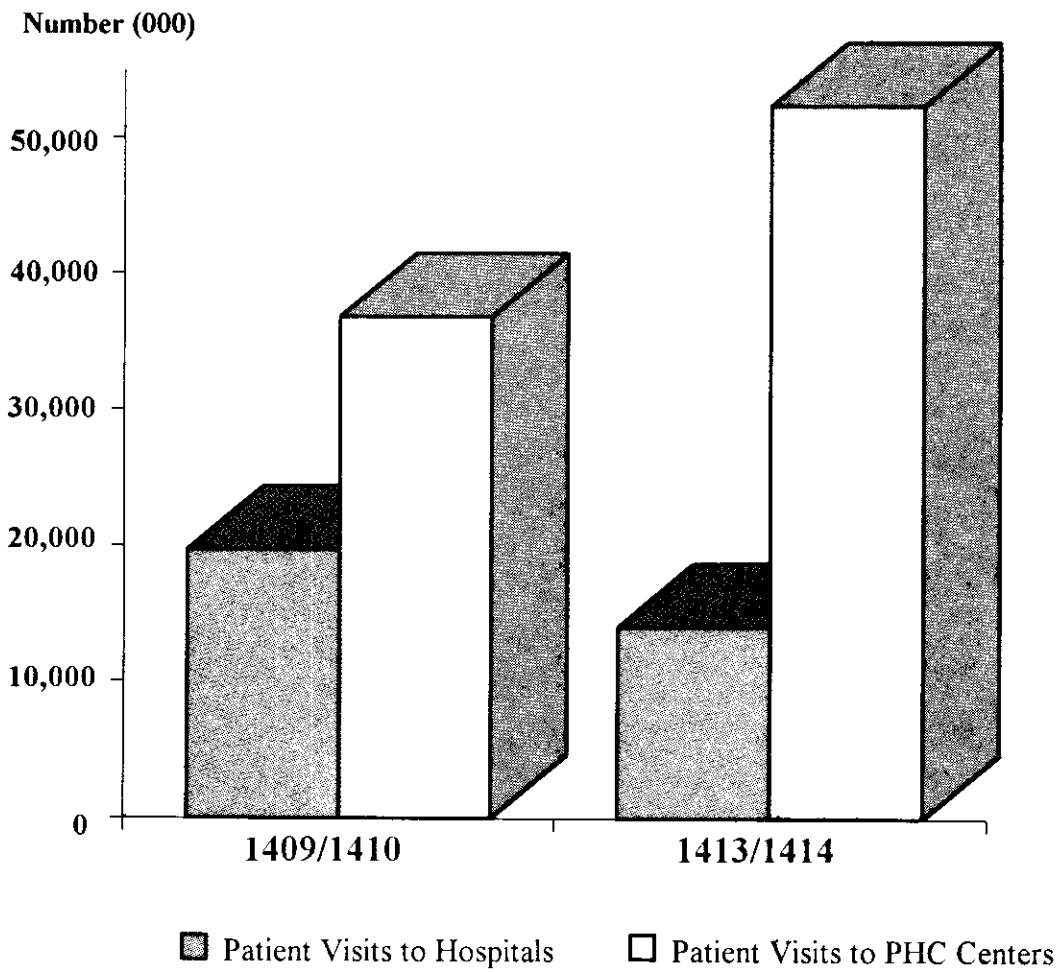
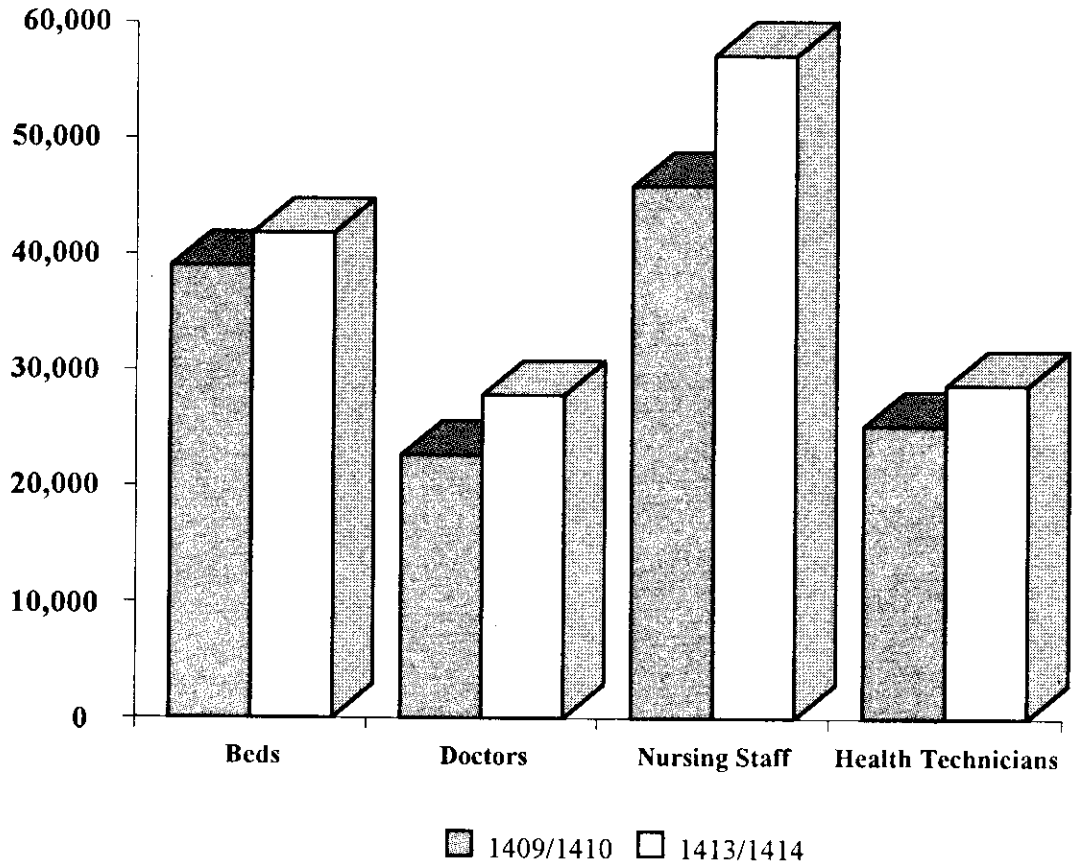


Figure 11.2
Number of Hospital Beds, Doctors, Nursing Staff and Health Technicians 1409/10 to 1413/14



11.1.2 KEY ISSUES

While the Kingdom's health services have developed and improved at a very rapid pace, there are a number of key issues that must be addressed in order to ensure continuous improvement in the provision of health care for all citizens.

Financing the Health Services

Health care systems throughout the world are facing a growing demand for services combined with rising costs and shortages of finance. In this respect Saudi Arabia, with its growing population, is no exception, although its ability to adapt to these new conditions is far greater than that of many other countries. Thus, the provision of high quality health services to all the population is placing a growing burden on the government budget. Aneed exists, therefore, to attract more private sector finance into the provision of health services.

Saudiization in the Health Services

The size of the health care work force has risen rapidly in line with the overall expansion of the health services, so that in 1413»1414 there were over 27,000 doctors, about 57,000 nurses and more than 28,000 health technicians. The proportion of these positions filled by Saudi nationals is very low, at only 13 percent of doctors, 11.2 percent of nurses and 38 percent of health technicians. The health care sector is one where the rates of Saudiization should be highest, particularly with respect to general practitioners and assistant technicians. Current indications from the educational and training institutions are that the supply of Saudi nationals into the health services will not be sufficient to reduce this gap significantly by the end of the Sixth Plan. Thus, an expansion of training programs for Saudi manpower in health occupations is needed.

Regional Balance in the Distribution of Primary Health Care Centers

The enormous size of the country and the scattered distribution of the population pose an enormous challenge to the provision of primary health care centers to all the Kingdom's population. Current indicators highlight the importance of ongoing provision of these centers according to accepted demographic criteria based on the health care needs of each region.

11.1.3 SAUDIIZATION

Ministry of Health: Total MOH manpower reached 89,817 employees by the end of 1413/1414, of whom 44,600 (or 49.7 percent) were Saudis and 45,217 were non-Saudis. The Sixth Development Plan aims to increase the total manpower of the MOH to 103,720 by the year 1419/1420, along with the steady replacement of non- Saudis by Saudis, so that the Saudi work force shall reach 57,403, or 55 percent of the Ministry's total manpower, by the end of the Plan period.

Saudi Red Crescent Society: Total manpower of the Saudi Red Crescent Society reached 2,603 employees by the end of 1413»1414, of whom 2,162 (or 83.1 percent) were Saudis and 441 were non-Saudis. The Sixth Plan aims to increase the Society's total manpower to 3,641 in 1419»1420, along with the continuous replacement of non-Saudis by Saudis, so that, by the end of the Plan, the number of Saudi employees shall reach 3,379, or 92.8 percent of the Society's total manpower.

11.1.4 PRIVATE SECTOR OPPORTUNITIES

The following steps have been taken by the government in support of greater private sector participation in the development process:

(a) providing interest-free long term loans for the construction and operation of hospitals and clinics, and pertinent support services;

(b) providing opportunities to contractors for constructing and preparing government health facilities through direct finance from the state budget;

(c) providing opportunities to contractors for the maintenance and cleaning of all health facilities, and the full operation of some hospitals;

(d) supporting the manufacture and marketing of drugs and medicines.

With encouragement from the public sector, the private sector has contributed to the provision of health services through:

- the provision of curative services through 75 hospitals with 7,477 beds, or 18 percent of all hospital beds in the Kingdom;
- the provision of health care through 510 dispensaries and 673 clinics;
- the provision of drugs and medicines through 2,703 pharmacies and 310 pharmaceutical warehouses;
- the manufacture of drugs and medicines;
- the supply and marketing of medical equipment;
- the complete operation of 45 hospitals affiliated to the Ministry of Health.

In addition to the government support identified above, the private sector will be given the opportunity to finance the construction of many health facilities during the Sixth Plan period, under appropriate arrangements with the government agencies concerned. These projects are:

- constructing primary health care centers;
- establishing intermediate health colleges;
- establishing health institutes;
- establishing training centers for emergency medical services;
- establishing emergency centers.

11.1.5 DEVELOPMENT STRATEGY

The Sixth Plan's development strategy for the health sector will be implemented through the following objectives, policies and programs.

11.1.5.1 Objectives

- to continue upgrading the health standards of citizens and providing preventive and curative health care efficiently;
- to focus more attention on the control of communicable diseases and to eradicate or reduce the incidence of such diseases to the lowest possible level;
- to emphasize primary health care programs, particularly mother and child programs, and to attain full vaccination coverage of children against infectious diseases;
- to support the referral system aimed at integrating and providing health services of a high standard.

11.1.5.2 Policies

Improving Health Standards of the Population: The primary health care centers (PHCs) represent the main instrument through which improved levels of health will be promoted. The implementation of a wide range of PHC procedures will be intensified in the Sixth Plan period. Health awareness programs will be expanded in the fields of nutrition, mother and child care, and the prevention of communicable and non-communicable diseases. Periodical health checks for children will be organized, with vaccination coverage against infectious diseases extended to all children. Follow-up procedures and the provision of health care by trained professionals will be implemented for the most vulnerable sections of the community, including the elderly, the handicapped and those with chronic illnesses. An expansion in pregnancy check-up services will be implemented by trained health professionals. The information feedback system between PHC sand hospitals will also be expanded, while environmental health awareness will be promoted through more effective coordination with other relevant government agencies.

Regional Distribution of Primary Heath Care Services: The number of PHCs will be increased in the regions according to the following criteria:

- cities whose population exceeds 200,000 will be served by one PHC per 10,000 persons;
- cities with a population less than 200,000 will have one PHC for every 5,000 to 6,000 persons;
- villages and remote populations will be served by one PHC per 500 to 2,000 persons.

Demographic maps will be prepared showing the regional population distribution and the location of existing health services, so that a more equitable regional provision of services can be properly planned. All PHCs will be provided with necessary equipment, as needed, such as X-ray services, laboratories, dental clinics and other basic services. Each PHC will be formally connected to the nearest possible referral hospital in the region.

Saudiization in the Health Services: The potential of existing medical colleges and health institutes to attract more Saudi nationals amongst their students and trainees will be expanded, and new intermediate health colleges opened, while the number of training programs and scholarships for Saudis will be increased, particularly bachelor's degree programs. The private sector will be encouraged to provide more health training programs for Saudis.

Health Service Financing Support: In order to broaden the funding base for an expansion in the health services, a system of health insurance will be expanded for non-Saudis.and their families In addition, methods will be studied and implemented to encourage private financial institutions, such as insurance companies, to establish health care facilities.

Upgrading Curative Medical Care: The number of hospital beds in both government and private hospitals will continue to expand in order to reach the targeted ratio, while optimal utilization will be made of hospital beds in accordance with the policy to improve efficiency. Strict quality control standards will be effected for all health services, including methods to develop and control the provision, storage, delivery and use of drugs and medical equipment. A study will be conducted in order to find the best method of administering and operating Ministry of Health hospitals to achieve greater flexibility and the optimal utilization of financial and human resources, and to evaluate the full operation approach that has been applied to some MOH hospitals, with a view to determining the feasibility of this system with respect to raising their efficiency and Saudiization rates and lowering costs.

Private Sector Investment in Health Services: All methods for increasing the private sector's role in the provision of health services will be studied.

11.1.5.3 Programs

The Sixth Development Plan includes programs and projects aimed at realizing the health sector's objectives and policies. These programs and projects focus on a group of activities, including the provision and development of preventive and curative health care services, the establishment of hospitals, primary health care centers and emergency medical service centers, other health support facilities, upgrading health manpower efficiency, increasing the number of Saudis in the health care work force, and the completion of applied studies and research on upgrading health standards.

11.1.6 SIXTH DEVELOPMENT PLAN TARGETS

The government is committed to raising the health levels of the population by improving the existing health services network in the Kingdom. The most important targets of the Sixth Plan include the following:

- maintaining the current penetration rate of hospital beds to 2.4 beds per 1,000 population;
- reducing the morbidity rate of infectious diseases per 100,000 population through immunization to 0.01 cases per 100,000 population for diphtheria, 0.4 for whooping cough, 40 for measles and 8 for TB, and eliminating tetanus and poliomyelitis altogether.
- reducing the frequency of diarrhea in children to 2 per child;
- reducing the morbidity rate of endemic diseases per 100,000 population to 200 cases of malaria in high rate areas, below 100 cases in medium rate areas, maintaining other areas free of malaria, and to 500 cases of bilharzia;
- increasing the immunization coverage to 97 percent for each of diphtheria, whooping cough, tetanus and poliomyelitis, 95 percent for hepatitis, and maintaining the 99 percent rate for immunization against TB;
- decreasing the incidence of new born children whose weights are less than 2,500 grams to 2 percent, and increasing the percentage of children of less than five years old whose weights are commensurate to their ages to 98 percent;
- raising the percentage of pregnant mothers who are provided with health care by health professionals to 97 percent and increasing the delivery rate by health professionals to 95 percent;
- increasing the immunization coverage of pregnant mothers against tetanus to 85 percent.

11.2 SOCIAL, YOUTH AND INFORMATION SERVICES

11.2.1 PRESENT CONDITIONS

The wide range of social, youth and information services provided by the government helps to improve the quality of life for the population and enable individuals to contribute to the development process and to address the impacts of rapid social, economic and cultural change. The Ministry of Labor and Social Affairs (MOLSA) - through the Deputy Ministry for Social Affairs (DMSA) - encourages local participation and enhances awareness of social and civic duties through its network of social work and development centers. It also provides rehabilitation and care through foster families or institutions which provide shelter and home care for physically or mentally disabled persons, as well as those who are deprived due to their social conditions. Pensions and relief assistance to needy persons are provided by the Deputy Ministry of Social Security (DMSS). The General Organization for Social Insurance (GOSI) and the Retirement Pensions Fund provide pensions and social insurance for retirJed employees of the public and private sectors. The social assistance and services provided by private charitable societies also help to raise the incomes of needy persons and to relieve their burdens. Cash subsidies for livestock and crops contribute to raising incomes in rural areas. The Saudi Credit Bank provides easy loans to low income individuals and households as emergency help or to establish small scale enterprises. Housing loans from the Real Estate Development Fund (REDF) reduce the costs of housing for families, thereby allowing incomes to be spent on other goods and services.

The General Presidency of Youth Welfare (GPYW) is responsible for services and programs leading to the mental and physical development of young people in cultural, scientific and athletic fields. The GPYW has provided sports facilities (such as centers, halls, youth camps, public playgrounds and fully equipped clubs) and has granted subsidies to literary and sports clubs and specialized private institutions in a manner supporting the role of the private sector in youth welfare. The GPYW also organizes national and international competitions in sports and cultural fields and aims to achieve international levels in all youth related fields. Furthermore, the GPYW grants the state prize in arts.

The Ministry of Information plays an important and complementary role in the field of social development to that of the social services and youth welfare institutions. Together, these institutions cooperate in improving the quality of life in general, and its cultural and psychological aspects in particular. This role is achieved through media activities aimed at extending a diverse and balanced range of information services throughout the Kingdom, including its more remote areas. These activities include specialized and general cultural programs, religious programs, programs dealing with social issues, drama programs and symposia, other news services designed to keep citizens informed about world events, and cultural and recreational programs for children.

Overall, the social, youth and information services agencies seek solutions to emerging social problems or adverse phenomena that arise out of general conditions in society. The services provided by these agencies to address such problems are enhanced through cooperation between the public and private sectors, and, in general, these services have succeeded in improving social and economic conditions for individuals and society as a whole.

From the outset of development planning in the Kingdom, great attention has been paid to the provision of social and youth services in all regions. Table 11.4 shows the range of social and youth services and the number of units providing such services at the end of the Fifth Plan period. In the field of community development, the number of development committees increased from 37 to 52. In the field of social welfare, the number of rehabilitation centers and institutions for handicapped and paralyzed children increased from 15 to 24. The number of orphanages, care homes for the elderly and residential nurseries increased from 29 to 31.

Financial support and assistance for family care also increased during the Fifth Plan. The number of handicapped beneficiaries of financial support for care at home rose from 19,074 to 37,400, while the number of beneficiary orphans and children with special conditions increased from 1,219 to 3,300.

The number of paralyzed children beneficiaries reached 3,100 by the end of the Fifth Plan, compared with 2,843 at the end of the Fourth Plan. The number of charitable societies increased during the Fifth Plan from 105 to 125.

The amounts disbursed on social security increased from SR 7.1 billion at the end of the Fourth Plan to more than SR 9 billion by the end of the Fifth Plan (an increase of 27 percent), as a result of the Royal Grant issued by the Council of Ministers' Resolution No. 75 (dated 6/6/1413) which approved an increase in social security allocations ranging between 43 percent and 138 percent, as of the fiscal year 1413/1414, so as to upgrade citizens' standards of living.

The **youth services** sector has been extremely successful, due to the provision of infrastructure such as sport stadiums, pavilions and clubs with the most advanced sports equipment. In the cultural field, the GPYW organized 108 story contests and 38 poetry contests at local level, and 8 story and 8 poetry contests at the national level, as well as 160 Holy Koran contests and 120 cultural weeks. In the social field, the GPYW organized 877 youth recreational camps, 11 work camps, 726 tours and 753 public service projects. In the field of sport, the GPYW was responsible for training 15,166 youths, and participated in the organization of 2,549 youth competitions at local level and 331 at international level.

The culmination of the GPYW's efforts saw the Kingdom's senior national football team win the Asian Championship Cup twice, while the national youth football team qualified for the World Youth Cup in 1413/14 (1993). The Kingdom's junior team won the World Junior Football Cup in 1409/10 (1989).

In addition, the Saudi equestrian team achieved first, third and fourth positions in the non-professional World Cup at Los Angeles and first position in the World Championship in Canada in 1412/13 (1992). The senior national football team had an historic achievement by qualifying for the second round of the World Cup Finals in the United States in 1414/15 (1994).

The **information services** sector's achievements in the Fifth Plan period were in line with the objectives and polices of the development plans, as the number of television transmission stations reached 115, of which 26 were fixed stations, thus increasing the transmission coverage of Channel One to 85 percent of the total population. Many Arabic and foreign language programs were broadcast on radio, including the general program, the Holy Koran, the English program, the French program, the music program, the second program and the Call of Islam. Total broadcasting hours reached 78 hours per day, distributed over 22 short-wave and medium-wave broadcasting stations and 16 FM stations. In the field of press and publishing, the number of Arabic newspapers reached 11 daily and 2 weekly, while there are 3 daily newspapers in English. In addition, there are 8 weekly, 21 monthly and 18 quarterly magazines. The Directorate General for Information Centers (through its eight centers in Riyadh, Makkah, Hassa, Qassim, Abha, Madinah, Jeddah and Dammam) issues informative publications and booklets on matters of social interest. For example, the number of informative publications in one year reached 32 books in three languages and two editions for each book. The total number of these books printed reached 1,205,000 copies, in addition to other publications such as posters.

There are also three information centers which monitor items about the Kingdom published or broadcast abroad and promote links with information agencies and international media throughout the world by clarifying the Kingdom's viewpoint on various matters to all nations, governments, organizations, associations and societies through books, publications, photographs and films produced by the Ministry of Information, and through press interviews and radio and TV programs about the Kingdom.

Table 11.4

Social, Youth and Information Services Networks

At the End of Fifth plan

Services units	Units at end of Fifth Plan
Local and Community Development	
— Community Development Centers	21
— Social Work Centers	7
— Local Social Development Committees	52
— Center for Training and Applied Social Researc	1
— Cooperative Societies	164
Social Care	
— Rehabilitation Centers and Institutions for paralyzed Children	24
— Residential Nurseries, Orphanages and Care Homes for the Elderly	31
— Social Guidance and Social Observation Centers	22
— Charitable Societies	125
Social Security	
— Field Offices	76
Social Insurance	
— Branch Offices	15
Youth and Sports	
— Sport Stadia and Pavilions	12
— Sport Clubs	24
— Private Sports Clubs	154
— Coastal and Sport Centers	17
— Youth Clubs	5
— Youth Hostels and Permanent Youth Camps	21
— Sport Federations and Committees	21
— Leaders Preparation Institute	1
— Sports Medicine Hospital	1
Information Services	
— TV stations (channel 1 covers 85% of total population)	115
— Fixed TV stations	26
— Radio Broadcasting Station (78 hour per day)	22
— FM stations	16
— Information Centers Abroad	3

11.2.2 Key Issues

Notwithstanding these achievements in the domain of social and youth services, and the availability of an integrated network of such services, one key issue must be addressed so that the long term service capacity of these institutions and their effectiveness can be increased.

Shortage of Social Information and Indicators

The collection, publication and widespread dissemination of accurate information and statistics are important for policy formulation and decision making in the social services sector. At present, the social services institutions lack information on basic social indicators, as well as the necessary capability for conducting social surveys and projecting future demand for these services.

Several scientific institutions in the Kingdom carry out social research and studies, including the social studies departments and faculties at the universities, the Security Research and Studies Institute at Riyadh, the Center for Training and Applied Social Research at Al-Dhariyah and other related government agencies. More coordination among these agencies concerning their research and study activities is needed in order to define the real needs of the community and to provide decision makers with the necessary information on the scale and extent of social problems.

Thus, the Training and Social Research Center should be supported and developed in order to undertake the responsibility of providing a broad base of social information, data and indicators to be used by decision makers in preparing the development plans, programs and policies. This center should be provided with the necessary facilities to train and qualify Saudi nationals in conducting the required social field surveys and research. Coordination can take place between this center and the other concerned agencies in following up and assessing the various social phenomena.

11.2.3 SAUDIIZATION

Deputy Ministry for Social Affairs (DMSA)

By the end of the Fifth Plan, the Saudiization rate in the DMSA had reached 88.5 percent. The Sixth Plan aims to fill all vacancies, while continuing the replacement of non-Saudi manpower by Saudis by bringing the Saudiization rate to 96 percent by the end of the Sixth Plan.

Deputy Ministry for Social Security (DMSS)

By the end of the Fifth Plan, the Saudiization rate in the DMSS had reached 98.4 percent. The Sixth Plan aims to fill all vacancies, while continuing the replacement of non-Saudi manpower by Saudis by bringing the Saudiization rate to 100 percent by the end of the plan.

Social Insurance

By the end of the Fifth Plan, the Saudiization rate in the General Organization for Social Insurance (GOSI) had reached 93 percent. The Sixth Plan aims to continue the replacement of non-Saudis by Saudis by bringing the Saudiization rate to 100 percent by the end of the plan.

General Presidency for Youth Welfare (GPYW)

By the end of 1413/14, 93 percent of the total manpower of the GPYW were Saudis. The Sixth Plan aims to fill all vacancies and to continue replacing non-Saudis by Saudis, thus bringing the Saudiization rate to 97 percent by the end of the Plan.

Ministry of Information

By the end of 1413/1414, 92 percent of the total manpower in the Ministry of Information were Saudis. The Sixth Plan aims to fill all vacancies and to continue replacing non-Saudis, thus bringing the Saudiization rate to 95 percent by the end of the Plan.

11.2.4 ECONOMIC EFFICIENCY

By their very nature, government expenditure programs on social and youth services are expected to yield a social as opposed to a direct financial return. Nevertheless, there is an obligation on government agencies in this sector to ensure that financial resources are utilized in the most efficient way to achieve a high quality service. This objective can be achieved through the following steps:

- optimizing the utilization of existing service facilities to ensure the maximum possible number of beneficiaries;
- preserving and maintaining such facilities;
- developing Saudi manpower in the social services and assigning the best qualified persons to work in these fields;
- studying the effectiveness and efficiency of the social services programs.

11.2.5 OPPORTUNITIES AVAILABLE TO THE PRIVATE SECTOR

In its efforts to encourage greater private sector participation in the development process, the government has contracted out to the private sector a range of activities in the social, youth and information services sectors. These include opportunities to construct, furnish, clean and maintain all social, youth and information services facilities through direct finance from the government budget, and to provide nursing care to residents of social care homes and institutions. The government also

encourages and supports the private sector in the production, publication and distribution of literary works and is committed to purchasing a number of privately produced publications at support prices.

The Ministry of Information will continue to expand its cooperation with the private sector to enable it to play a major role in radio and television productions. A major incentive in this respect has been the government's support to the private sector for the purchase of photographic equipment and materials.

In continuation of government support to this sector, the private sector will continue to be given the opportunity to establish, equip and furnish new projects for the social, youth and information services, based on direct finance from the government budget, as well as the maintenance and cleaning of all facilities.

11.2.6 DEVELOPMENT STRATEGY

The development strategy of the social, youth and information services sector will be implemented through the following objectives, policies and programs during the Sixth Plan.

11.2.6.1 Objectives

The ongoing development of the social, youth and information services sector will be guided by the following objectives in the Sixth Plan:

- to develop Saudi society by providing needed social welfare programs and to protect society against adverse phenomena;
- to raise citizens' participation in supporting social development and social welfare programs and enhance awareness of civic duties;
- to achieve balanced regional growth in the provision of social services throughout the Kingdom;
- to increase the incomes of needy persons through assistance and the encouragement of self-help;
- to strengthen family structures and relations, and to place emphasis on child care, early education and disciplined parenting;
- to develop youth welfare programs in ways that enhance the mental and physical capabilities of youth in social, cultural and sporting fields;
- to upgrade the quality of broadcast information programs in terms of their social and cultural contents.

11.2.6.2 Policies

The social, youth and information services sector aims to achieve these development objectives through the following policies:

- Continue the provision of social welfare support through the establishment of social homes, centers and institutions to meet the needs of those entitled to such services, and to raise the effectiveness of these institutions in developing the self reliance capacity of individuals.
- Support non-institutional social care programs by: encouraging the concept of foster families taking care of orphan children and those with special needs and conditions; supporting families through the handicapped subsidies program; promoting voluntary social action through the formation of private charitable and cooperative societies; and providing technical and financial assistance to these societies to be more active in rendering their social services.
- Expand community development programs to urban and rural areas in response to the growing needs of local communities, in coordination with the concerned agencies.
- Continue to disburse social security subsidies and assistance, while encouraging less reliance on them by extending subsidies for the establishment of small enterprise projects for beneficiary families; coordinate with the concerned agencies to provide suitable job opportunities to some members of these families according to their physical capabilities and health.
- Expand the social insurance system to cover all workers in both private and government sectors by applying the pensions scheme to all Saudis in employment, by requiring all employers who employ five or more workers to make social insurance contributions, and by applying the occupational hazards scheme to all Saudi and non-Saudi workers in establishments with five or more employees.
- Inculcate Islamic principles in bringing up the nation's youth.
- Develop youth welfare activities in all parts of the Kingdom and expand local community programs for children and youths, with special emphasis on the handicapped; promote excellence in all youth activities up to international standards.
- Set specific criteria for reviewing and evaluating the production of radio and television programs, through:
    - adopting Islamic and ethical values and the traditions of Saudi society as the basis for assessing the propriety of a program's information content;

- emphasizing the consideration of important social issues and of family-related and childhood issues in an attractive and interesting manner;
- selecting writers, producers of artistic and scientific material for programs, and technical staff according to certain criteria;
- adapting the duration of news, recreational, cultural and religious programs according to the needs of all segments of society;
- identifying fields of technical cooperation and exchange with other information agencies outside the Kingdom.

11.2.6.3 Programs

The main programs which will support the policies of the social, youth and information services include: institutional care of the elderly and children with special needs and conditions; care and rehabilitation for the handicapped (males and females); social care to individuals in their own environment; family care and the encouragement of family solidarity; social development; promotion and guidance of indigenous and cooperative activities; youth welfare programs; information programs; and social studies and research.

11.3 Culture

Never before in the history of civilization has culture received such an attention as it has in recent decades, or raised such an influx of concepts, approaches and definitions about its nature, functions, relations, institutions and tools, as well as the role it plays in formulating social sentiment and present and future life in general. Indeed, the concept of culture has never approached, as it does today, the concept of civilization in so close and interrelated a manner that the two concepts have become almost identical Culture has become the twin of civilization, embodying its characteristics spiritual, material, intellectual, scientific, sentimental. It encompasses the knowledge, values and the ethical commitment which are deeply rooted in culture, resulting from the strongly founded articles and teachings of Islam. It also embodies the methods of thinking and of the production of aesthetic, epistemological and technical creations, as well as the norms of behavior, methods of expression and the patterns of life. It, furthermore, comprises man's aspirations towards high ideals and his frequent attempts to review his achievements, and his continuous search for new significations for his life, values and future, as well as the creation of all that maximizes self-realization.

This civilized perspective towards culture includes completely the movement of society in all its categories and fields, responding, at the same time, to any qualitative change that takes place in society or its outputs. Such a perspective covers all environmental and human variations, making its diversities unique characteristics that enrich culture and boost its capabilities of development and interrelatedness,

The Kingdom of Saudi Arabia is the civilization and historical depth of the Arab Peninsula, having a geographical and non-geographical dimension. It is located at the crossroads of civilization and trading since prehistory. This made it a haven for artifacts, cultures, arts, crafts and industries, all of which have accumulated through trade exchange, neighborliness, invasions and migration, in a unique diversity, that combined the cultures of the sea and of the desert, of the village and of the town, of the coastal areas and of the inland. This ultimately led, under the strong canopy of the human and ethical values of Islam, to unity in diversity, to integration in disparity, which boosted the process of social cohesion, deepened patriotism and gave our culture its unique character and contemporaneity.

Such a comprehensive perspective of culture and its focus on the reality of cultural life in the Kingdom and its events, taking into consideration all the historical backgrounds that have created a momentum to the Kingdom's civilized heritage and all the cultural achievements realized during its modern history, necessitates that the perspective on culture in the Kingdom should include the following facts:

First : The culture of the Kingdom is an inseparable part of Islamic civilization in terms of religion and morals, as it is an inseparable part of Arab civilization in terms of language, history and literary heritage. Such a connection is an eternal destiny, historically and traditionally.

Second : The spread of advanced communication technologies and satellite networks and the influx of information from space which has transformed the world into a global village, have necessitated the interconnection with foreign cultures intellectually, literally and artistically, not only for the enrichment of our Arab culture but also for the rationalization of such a communication in general.

11.3.1 Present Conditions :

No doubt, social life in the Kingdom has faced challenges associated with the development process, and has resulted in forms of cultural expression which are important signals of the extent of sentimental response to the material achievements of development and the resultant influx of new information and knowledge. These helped, in an accumulative manner, to prepare for an intellectual formulation that has created a pattern of awareness, trying to understand and assimilate those results of modern development, and the resultant technologies, tools, knowledges and approaches. In other words, the radical changes made by the development plans in the life patterns in the Kingdom and their impact on social sentiment, definitely lead cultural life into a new path.

Such a new path of culture can be analyzed through considering the events in which the Kingdom has played a historical role or in which it has contributed at both national and international levels. This means that one should take into account the historical background of the Kingdom and all actions in which it has participated throughout its modern history. This will be best explained by an analysis of the present condition of culture.

In this context the following remarks are cogent:

- The cultural and artistic tasks performed by some government agencies had been associated with the initial stages of the development process, and had played their role satisfactorily. They can surely play a new role in the current and subsequent ambitious plans.
- Since the material and technical achievements are accumulating in an accelerating manner, both in terms of quantity and quality, the cultural agencies, in turn, have to face the challenge of producing a similar accumulation. This may entail new and deeper contexts and formulations for the activities of the cultural agencies, which improve the quality of those activities, making them more efficient sources of cultural production, particularly because they are potentially capable.
- The cultural production having as one of its objectives the encouragement of all individual initiatives, and to be more flexible in this respect, possesses the potential for working towards a wider and greater movement.Such a production (of books, etc.,) can cross the local level and reach out to the Arab and world markets, as a contribution to Arab culture.
- The facilities provided for the Arabic book can play a significant role in activating its circulation and in using it to fill the gap in the local production of books and in facilitating the interrelatedness of Arabic culture.
- The evolving concept of culture demands that we transcend the traditional concept of literature and arts (poetry, short story, novel, drama, criticism, music, folklore, ... etc..) which gives most people the impression that culture is the privilege of the elites, and that its institutions are forums only for artists and men of letters. This new concept should take cultural work out of its isolation in order to interact with all segments of society.
- The cultural discourse towards adults necessitates a parallel discourse towards children, that is not left to individual initiative, and does not form a specific trend or a vital cultural movement.

In the light of the aforementioned, the development strategy envisages a set of objectives and policies consistent with the present condition, to pull it towards the desired goals. These objectives should be derived from the section about culture in the (General Objectives and Strategic Principles) of the Sixth Development Plan.

11.3.2 Basic Issues :

1- Development of cultural life in consistency with material achievements :

Cultural is not a direct product of a project or a program measured, for example, by the output of a factory, and it is not a material product which can be designed and shaped as desired, directed and controlled. It is, by its very nature, spontaneous emanations of the cultural mentality, constituting, as a whole, the cultural life in its various levels. Consequently, it is better for the government not to interfere directly in cultural activity, or plan it in the same way it does in agricultural or industrial projects. However, the government, in its comprehensive planning, should not exclude culture, assuming that cultural activity can flourish only under its intrinsic conditions of spontaneity, particularly, as this area should coincide with the material achievements of development. In reviewing the present condition of culture, it appears that it has done whatever it possibly could within the limits of the available institutions and machinery that began with the inception of development. However, the increasing developmental achievements and the resultant new style of social life, have made it necessary that culture should develop in a manner consistent with these achievements, and envisage wider horizons of creation. Such a task is usually undertaken by the educated through their intellectual activities, and by the government in creating the appropriate climate and providing all resources and incentives, enabling them to express themselves in an ever increasing momentum.

As examples of what the government can do to boost cultural and intellectual life, these can be cited: a) providing opportunities for publication, distribution and circulation of books; b) encouraging cultural contacts and dialogues with various cultures in terms of exchanging experiences; c) providing means of serving the cultural heritage by documenting, recording and studying it, and then showing and preserving it. Thereafter, it is the responsibility of the intellectuals, thinkers and authors to develop cultural life through the adequate resources and the appropriate climate available to them.

2- New formulations for combining the efforts of cultural institutions to underline their effectiveness and develop their output.

It was natural, in the early stage of the development process, for the cultural services to be distributed among several government agencies and institutions concerned in one form or other with cultural work, in order to maximize such services. In that stage there was a need for such a distribution in the context of a general concept of culture, in which education efforts and youth and information services enhance each other. Those agencies and institutions have gone beyond their expected role in carrying out their duties, because they were strongly motivated to continue the achievements of the preceding pioneering generations.

However, the material progress made by the Kingdom, the distinguished position it occupies at the global level and the new concepts that emerged in cultural life, all of these necessitate the creation of a new formula to combine all cultural services within one institution that works within a comprehensive national plan, and for which the tools of continuous assessment and decision making will be available. If the 'development of cultural life in conformity with the material achievement' becomes the basic cultural issue in terms of content, then 'creating a new formula to combine the efforts of the cultural institutions to enhance their effectiveness' becomes the second issue in terms of form.

11.3.3 Development Strategy:

11.3.3.1 Objectives :

- Strict adherence to the values of Islamic Civilization as the core of the cultural identity.
- Creating the appropriate conditions and necessary potentials to enrich the personality of the citizens and build its integrity, to enhance their awareness of faith and their capability to participate in the process of human development.
- Enriching and continuously developing the intellectual structure through scholarly and academic studies, since culture is a basic cornerstone in the civilization of the nation.
- Achieving integration between heritage elements and the renewable human experience.
- Developing the intellectual, literary and artistic output in such a way that it can enter into dialogue with other cultures.
- Developing and enriching child culture in order to equip the young generations to play their anticipated role.

11.3.3.2 Policies

1. **Maintaining the Islamic and Arab identity of culture through :**

- Encouraging research in various fields of Islamic heritage (Islamic studies, Arts, Architecture, Sciences), using its noble values in educational curricula and materials.
- Encouraging the compilation and verification of the heritage by supporting those working in this field
- Publishing encyclopedias and dictionaries needed in Arab culture.

2. **Expanding the dialogue between national cultural products and similar ones in Arab, Islamic and Foreign Countries, through :**

- Making the maximum possible use of the cultural exchange between the Kingdom and other countries, and of all opportunities made available by others and by regional and international organizations of which the Kingdom is a member.

- Increasing the Kingdom's participation in the international book fairs and art exhibitions.
- Adopting a national plan for translation in which the highest priorities and required directions are clearly defined.
- Supporting the national festival for heritage and culture (Al-Janadriyyah) and making use of its successful experience in deepining the awareness of the national heritage, and in providing opportunities for holding meetings for intellectuals and men of letters from various Arab countries, and organizing the Saudi Cultural Week in Arab and foreign countries as well as hosting similar weeks in the Kingdom.
- Supporting the participation of Saudi intellectuals and men of letters in international cultural conferences, festivals, symposia and exhibitions.
- Intensifying the participation in dramatic and artistic activities in Arab and International forums.

3. **Supporting and developing cultural institutions and those working in the field, and establishing the institutions needed to complete the facilities, through:**

- Continuing to support King Fahd Library after the success of its experience, and considering the idea of establishing branches for it in other regions.
- Developing the literary clubs and the Saudi Society of Culture and Arts and its branches, to make its services available to all.
- Linking the efforts of the literary clubs and the Saudi Society of Culture and Arts in the field of publication with the national book plan, and direct their forum activities to tackle the problems facing society in general as well as the issues relating to culture, thought and art.
- Disseminating the concept of culture in educational institutions through courses in general culture and class periods devoted to the library and free readings.
- Supporting the exhibition of plastic arts by developing the existing exhibition halls and considering the establishment of additional ones, and encouraging the acquisition of some plastic arts as a groundwork for a permanent art exhibition.
- Considering the best ways to supply public libraries and their branches with new materials, including modern technology, to ensure their continuous updating and accessibility to readers most of the time, as well as developing school libraries.
- Developing existing museums and activating their programs so that they open during holidays and after work hours, and providing them with documentaries, historical and artistic publications.

- Considering the establishment of specialized museums, mobile museums, and folklore museums in various parts of the Kingdom.
- Studying the methods of completing the acquisition of cultural facilities, supporting them with qualified manpower and giving the private sector the opportunity to participate.

4. Activating book production and circulation inside and outside the Kingdom, through:

- Creating more opportunities for the publication and distribution of national cultural and intellectual products, and developing a national plan for the book which makes use of scholarly studies and researches and appropriate university theses (in addition to serving heritage and translation activities) in order to link the scholarly efforts with cultural activity, to enhance its efficiency.
- Taking the necessary measures to facilitate book exchange and circulation to and from the Kingdom.
- Making locally produced books available in the libraries of educational institutions and in private and government agencies.
- Supporting the book fairs held periodically by the government or relevant agencies.
- Supporting the private sector dealing with printing, publishing and distributing; including it to participate in producing books at reduced cost.

5. Creating the proper conditions for the intellectuals, men of letter and artists to produce, through:

- Supporting all ideas leading to the creation of an intellectual milieu wherein creative works flourish, especially in the light of what the two Royal Decrees (No. M/11, dated 19/5/1410 related to author patent rights protection, and M/26 dated 7/9/1412 related to depository law) have given intellectuals, men of letters and artists of rights and privileges, which represent an important step towards the completion of the cultural structure of the Kingdom.
- Considering the idea of establishing a fund for writers and artists to assist them in emergencies.
- Encouraging writers, translators, researchers and artists to perfect their work by establishing state prizes for the distinguished as an official appreciation for their efforts.
- Providing opportunities for writers or artists of distinguished talent to devote their full time to their creative work.

6 Giving attention to child culture, through:

- Considering the idea of establishing centers for the development of child culture equipped with simple scientific tools, hobby practicing methods, small libraries and children theatre.
- Giving attention to children libraries and the children sections in public libraries, providing them with new issues of books and magazines.
- Activating the production of cultural materials for children such as publications (emphasizing quality series like simplified scientific books, great authors or artists worldwide), educational and cultural programs, oriented towards the family in general and the mother in particular, and supporting the specialists in the field.
- Including simple cultural programs in school curricula in the first levels.

7. Expanding the cultural base to reach a comprehensive concept for culture, through:

- Increasing the number of cultural programs in radio and TV. that have simple cultural materials sugarcoated with entertainment, and expanding radio transmission of cultural activities.
- Strengthening the relationship between intellectuals and artists on the one hand and mass media and other cultural centers on the other hand, removing any obstacle that might stand in the road. These agencies should make the maximum use of their expertise for the benefit of all.
- Establishing a government cultural data base, serving individuals and organizations.
- Linking, as much as possible, cultural products with the realities of life in the Kingdom, particularly cultural activities such as seminars, readings from literature and art exhibitions.

11.3.3.3 Programs:

1- Public Commission for Literature, Arts and Science.

A study will be done on the feasibility of establishing a 'Public Commission for Literature, Arts and Science,' in coordination with the relevant agencies, to undertake two important tasks, namely, to take good care of the artistic and literary heritage of the Kingdom, and to provide accessibility to the various aspects of foreign culture.

The responsibility of this commission will be :

- to record, document, study and preserve the artistic and literary heritage of the Kingdom,

- to produce the Arabic book and facilitate its circulation.
- to activate the translation from and into Arabic.
- to strengthen international cultural relations, cultural exchange agreements, and to support Arabic and international cultural weeks and festivals.

The study should suggest the organizational structure of this commission; which may include :

- The Saudi Book House (a department for publication, a heritage department, a translation department, a magazine department, a printing press, a distribution department)
- The National Folklore Center (a section for artifacts registration, a section for audio-visual records, a folklore museum, a specialized library, a section for models production and transcription)
- Festivals Department.
- Cultural Exchange Department.

2. Arts Academy

A study will be done on the feasibility of establishing an arts academy to undertake the task of creating and supporting specialized cadres in the fields of arts and arts criticism, capable, in the short term, of training a generation of workers in these fields, which will guide and evaluate artistic activities, and, thereby, develop these subjects.

The arts academy may include specialized postgraduate institutes, such as :

- The Higher Institute for Drama Studies
- The Higher Institute for Art Criticism.

The arts academy will start with two institutes, to which others will be added gradually.

11.4 RELIGIOUS AND JUDICIAL SERVICES

11.4.1 IPRESENT CONDITIONS

Since its foundation, the Kingdom of Saudi Arabia has based all its political, economic and social development efforts on the principles and faith of the Islamic religion and has followed the Holy Quran and Sunna as its governing code, thereby confirming and enforcing Allah's Sharia, propagating the Islamic call and maintaining justice. As a protector of the Holy Places, the Kingdom performs its responsibilities in serving and taking care of the two Holy Mosques, and fulfills its vital and particular duty to Islam and Muslims all over the world.

Through the religious and judicial affairs agencies, the Kingdom preserves Islamic values, and duly observes, disseminates and confirms Allah's Sharia (God's Divine Law). Furthermore, it encourages morality and enhances brotherhood, cooperation and collaboration in all aspects for the benefit of Islam and Muslims, while at the same time maintaining justice and social stability.

The Ministry of Justice provides and administers judicial services in accordance with the Sharia rules, as the basis of the legal system in all dealings and transactions. The Ministry of Islamic Affairs, Endowments, Call and Guidance is responsible for propagation of the faith (inside and outside the Kingdom) and for printing, translating and distributing the Holy Quran, and religious books and conducting research, organizing symposia and lectures and awareness of pilgrims on religious matters, in addition to its responsibility for management and proper investment of the philanthropic endowments for the benefit of Muslims and taking care of the destitute (Al-Arbatah). Also, it directly supervises the construction and maintenance of mosques all over the Kingdom, and takes care of Muslims abroad and calls non-Muslims to adopt Islam. The Ministry of Hajj takes care of pilgrims and visitors and provides services and facilities that assist them in performing the Hajj and Umra rites at the Holy Places. It also provide them with religious guidance. The Kingdom give special care to the Two Holy Mosques in Makkah and Madinah, where the General Presidency for the Holy Mosques also provides services and facilities that assist pilgrims and visitors to perform the Hajj and Umra rites.

The General Presidency for Scientific Research and Ifta is responsible for issuing judicial opinions (Fatawi) on Sharia matters. It is also responsible for conducting and distributing Islamic research and studies. The General Presidency for the Morality Committees is responsible for preserving local mores and high standards of public behavior and for encouraging people to adhere to Islamic teachings.

The achievements of the religious and judicial affairs sector during the Fifth Plan have been significant, the most significant of which was the expansion of the total area of the Holy Mosque in Makkah to about 356,000 square meters. At the same time, the Prophet's Mosque in Madinah was expanded to 418,000 square meters. The Ministry of Justice decided upon a number of legal cases and suits heard before a number of courts and notaries public.

All mosques and prayer facilities in the Kingdom (more than 35,000) have been supervised and maintained, as has the King Fahd Complex for Printing the Holy Quran, which produces 7 million copies of the Holy Quran per year. These are being distributed all over the Kingdom and to all Islamic countries. The complex also records and translates the interpretation of the Holy Quran which are also being distributed to Muslims.

With regard to the investment of the philanthropic endowments returns, a number of housing complexes were constructed in Makkah, Jeddah and Taif, as well as the charity endowments markets in Riyadh, taking care of the homes and improving the standard of living of the destitute (Al-Arbatah),

as well as supporting and maintaining the endowed libraries all over the Kingdom. The Ministry of Hajj, in coordination with the other concerned agencies, have supervised all services and facilities that have greatly assisted pilgrims to perform pilgrimage rites and facilitated their movement to and from the Holy Places. The Ministry, in cooperation with the other concerned religious agencies, also supervised the religious guidance of pilgrims on matters relating to performance of their religious rituals and continued supervising and directing the Guidance (Tawwafah) organizations, the pilgrims' transport vehicles syndicate and the consolidated (Zamazemah) office.

Furthermore, the continuous and intensified efforts in the field of call (dawa) and guidance and related publications have led to the predominance of Islamic behavior in all aspects of life and to the increase, strengthening and stabilization of social relations. Also, the Holy Quran memorization societies have played their role in the memorization of the Holy Quran and the efforts made to encourage the Holy Quran Memorization Competitions have led to an increase in the number of participants and have attracted Muslims to read and memorize it in a manner serving religious issues.

11.4.2 KEY ISSUES

In spite of the remarkable achievements realized in the sector, there are still some key issues that need further attention and concentration during the Sixth Plan period.

Insufficient Information and Statistical Indicators

The availability of data and statistics from various sources is essential for socio-economic planning and for formulating the objectives and policies of the religious and judicial affairs sector so that appropriate decisions can be made. However, the concerned agencies in the sector lack a broad information and statistical data base and definite indicators that reflect the magnitude of social problems. Although several scientific institutions in the Kingdom conduct research and studies in the area of religious and judicial services, such as the universities and the Institute for Security Studies and Research in Riyadh, this sector still needs to:

- establish a specialized unit in all religious and judicial agencies to follow up the newly conducted research or studies on religious or social issues, in order to derive the conclusions and recommendations which assist the sector to find appropriate solutions for the problems and constraints which it faces;
- give more attention to field surveys, in order to identify the nature and scale of problems that are hindering the means of providing religious and judicial services;
- intensify training programs for Saudi nationals so that they will be able to undertake the required research in various religious areas;
- make use of modern technology such as computers.

Manpower in the Judicial Services

Due to the substantial socio-economic growth caused by the development process and the continuous increase in demand for judicial services, the judicial system needs substantial support to develop its manpower and to attract specialized Saudi nationals to work in the judicial system. This calls for greater emphasis on the curricula of the Sharia faculties and of the Higher Institute for Judges. The Royal Decree which increased employee salaries in the judicial system has been a great support for the judicial body and has made employment in judicial services attractive, thereby reflecting the special attention given by the government in support of the judiciary. However, similar attention should be placed on curriculum development.

Specialization in Judicial Services

In response to the substantial socio-economic development witnessed by the Kingdom, the scope and number of legal transactions, court suits and litigation have expanded. The Fifth Development Plan stressed the significance of establishing specialized courts (commercial, conjugal, juvenile, traffic) to be geographically distributed according to the needs of the various regions and physical growth. However, the need for advance in this direction still exists.

11.4.3 SAUDIIZATION

By the end of the Fifth Plan, Saudiization rates had reached high levels in all the relevant agencies in this sector: Ministry of Hajj (97.3%), Ministry of Islamic Affairs, Endowments, Call and Guidance (98.4%), Ministry of Justice (98.1%), General Presidency for the Holy Mosques (99.7%), General Presidency for the Morality Committees (99.9%), Presidency of Scientific Research and Ifta (99%). The target of the Sixth Plan is to fill all vacant posts and to replace all non-Saudis by Saudis in all agencies.

11.4.4 PRIVATE SECTOR OPPORTUNITIES

In the context of its policy to encourage the private sector's participation in the development process, the government has supported the religious and judicial sector through the following:

- providing opportunities for the contracting sector to construct and furnish facilities such as mosques, prayer facilities, homes for needy people, charitable foundations and housing for the Al-Arbatah (indigent) population;
- providing opportunities for the contracting sector to supply maintenance and cleaning services for the many religious and judicial facilities, both in the government agencies and at the holy places.

11.4.5 DEVELOPMENT STRATEGY

The religious and judicial services sector's development strategy will be implemented through the following objectives, policies and programs:

11.4.5.1 Objectives

- To safeguard Islamic values by duly observing, disseminating and confirming Allah's Sharia God's Divine Law;
- To focus on the development of Saudi society by providing religious care, facilitating litigation procedures and protecting society against adverse influences;
- To upgrade the intellectual and cultural standards of callers and Imams in a manner that would enable them to deliver their message in the proper manner.

11.4.5.2 Policies

- Provide the means to enable the judicial services to ensure the timely settlement of legal cases and transactions;
- Provide religious and judicial facilities in areas not covered by such services, in addition to improving existing facilities;
- Increase the number of general and specialized courts and distribute them according to the needs of the various regions;
- Increase the number of notaries public to contribute in the timely settlement of cases and transactions.
- Intensify and diversify training programs in the religious and judicial sector in general, and for judicial field staff in particular;
- Continue to operate and diversify the output of the King Fahd Complex for holy Quran printing;
- Continue to support the process of maintaining mosques and prayer facilities throughout the Kingdom;
- Continue to take care of Islamic centers within the Kingdom and abroad;
- Intensify the procedures for classification and control of endowments, increasing their revenues while maintaining and renovating their buildings;
- Continue construction of Al-Arbatah homes and improve the conditions of their residents;

- Continue the supervision and development of institutes for Imams, Khatibs and Callers and of benevolent religious schools and the endowed Islamic libraries;
- Devote attention to the various aspects of Islameditc heritage and open two centers in Makkah and Madinah, each encompassing a library, a museum for Islamic heritage, antiquities and manuscripts, along with caring for and studying such manuscripts and making them available to researchers;
- Continue to support the care of pilgrim service and care stations, rest houses, and centers for awareness and guidance;
- Continue coordination with the Hajj central committee, the Hajj missions and concerned government agencies in order to provide pilgrims with the best services;
- Continue to supervise and direct Hajj organizations within the Kingdom and abroad;

11.4.5.3 Programs

The programs and projects of all agencies providing religious and judicial services aim at realizing the objectives and policies of the religious sector for the benefit of all citizens. These programs and projects focus on a series of themes: providing and facilitating religious and judicial services; the establishment of specialized courts; construction and maintenance of mosques and Islamic centers; taking care of and developing Al-Arbatah homes and orphanages; control and maintenance of endowments and development of their investments; upgrading the efficiency of manpower at all religious and judicial agencies; and exerting the utmost efforts to increase the percentage of national cadres therein.

11.4.6 Growth Targets During the Sixth Plan:

- Increase notaries public capability to ensure the timely issuance of deeds transactions.
- Increase legal courts capability to ensure the timely settlement of legal cases.
- continue to operate and diversify the output of King Fahd Complex for Holy Quran printing and issue more than (7) million copies per year.
- Continue to organize local and international Quran memorization and recitation and Prophet's Sunna Competition.
- Continue to supervise and direct guidance (Tawwafa) organizations in the development of their services to pilgrims.
- continue to coordinate with Haj Mission.
- Continue to produce the Kaaba Kiswah and the Prophet Chambers Sitra (Curtain).

- Continue the maintenance and cleaning of the two Holy Mosques and the process of maintaining mosques which reached (35,000) throughout the Kingdom, increasing their numbers and encouraging benevolent societies to construct more mosques.
- Continue the survey and control of endowments, protect them and increase their revenues.
- Continue the supervision and development of institutes for Imams, Khatibs and callers and of benevolent religious schools and the endowed Islamic Libraries.
- Continue the material, moral and education support of Muslims abroad, particularly where there are Islamic minorities.
- Continue to support Islamic centers, Societies, Organizations and Institutes abroad.
- Continue to encourage Muslims to adhere to their religion and to call non-Muslims to adopt Islam.
- continue to call non-Muslims to adopt Islam by wisdom and proper advice.
- On-the-job training for the sector's employees.

CHAPTER 12

TRANSPORT AND TELECOMMUNICATIONS

12. TRANSPORT AND TELECOMMUNICATIONS

This chapter highlights the progress realized during the Fifth Plan in the fields of transport, telecommunications and postal services. It also deals with the key issues to be tackled during the Sixth Plan and the subjects of Saudiization, economic efficiency and the opportunities available for the private sector, as well as the objectives, policies, and programs of these sectors during the Sixth Development Plan.

12.1 TRANSPORT

12.1.1 PRESENT CONDITIONS

The transport sector plays a vital role in the movement of people and goods both within and between countries. It also enhances economic and social development in general through the direct support it provides to other sectors such as agriculture, industry and mining, in the form of an integrated network of land, sea and air transport services, as well as pipelines and storage facilities. The transport sector also offers investment opportunities and provides employment and training for the upgrading of national manpower. Finally, transport's contribution to economic development depends on the operational efficiency of the existing transport network. In this respect, the Ministry of Planning is currently cooperating and coordinating with the relevant transport agencies in the preparation of a long-term plan that will address the future growth requirements of this sector during the next twenty years.

During the Fifth Plan period, transport services in the Kingdom generally satisfied user requirements in both quality and quantity, so that no serious capacity bottlenecks existed by the end of the Fifth Plan. The major achievements of the government's transport agencies during the Fifth Plan are reviewed below.

Roads and Road Transport

During the Fifth Plan, the Kingdom's main road network grew by about 2,100 kms, or almost 10 percent, thus considerably exceeding Plan targets. The network of secondary roads and paved agricultural roads also grew by about 1,300 kms and 2,000 kms respectively, thereby increasing the total length of the asphalted roads network to about 43,000 kms. About 36,000 kms of main and secondary roads are currently maintained by about 60 Saudi private contractors.

The Ministry of Communications (MOC) made considerable progress in the field of traffic monitoring by implementing and operating a number of traffic counting and truck weighing stations, and in the analysis and periodic publication of aggregated data.

SAPTCO also plays a major role in providing public road transport services to passengers, currently transporting around 30 percent of all inter-city travelers. Due to a good operating performance and the introduction of international services in 1410, SAPTCO's operating results improved steadily during the Fifth Plan period. It achieved operational self-sufficiency in 1410/11, and from 1411/12 until the end of the Fifth Plan, it was able to operate without a government subsidy.

Railroad Organization (SGRRO)

Between the beginning of the Fifth Plan and 1413/14, rail freight volume grew by 36 percent, to about 2.1 million tons (Figure 12.1). The cost covering ratio of the SGRRO rose steadily from around 18.1 percent in 1409/10 to 42 percent in 1413/14, as a result of declining costs and increasing revenues. Although any comparison with other countries should take into consideration the difference in network sizes, the *achieved revenues per kilometer* reflects the Kingdom's low rail fares, especially in passenger transport, where it achieves between 2 and 10 percent of the passenger revenues per kilometer achieved in European countries. However, manpower productivity increased during the first three years of the Fifth Plan, as the volume of freight handled rose from 1.6 million tons in 1409/10 to 2.1 million tons in 1413/14, while the number of employees remained constant.

Air Transport and Airports

Air passenger volumes grew from 20.3 million departures and arrivals in 1409/10 to 25.1 million in 1413/14, an increase of about 24 percent.

With the re-opening of Turaif airport and the start of operations at Wadi Dawasir airport, the number of airports in the Kingdom rose to 25, including three international airports, seven regional airports and fifteen local airports. Necessary steps are currently under way to start operations at King Fahd International Airport in the Eastern region (Figure 12.2).

The operating cost recovery ratio of SAUDIA increased during the Fifth Plan to 94 percent of its revenues in 1413/14. Over the same period, unit operating costs have been in line with the international average of the air transport industry. Employee productivity also rose, from 186,200 available-ton-kilometers per employee in 1410/11 to 219,000 available-ton-kilometers per employee in 1413/14 (Figure 12.3).

Ports and Sea Transport

Developments in the Kingdom's foreign trade during the Fifth Plan period reflect the changes that occurred in the overall economy. Since 1409/10, the cargo handled in the Kingdom's major ports

began to grow steadily, rising from 63.7 million tons in 1409/10 to 83 million tons in 1413/14, an average annual growth rate of 6.8 percent. The boom in the domestic construction sector affected cargo volumes in two different directions; while imported construction materials rose by more than 5.8 million tons (or 174 percent) between 1409/10 and 1413/14, exports of construction materials declined as a result of high domestic demand (Figure 12.4).

The Sea Ports Authority (SPA) adopts the latest port management and operation techniques, and uses the most advanced facilities and equipment for cargo handling. This is reflected positively in the operational results. Throughout the Fourth Plan and the first three years of the Fifth Plan, port revenues were more than twice the levels of expenditure. However, the cost recovery ratio (revenues to total expenditure) decreased from 278 percent in 1411/12 to 185 percent in 1413/14, because of the reduction in port handling fees from 1412 onwards. Despite this reduction, however, operating expenses per ton of cargo handled fell from SR 7.6 in 1412/13 to SR 6.7 in 1413/14, a decline of around 12 percent, thus indicating improved operating efficiency and performance levels.

This reduction in ports fees will have a positive impact on the economy in general because it improves the competitiveness of Saudi exports, decreases the cost of imports and makes Saudi ports more attractive in the region.

The operating efficiency of ports can be measured by a number of indicators, the most important of which are: *manpower productivity; time spent by a ship in port; the number of containers handled per hour; handling costs per ton of cargo; and revenues per ton of cargo.* These indicators show that the SPA has succeeded in operating its ports at a high level of efficiency. Manpower productivity in the commercial ports rose from 1,610 tons per employee in 1407/08 to 2,810 tons per employee in 1412/13. In the industrial ports also productivity rose from 22,000 tons per employee to about 159,000 tons per employee over the same period. The revenue per ton of cargo handled reached about SR 14 in 1413/14, or about double the cost per ton of cargo handled.

The total number of berths in the major ports increased by 3 percent to 179 berths during the Fifth Plan, which is about four times the number of berths in 1396. The available capacity of the ports increased more than forty-fold since 1396, to about 247 million tons per year. The capacity of the industrial ports represents about 74 percent of the total available capacity of all ports.

12.1.2 KEY ISSUES

With the physical infrastructure largely in place, emphasis has moved increasingly to the operating efficiency of transport service facilities. However, a number of key issues still need to be addressed to achieve greater efficiency and to implement a coordinated transport policy.

Figure 12-1

Rail Freight and Passenger Traffic

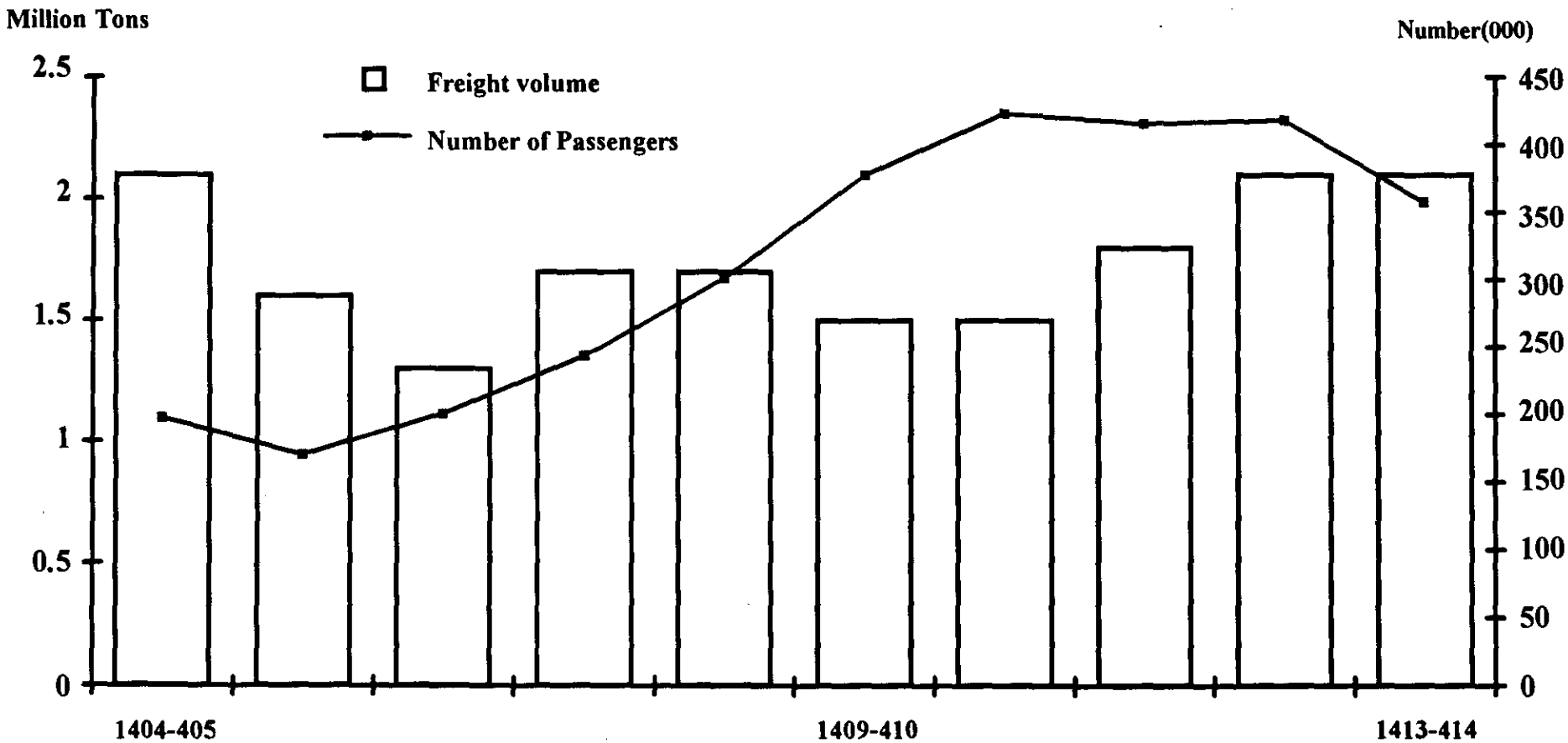


Figure 12-2:
Distribution of Passengers at the Kingdom's Airports 1413/14

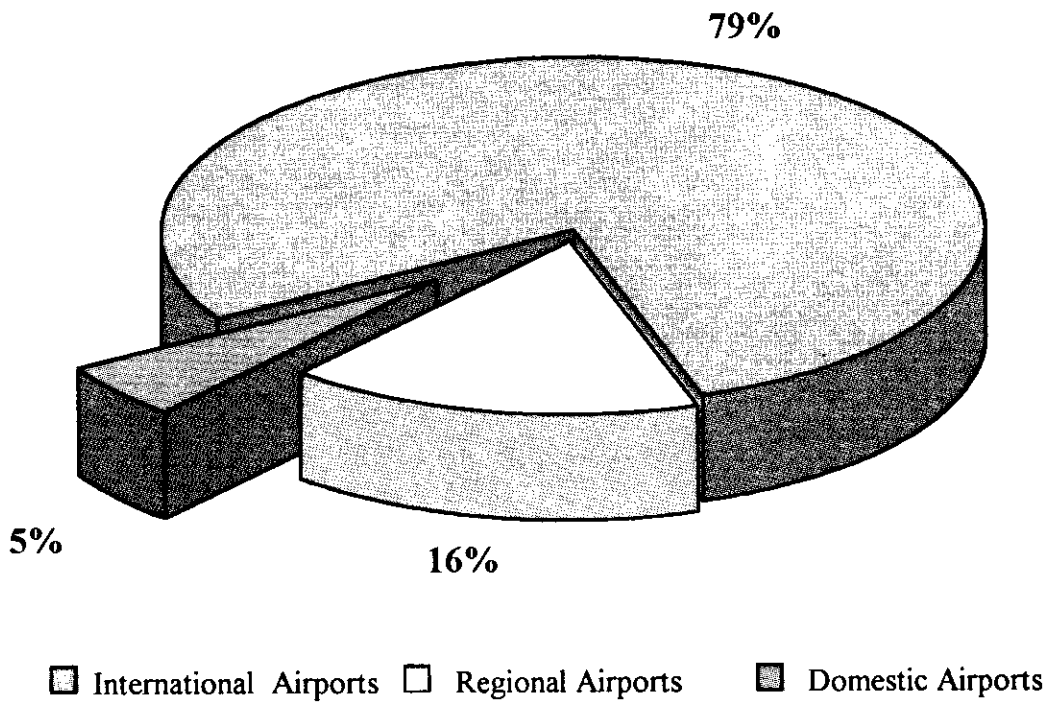


Figure 12-3

Passengers on Domestic and International Flights (Saudia) (Scheduled Flights)

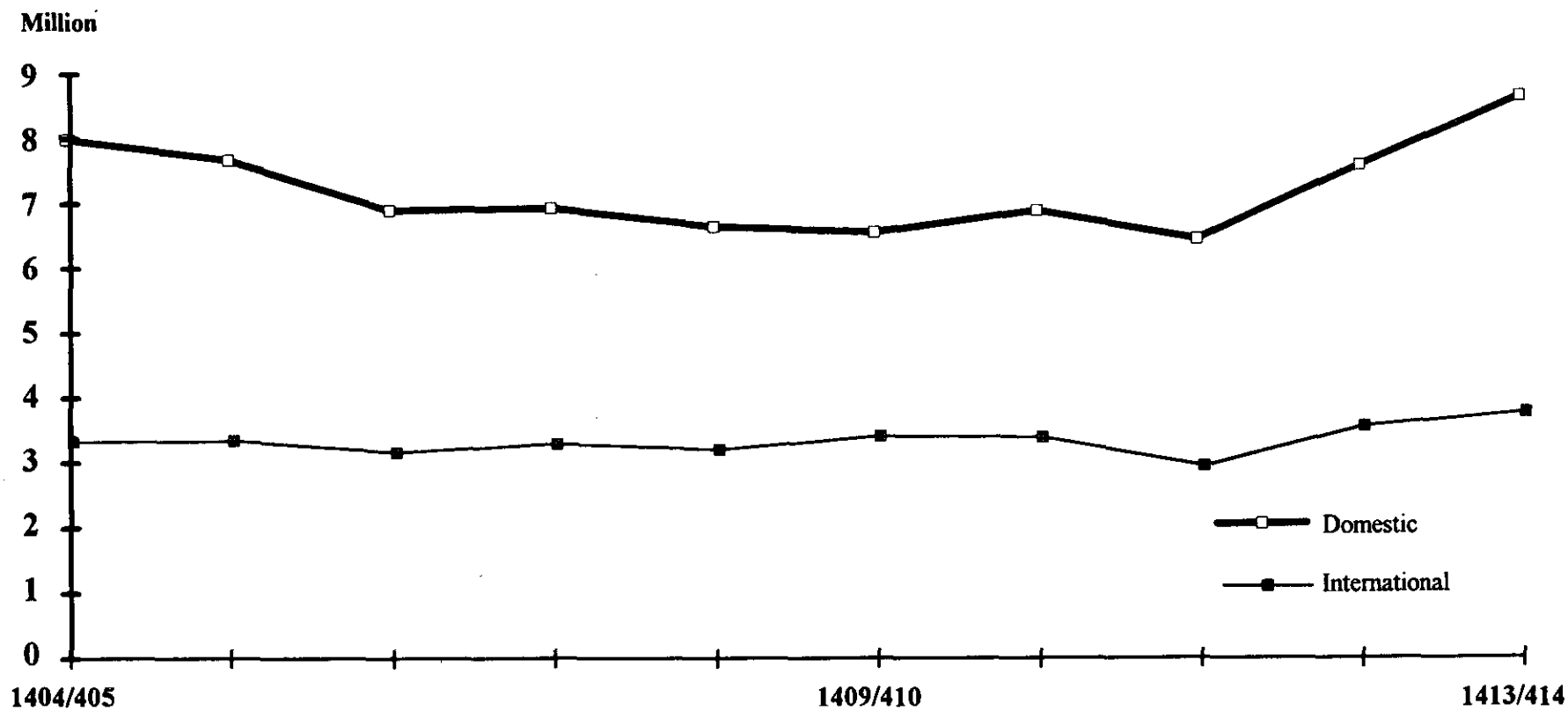
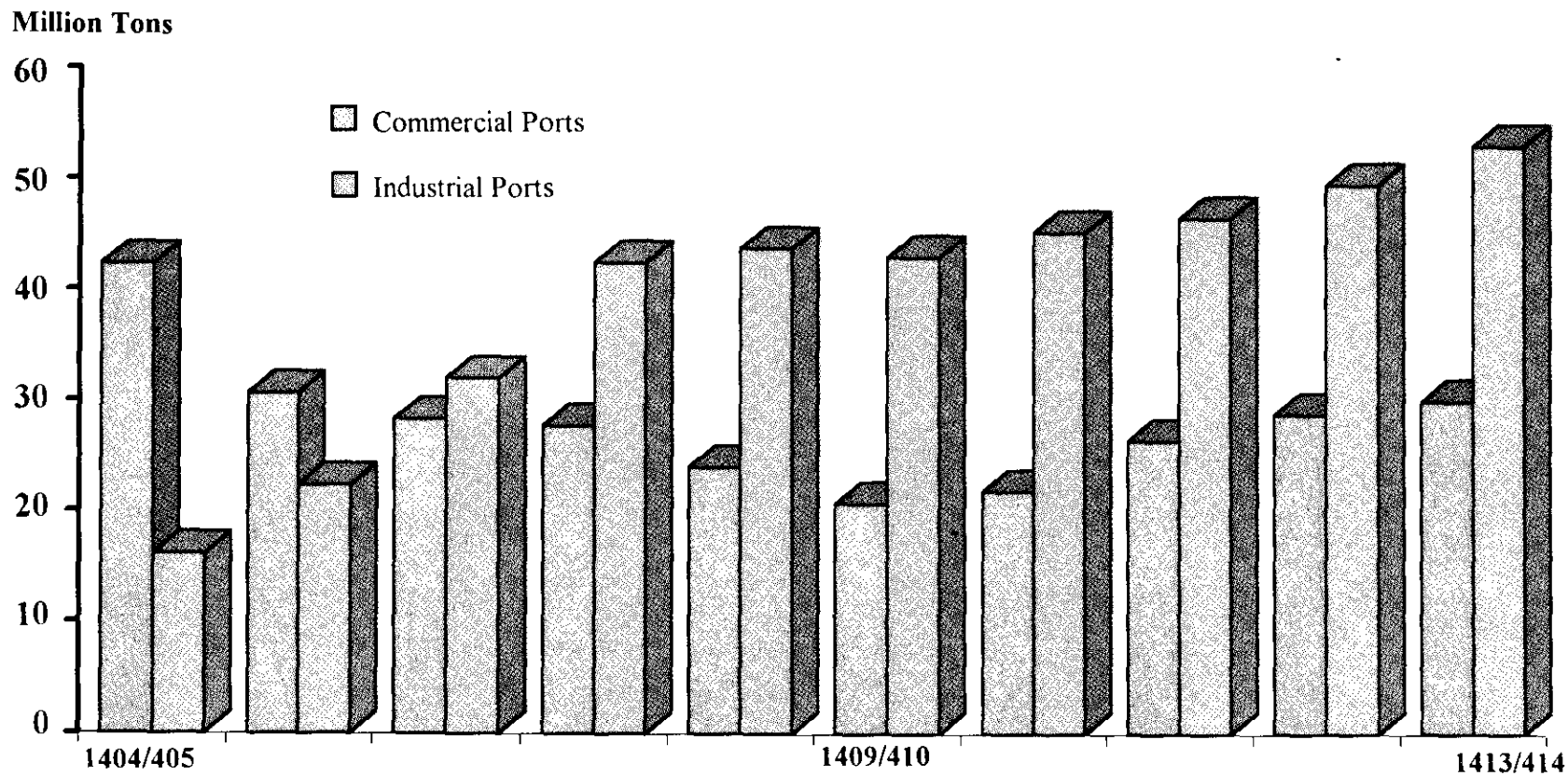


Figure 12.4
Cargo Handled in Commercial and Industrial Ports



Deregulation

Deregulation and the improvement of operating procedures is a policy approach that is currently being adopted worldwide. In general, this policy aims to expand the role of the private sector in transport activities, and to introduce the principles of competition and market liberalization for both government-owned and private sector companies. In this way, greater efficiency and improved financial performance are the expected results. The process of deregulation should concentrate on the current tariff system and on the enhancement of competition between the various transport modes, by amending the existing system of direct and indirect subsidies.

Information Systems

The concerned agencies in the transport sector have achieved great advances in the establishment of data bases and information analysis, which are needed for planning and decision making. Despite great efforts to improve the recording and documentation of accidents, more information gathering, monitoring and analysis of traffic movements on the Kingdom's main roads is still needed. Such information is essential for the economic evaluation of new road projects. In addition, environmental aspects are gaining more attention, making it necessary to start monitoring pollution levels on a regular basis, especially in densely populated areas.

Operating Efficiency

Despite improved financial results, some issues related to the operating efficiency of some agencies still need to be addressed, through continuous performance improvements based on higher employee productivity, the efficient use of existing equipment and facilities, and the presence of balanced competitive conditions for different transport modes.

Road Transport Safety

Despite the high standards of security and safety provided by the road network, the number of traffic accidents is continuously growing. This reflects the need to educate drivers in the principles and disciplines of safe driving and the technical condition of vehicles, and to raise traffic awareness among the population in general. Further efforts should be made in these directions.

Environmental Aspects of Road Traffic

The Kingdom has made great efforts to control environmental pollution and to limit its impacts, especially in densely populated areas. Since this problem does not receive adequate attention from the public, precautionary steps must be taken to educate the public and to promote their level of awareness of environmental matters.

12.1.3 SAUDIIZATION

The process of Saudiization in the public sector progressed steadily during the Fifth Plan, with the following rates achieved in the various agencies: full Saudiization in the Presidency of Civil Aviation, where total employment amounts to about 3,100; 92.3 percent of the 3,200 total employment in the SPA; 93 percent of the 4,100 total employment in the Ministry of Communications; 74 percent of the 1,900 total employment in the SGRRO; and 65 percent of the 23,900 total employment in SAUDIA.

The low Saudiization rate in SAUDIA reflects the nature of the air transport industry, where companies operating in the international market meet their needs for local staff from those markets. It is planned to Saudiize all positions in the public sector by the end of the Sixth Plan, except for highly technical staff which are difficult to find in the Kingdom.

On the other hand, the process of Saudiization in private establishments operating in the transport sector has been lower, ranging from 39 percent amongst railroad maintenance contractors, 27 percent in the domestic airports, 7 percent in the international airports, and 12 percent in the ports contractors (maintenance and cargo handling).

The private sector will be prompted to accelerate the rate of Saudiization and to implement directives in this respect through both incentives and obligatory measures.

12.1.4 ECONOMIC EFFICIENCY

During the Sixth Plan, transport policies will aim to provide the conditions needed for the sector to operate as an integrated transport network and to establish performance criteria for the executive agencies consistent with prevailing market conditions and the sector's potential to attain international standards of productivity and financial performance.

The operating efficiency of the transport agencies improved during the Fifth Plan period:

- SAUDIA's manpower productivity reached 97 percent of its target rate, while its unit cost of production was below the IATA average in 1412/13;
- the cost of maintaining asphalted roads was more than 21 percent less than the targeted cost;
- the ratio of operating expenditures to revenues in the ports reached 185 percent in 1413/14 compared to 210 percent in 1409/10, while the direct handling cost per ton of cargo declined from SR 11.4 to SR 6.7 over the same period;
- the ratio of operating expenditure to revenues at the Railroads Organization reached 53 percent in 1413/14 compared to 45 percent in 1409/10.

Improved economic efficiency in the transport sector during the Sixth Plan requires the resolution of problems and issues that arose during the Fifth and earlier Plan periods. Future expansion and greater efficiency also require a long-term strategy that focuses on comprehensive development needs and coordination between the various transport modes. In support of this goal, the Ministry of Planning has undertaken a comprehensive study of the transport sector to the year 1435, in cooperation with the agencies concerned. The preliminary findings of this study confirm the importance of developing the main corridors over the longer term and of implementing the following measures:

- improving existing organizational structures and administrative procedures, by modifying the regulatory framework to ensure effective competition within a free market environment;
- improving the technical skills of employees, thereby raising productivity;
- reducing employee numbers to internationally recognized levels at those agencies that currently exceed these levels;
- expanding the private sector's role in the provision of transport services.

12.1.5 PRIVATE SECTOR OPPORTUNITIES

Enhancing the private sector's role will continue to be one of the strategic principles of development, and one of the transport sector's top priorities during the Sixth Plan.

The private sector currently implements all the transport sector's construction projects and O&M programs through contracts financed by the government budget and under direct government management and supervision. The Sixth Plan aims to review and amend the rules and regulations of the transport sector in accordance with free market principles and the need to balance competitive conditions amongst the various transport modes. In this way, the private sector can be attracted to undertake the tasks of boosting the efficient development of this sector and to shoulder increasing responsibility for its integrated management, operation and maintenance activities.

12.1.6 DEVELOPMENT STRATEGY

The development strategy in the transport sector will be implemented through the following objectives, policies and programs:

12.1.6.1 Objectives

The overall objectives in the transport sector remain the improvement of productivity and the provision of appropriate levels of service to the community. Within this framework, the two major strategic objectives in the Sixth Development Plan will be:

- to ensure continuous balance between the increase in demand for transport services and the appropriate expansion in both the domestic and international transport networks;
- to rely increasingly on the private sector to provide transport services and to study the possibility of privatizing those activities now operated by the government (such as SAUDIA), whenever feasible.

12.1.6.2 Policies

1. Reorganizing the Transport Sector

The following policies aim at increasing the efficiency of managing and operating the Kingdom's transport infrastructure:

- Improving the administrative and legal framework regulating the relations between the private and public sectors in a manner that will encourage the private sector to increase its investments in transport activities;
- Reconsidering those subsidies and other regulatory factors that may affect the competitive balance between transport modes;
- Reviewing and possibly modifying transport service prices so that they will not be less than production costs, except in rare cases, in accordance with the Fourth Basic Strategic Principle of the General Objectives and Strategic Bases of the Sixth Development Plan.
- Defining and monitoring quality standards for contracted transport services.

2. Enhancing Economic Efficiency in the Public Sector

This policy aims to improve economic efficiency in the public sector by:

- Greater use of economic evaluation criteria in the decision making process for new investment projects (transport infrastructure and equipment);
- Improving the transport sector's data and information system, including the definition and monitoring of performance indicators;
- Ensuring maximum utilization of existing capacity through efficient operations;
- Further improving manpower skills through training;
- Adjustment of organizational structures according to prevailing needs.

12.1.7 SIXTH PLAN TARGETS

- Operational self-sufficiency must be achieved or maintained for each of the main commercial and industrial ports.
- SAUDIA will aim at operational self-sufficiency and manpower productivity levels equal to international levels.
- The Railroad Organization is expected to increase the utilization of passenger trains by decreasing the shuttle trip times from two days to one day.
- SAPTCO is expected to maintain positive financial results throughout the Sixth Plan.

12.2 TELECOMMUNICATIONS AND POSTAL SERVICES

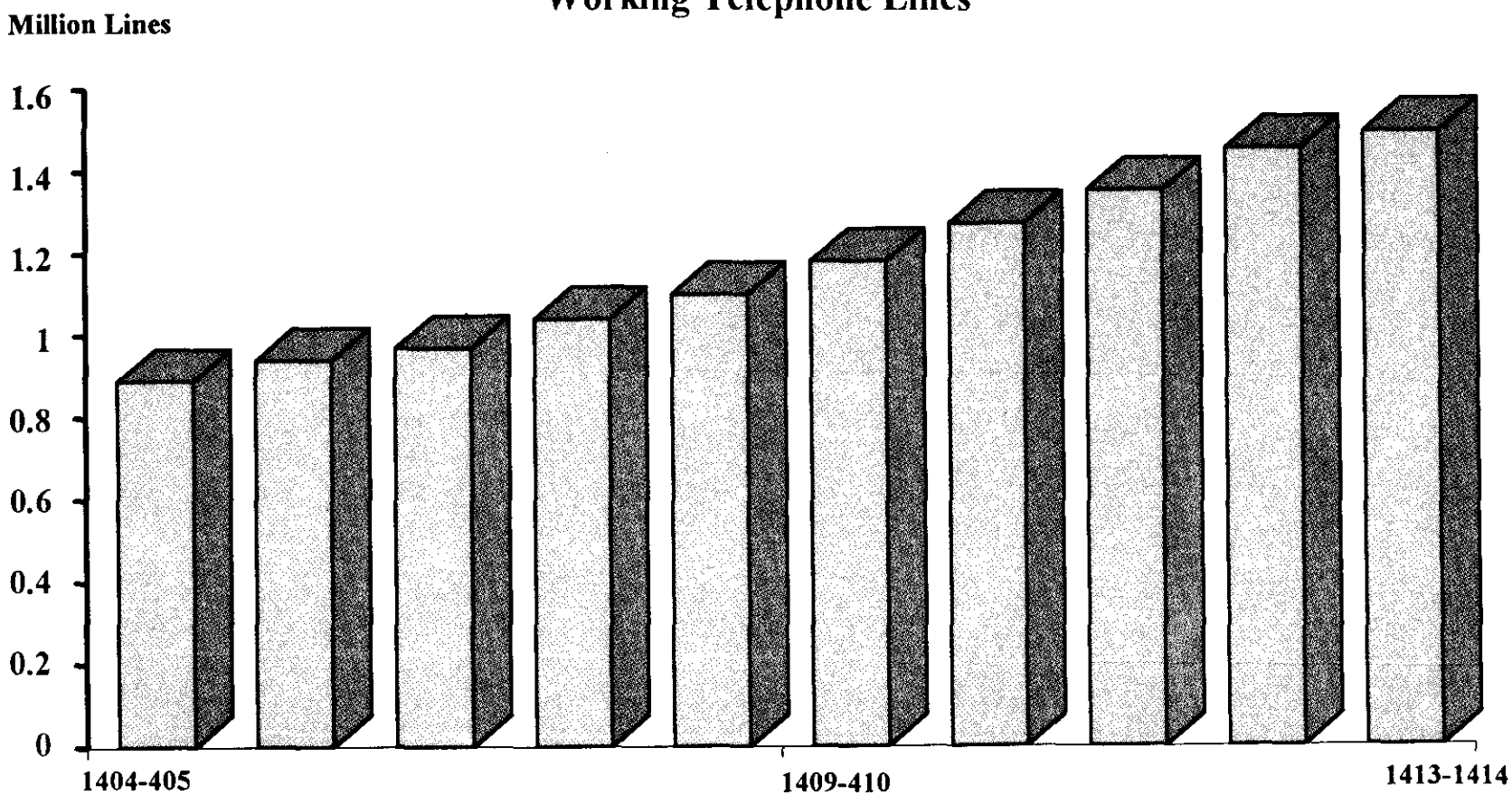
12.2.1 PRESENT CONDITIONS

Over the past two decades, telecommunications and postal services in Saudi Arabia have made a significant contribution to economic and social development, through the provision of a wide range of communications services: telephones, mobile telephones, paging systems, leased circuits, telex, data communications, telegraph, letter and parcel services. Such services provide essential communication links, both within the large surface area covered by Saudi Arabia and with the outside world. In recent years, commercial establishments and the producing and financial sectors have come to rely more and more on telecommunications for the collection, storage, processing and distribution of information in their efforts to raise productivity, to control costs, to manage decentralized units, to reach customers and to promote new products.

During the Fifth Plan period, substantial progress was made in the overall performance and productivity of the telecommunications service, through both rising revenues and greater control of operating and maintenance expenses. Revenues from the telephone service, which accounted for around 96 percent of total revenues, rose from around SR 4 billion at the end of the Fourth Plan to about SR 6 billion at the end of the Fifth Plan. At the same time notable advances were made in the expansion and quality of services and in the management of technical and human resources.

The number of working telephone lines rose to about 1.53 million over the Fifth Plan period, an increase of about 372,000 lines, or almost 32 percent (Figure 12.5). A new radio paging service was introduced in 1412 and the number of new subscribers rose to around 167,000 by the end of the Fifth Plan period. The number of specialized point-to-point lines -- used mainly for data communications -- rose from about 30,700 lines in 1409/10 to around 49,000 in 1414/15, while public pay telephones rose from 6,200 to 7,500 over the same period. The packet-switched public data network installed at the end of the Fourth

Figure 12-5
Working Telephone Lines



Plan (Alwaseet) has developed steadily, and now provides around 3,000 active data services. The high-technology international submarine cable project (SEA-ME-WE 2), based on digital optical fiber systems, will be completed by the end of the Fifth Plan and will meet the growing international circuit requirements of Saudi Arabia.

12.2.2 KEY ISSUES

During the Fourth and Fifth Plan periods, the main thrust of development was towards increasing the utilization and optimization of existing telecommunications and postal facilities. The investment allocations were used mainly for necessary basic expansion and modernization of the national and international telecommunications network, while postal services maintained their current performance in terms of productivity and the volume and quality of services. During this period, however, there has been a growing demand for basic telephone services, mobile telephones and public pay telephones. In addition, demand has grown for the introduction and application of new telecommunications technologies, such as an integrated services digital network (ISDN), digital mobile communications, broad band digital leased circuits, video conferencing and electronic mail. Therefore, the overriding concern of future years will be the satisfaction of this growing demand for existing and new telecommunications services.

Thus, modernization and expansion broadly define the twin challenge facing the telecommunications sector at the start of the Sixth Plan, particularly with respect to the long distance network (with its requirements for digitization and the installation of optical fiber cables, digital microwave facilities and the upgrading of satellite equipment) and the exchanges, where existing hardware and software needs to be replaced. Such modernization and expansion will require substantial investment and methods of increasing private sector participation in this investment will be studied.

A similar need exists to expand and modernize the Kingdom's postal services, although the investment required is much less. If these services are to fulfill their potential contribution to economic and social development throughout the Kingdom, additional post offices and mail collection points will be needed in rural, suburban and urban areas, along with advances in mechanization and the expansion of surface and mobile mail transport routes.

12.2.3 SAUDIIZATION

By the end of the Fifth Plan, the Saudiization rate in the telecommunications and postal services sectors had reached erlmost 93 percent of the total employment of 20,300 and 10,000 respectively. Full Saudiization is expected by the end of the Sixth Plan. However, the rate of Saudiization remains low in the programs implemented by the private sector. Private companies operating in the telecommunications sector must be monitored to ensure that they are abiding by the directives to increase the rate of Saudiization and that they are taking positive actions towards achieving this goal during the Sixth Plan period.

12.2.4 ECONOMIC EFFICIENCY

Over the Fifth Plan period, there was a notable improvement in manpower productivity in telecommunications, as the number of telephone lines per employee rose from 58.4 to almost 80 (an increase of 37 percent). At the same time, revenue per employee rose by almost 45 percent, from around SR 200,000 to about SR 290,000. With respect to the postal services, the average number of postal items per employee exceeded 53,000 over the Fifth Plan period.

Measures to raise productivity and efficiency in the telecommunications sector in the Sixth Plan are closely linked to the proposed large-scale investment in new technology and the expansion of the network. Higher levels of output can be achieved at lower operation and maintenance cost, through the introduction and extensive application of high capacity switches, digital transmission links and automated operator services. In addition, the internal management of the network will become more efficient through the intensive use of computers for automatic fault analysis, for customer services, for improving the management and control of materials, and for overall financial management. The proposed capital investment in modernizing and expanding the telecommunications network during the Sixth plan is expected to result in the following improvements in productivity over the five-year period:

- an increase in revenues per employee from SR 290,000 to SR 440,000;
- a decrease in the number of employees per 1,000 lines from 12.9 to 8.

At the start of the Sixth Plan, the operating costs of the Kingdom's postal services are expected to exceed the revenues generated because of the labor-intensive nature of these services. It is important, therefore, to raise the productivity and efficiency of postal workers, to simplify work practices and to expand the use of automatic processing.

12.2.5 AVAILABLE OPPORTUNITIES FOR THE PRIVATE SECTOR

Enormous capital investment is needed to expand and upgrade the telephone exchanges, the long distance network, mobile telephones and support facilities. There will be significant opportunities for private sector investment in telecommunications, through joint ventures, supplier credits, or revenue sharing programs, particularly as the profit levels in telecommunications are now large enough to attract private investors. However, profitability can be further increased through productivity gains, cost reductions per line and improved revenue collection. The total cost of potential projects in the Sixth Plan will exceed SR 16.7 billion. Studies are currently being undertaken on the possible options for private sector participation in financing the projects of this sector. It is also planned to privatize some business-oriented telecommunications activities if this will generate real benefits for the national economy.

Opportunities for private sector participation in the postal services will be mainly confined to operations and maintenance contracts for buildings and mail transportation activities. Studies can be undertaken in the Sixth Plan period on the possibilities for private sector financing of some postal projects.

12.2.6 DEVELOPMENT STRATEGY

The development strategy for the telecommunications and postal sectors will be implemented through the following objectives, policies and programs.

12.2.6.1 Objectives

In recognition of the important role of telecommunications and postal services in the Kingdom's economic and social development, the following objectives will be pursued in the Sixth Plan:

- to satisfy the increasing demand for telecommunications and postal services in all regions;
- to provide high quality telecommunications and postal services at favorable prices;
- to modernize and expand the telecommunications networks and the postal infrastructure;
- to consolidate the financial viability and productivity of government agencies in these sectors and to achieve their financial autonomy;
- to develop a highly skilled and qualified Saudi work force;
- to provide opportunities for the private sector to finance and operate the telecommunications and postal services.

12.2.6.2 Policies

The following policies will guide the development of the postal services and telecommunications sectors in the Sixth Plan period:

Postal Services

- Efforts will be made to improve the quality of the postal service by reducing the time for mail processing;
- Postal coverage will be expanded with due consideration to the volume of traffic, the range of coverage and the criteria of growth.

Telecommunications

- The telecommunications network, particularly the long distance network, will be expanded and modernized in all regions, through the widespread introduction of digital services and conversion from analog services.
- The quality of telecommunications services will be improved to meet customer needs through a reduction of the new telephone waiting lists, efficient maintenance and better fault repair management.
- New telecommunications services will be introduced, such as an integrated services digital network (ISDN), small satellite services (VAST), broad band video conferencing, electronic mail and other data services on leased lines or through the public telephone network.
- New, expanded or upgraded switches will be installed for the local, national and international networks, and will include the latest signaling and software technology.
- Investment funds will be raised from private financial institutions, along with the use of supplier credits and revenue sharing agreements for build-operate-transfer operations.
- Opportunities for increasing joint ventures or revenue sharing arrangements will be examined for activities such as the mobile telephone network, paging systems, pay telephones and other services, while competition will be encouraged in services such as video conferencing and data communications.
- Local, national and international telephone charges will be reviewed and modified to reflect cost structures.
- The development of Saudi human resources will be given a high priority.

12.2.6.3 Programs

The main programs in the telecommunications and postal sector for the Sixth Plan are as follows.

Telephone Expansion Program: This program will focus on the supply, installation and commissioning of new digital switching and junction equipment, and the construction and installation of outside plant facilities. The expansion and upgrading will cover the local, trunk, tandem and international exchanges. Terrestrial mobile subscriber facilities and radio paging services will also be included in this program.

Long Distance Network (LDN) Program: The expansion and modernization of the LDN is the core element in the future development of the telecommunications network. The planned terrestrial international links will connect the Kingdom to Kuwait, Qatar, UAE, Jordan, Yemen and Sudan by digital microwave or optical fiber.

Data Communications Program: This program aims to provide new data communications services through the introduction of new technology and facilities such as ISDN access, a public electronic mail service, a dedicated digital data network, and the expansion of the analog leased data service.

Support Services Program: The main activities under this program fall into three main categories -- data processing, frequency management and buildings -- and include the modernization and storage capacity expansion of central computers, the replacement of hardware, the development and modification of software, the expansion of frequency management for HF monitoring, the provision of technical buildings, warehouse buildings, information buildings and subscriber offices. This program will also provide mobile telephone exchanges, upgrade satellite facilities, replace analog microwave systems, and provide mobile, paging and TV services to meet some special requirements.

Operation and Maintenance (O&M) Program: The activities under this program will ensure the required performance of the current and planned network expansions. They will include the contracting of O&M activities for the LDN (microwave, coaxial, satellites), telex and packet network, the O&M of frequency management, consulting services, maintenance of the telegraph network, coastal stations, buildings and computer services. Other major program items are the maintenance of exchanges, the operation of the telephone network and the subscriber rural system (SRS), and the provision of spare parts.

Manpower Development Program: This program aims to develop the skills and performance of MOPTT employees through the provision of training that is targeted according to employees' experience and the work requirements. The training objectives will be achieved with the support of technical colleges, training centers, the computerization of training classes and on-the-job-training.

Postal service program: In addition to the management, maintenance and operation of the postal services, the main programs in this sector include the expansion of postal coverage, the development of postal facilities, quality improvement through the introduction of electronic equipment and the prepar-ation of necessary studies to develop the postal service. Further, emphasis will be placed on manpower development through provision of training programs at the training facilities of the General Directorate for Posts and other centers.

CHAPTER 13

REGIONAL AND URBAN DEVELOPMENT

13. REGIONAL AND URBAN DEVELOPMENT

This chapter discusses the progress made during the Fifth Plan in regional development, rural and municipal services, and housing, as well as the key issues to be tackled during the Sixth Plan, and the topics of Saudiization, economic efficiency and the opportunities available for the private sector in these sectors. It also highlights the objectives, policies and programs of these sectors during the Sixth Plan.

13.1 REGIONAL DEVELOPMENT

During two and a half decades of planned development, significant changes have occurred in the settlement structure, transport links, industrial concentration, land use patterns and living standards in the Kingdom. Because of its vast size and the diverse geographical distribution of population and natural resources, however, the extent of these changes has not been uniform throughout the entire country. For this reason, the regionalization of planning has become an essential tool for studying regional phenomena and for proposing corrective solutions where necessary, as well as for exploiting various resources in the regions and for expanding public services in rural areas.

During the Fifth Development Plan period, the five former planning regions were replaced as spatial references for planning by the 13 regions, which differ from each other by a host of geographic, demographic and economic factors. The new regions have their own administrations and councils, which are essential prerequisites for the system of planning in the Kingdom.

The Kingdom's development planning approach is based on comprehensive planning of all sectors of the national economy and of each administrative region, thereby taking into consideration regional development needs through the government agencies which advocate regional aspects in their development plans. These plans are prepared within the context of the general objectives and the strategic principles of the development plans, and through the reports prepared for different regions of the Kingdom.

With the issuance of the "System of Provinces", the institutional foundations have now been laid for coordinated regional and sectoral planning within the region itself, so that an equitable and efficient distribution of investments and public services can be achieved.

The private sector will play a vital role in supporting regional development in the future through implementation of some investment projects in the regions of the Kingdom, in addition to the public sector. Cooperation between the public and private sectors will enhance the joint efforts devoted to the development of different regions of the Kingdom.

Future development will concentrate on education, technology transfer and environmental protection. Information will also be provided on investment opportunities in industrial, trade and administrative activities, as well as on the various regions. The development plans and the reports of the regions will reflect their potential to provide opportunities for the private sector in each sector.

The development process in the Kingdom has paid attention to satisfying the basic needs of all citizens for health care, education and employment. This is considered not only as a humanitarian commitment but also -- more fundamentally -- as an investment in Saudi human capital for the longer term benefit of society as a whole. The main concern of regional planning will continue to focus on resolving the issues that face each region, on identifying their development strategies, on the optimal exploitation of comparative advantages, on reconciling the disparities between regions, and on satisfying the living needs of the population settlements in these regions.

Under the old system of planning, specific economic roles had been identified for each region. Such roles will become more apparent in the Sixth Plan as a result of the formation of the Provincial Councils, which will identify and exploit the comparative advantages of each region.

13.1.1 PRESENT CONDITIONS

13.1.1.1 Institutional and Administrative Changes

In the Fifth Plan period, a crucial administrative breakthrough was effected with the transition of regional planning from its earlier status as an aspect or dimension of national planning towards a more fully institutionalized and integrated activity :

- First, a new provincial system has been established (by Royal Decree No. A92 on 27/8/1412) which aims at upgrading the level of administrative work and development in all parts of the Kingdom. The system identified the responsibility of the new Provincial Council in each region to study all relevant aspects and proposals to upgrade the level of services in the region. In particular, each Provincial Council will: determine the needs of the region for programs and projects, and suggest their inclusion in the national Development Plan; rank useful projects according to their priorities and propose their approval in the annual state budget; study the organizational plans of the region's cities and villages and follow up their implementation after approval; follow up the implementation of projects that have been included for the region in the national development plan and annual state budget, with due consideration to the necessary coordination in this regard.
- Second, the provincial system was amended by Royal Decree No. A20 on 30/3/1414, which identified the members of each new Provincial Council and set the number of

regions at 13. The administration of each region has also been enhanced according to a standard organizational structure which will strengthen the role of regional planning in the future. Therefore, regional development bodies are being entrusted with the task of determining their own development objectives, programs and priorities within the framework of the objectives and strategic principles of the development plans.

- Third, the determination of 103 sub-regions (both type A and B) under the 13 regions offers yet another dimension to regional planning by providing the spatial and institutional references for planning the provision of municipal facilities and services in the context of their surrounding rural (catchment) areas, for which they must provide some basic services as well. The administrative and institutional innovations for regions, sub-regions and centers also give new support to the concept of the program-oriented approach to planning, which leads to improved coordination on the selection of the most essential and effective projects at national and local levels.

13.1.1.2 Central Place Concept

Although the new administrative system for the regions has been formally established and standardized, cities and towns vary between regions, in terms of their number, size, economic significance, distances between them and the extent of their rural population catchment areas. Because of these differences, the new system will continue to use the "central place" concept as an essential tool for spatial planning and development. The existing system of Development Centers and Village Clusters remains a basic tool for guiding the investment location decisions of development agencies and private enterprises alike, so they can take advantage of existing or planned infrastructure and established economic linkages, in providing goods and services to the maximum possible populations within and near these centers. The three levels of Development Center are defined as follows :

- **national** centers, where various economic and administrative functions relevant to the whole country are available and where highly specialized services are provided ;
- **regional** centers, where less specialized administrative and service functions are performed for a number of local centers ;
- **local** centers, where institutions and services that are needed on a frequent (daily) basis and serve a number of villages and village clusters, are located.

The central place concept is made complete with the addition of the village clusters, which provide municipal services from a central village to a cluster of villages or to the surrounding population.

In the light of the development experienced by the Kingdom in all fields and the demographic and economic changes that occurred in these centers and the major catchment areas, as well as the improvement of feeder roads to and from these centers, some of the centers have been upgraded and the geographic limits of some serviced rural areas have been extended. Figure (13.1) shows the proposed development centers in the Sixth Plan.

13.1.1.3 Geographical Data and Information System

A comprehensive regional information base is necessary for improving the effectiveness of regional planning. In this context, the information content of the regional reports has been updated during the Fifth Plan period and a system of regional indicators and geographical information adopted.

The regional reports describe the present conditions of various facilities and services sectors. The regional indicators system aims at describing the level of development in each region in a quantitative manner and helps to set priorities for selecting appropriate programs and projects and to assess their impacts on the development of each region, in order to achieve balanced regional development.

With the completion of the geographic data and information system during the Sixth Plan, there will be a statistical and geographic information base, as well as computerized digital maps that will include regional analysis in various fields.

The above-mentioned information will help the concerned government agencies and the Provincial Councils in identifying the level of development in the region and in selecting useful programs and projects and following up their implementation. It will also help in preparing regional development plans in the future.

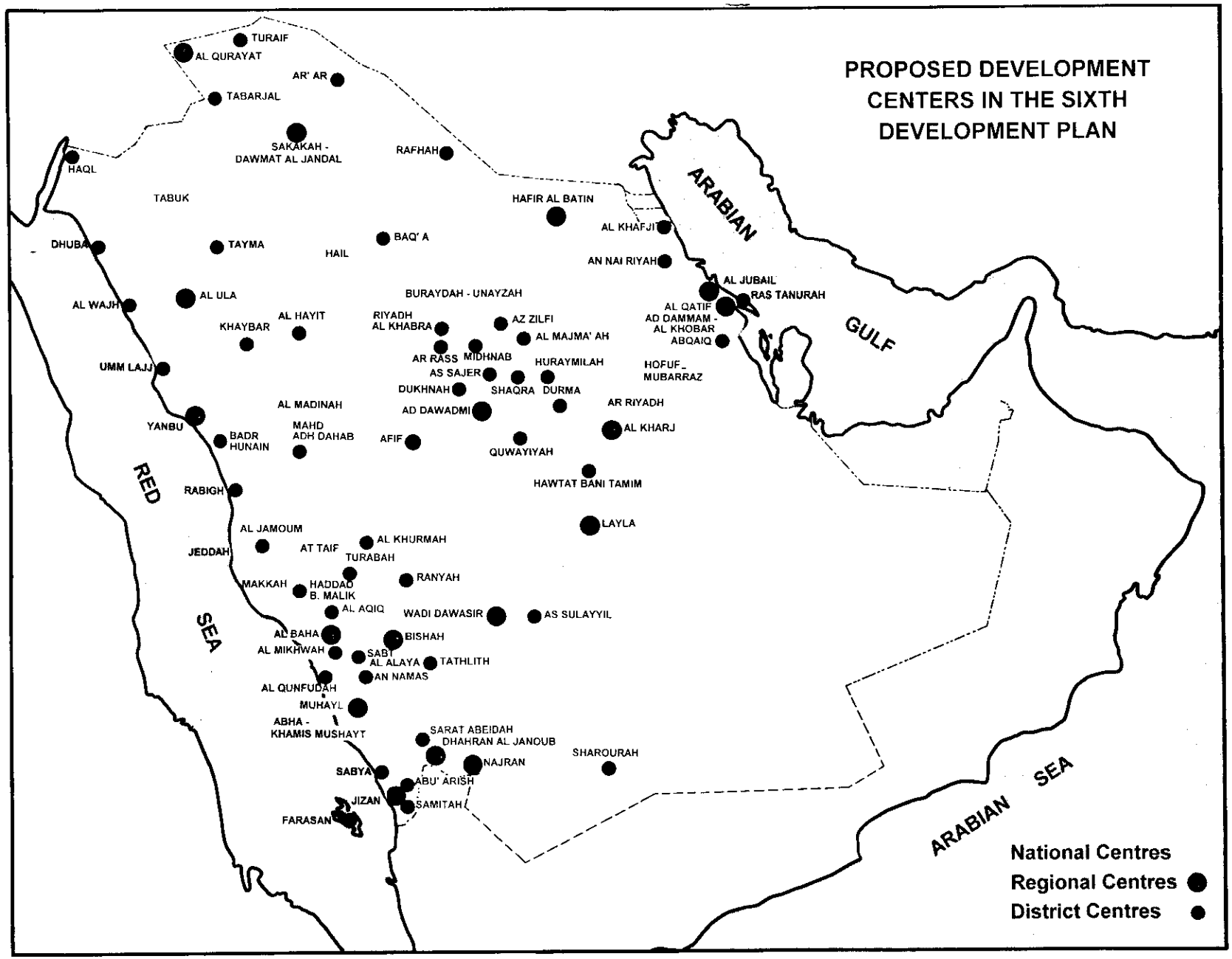
13.1.1.4 Regional Achievements

Various achievements have been made during the Fifth Plan, resulting in tangible progress in roads construction in the rural areas. Thus, access to various facilities and services, which were previously under-utilized, was provided to a greater number of people. This is a good example of how projects that are well coordinated at the level of the regions and their sub-regions and centers, can relieve the need for additional investment in facilities without greatly affecting the standard of service.

Concentration of spatial development in the rural areas facilitated access to facilities and services. Such concentration is necessary for achieving balanced regional growth. Improved services in the rural areas also reduces migration to urban areas, thereby relieving the pressure on urban facilities and services, while limiting maintenance requirements and environmental problems in urban areas.

There are many tourism and recreational facilities for citizens to enjoy in the regions of the Kingdom, which helps to improve the economic conditions of these regions.

Figure (13-1)


PROPOSED DEVELOPMENT CENTERS IN THE SIXTH DEVELOPMENT PLAN
TURAIF
AL QURAYAT
AR' AR
TABARJAL
SAKAKAH - DAWMAT AL JANDAL
RAFHAH
HAQL
TABUK
HAFIR AL BATIN
AL KHAFJI
BAQ' A
DHUBA
TAYMA
HAIL
AN NAI RIYAH
AL JUBAIL
RAS TANURAH
AL ULA
BURAYDAH - UNAYZAH
AL QATIF
AD DAMMAM - AL KHOBAR
ABQAIQ
AL WAJH
AL HAYIT
KHAYBAR
RIYADH AL KHABRA
AZ ZILFI
AL MAJMA' AH
AR RASS
MIDHNAB
HURAYMILAH
HOFUF - MUBARRAZ
UMM LAJJ
AS SAJER
DUKHNAH
SHAQRA
DURMA
AL MADINAH
AD DAWADMI
AR RIYADH
YANBU
MAHD ADH DAHAB
AL KHARJ
BADR HUNAIN
AFIF
QUWAYIYAH
HAWTAT BANI TAMIM
RED SEA
RABIGH
LAYLA
AL JAMOUM
AL KHURMAH
JEDDAH
AT TAIF
TURABAH
RANYAH
MAKKAH
HADDAD B. MALIK
AL AQIQ
WADI DAWASIR
AS SULAYYIL
AL BAHA
BISHAH
AL MIKHWAH
SABT AL ALAYA
TATHLITH
AN NAMAS
AL QUNFUDAH
MUHAYL
ABHA - KHAMIS MUSHAYT
SARAT ABEIDAH
DHAHRAN AL JANOUB
SHAROURAH
NAJRAN
SABYA
ABU' ARISH
JIZAN
SAMITAH
FARASAN
ARABIAN GULF
ARABIAN SEA
National Centres
Regional Centres
District Centres

Great efforts have been made during the development plans to boost regional development by establishing public institutions and by encouraging private establishments to undertake some activities in such locations. The provision of infrastructure, such as water and electricity facilities, telecommunications, highways, pipelines, oil production facilities, and industrial complexes has generated remarkable growth in all fields. Military installations also played a great role in the development of some regions.

13.1.2 KEY ISSUES

After settling the administrative division and determining the administrative and institutional responsibilities, the detailed framework for the whole regional planning process has to be formulated by the relevant regional development agencies and to be institutionalized in the form of a code of practice and executive rules. A number of key issues will affect the successful completion of this task.

Administrative Coordination

Development planning at the regional level requires a high level of coordination between concerned agencies and institutions, particularly with respect to the delegation of powers and the determination of responsibilities for the branches of government service agencies represented on the Provincial Councils, as well as the exchange of information, where it is necessary to adopt standard specifications for the storage, updating and communication of computerized data.

There is no doubt that the establishment of the Provincial Councils, on which the different government services sectors and the private sector are represented, has led to better coordination between concerned agencies.

Regional Planning Standards

The regional studies carried out by some agencies have varied considerably in terms of content and degree of coverage, so that it became difficult to undertake a reliable review of the existing and required services and facilities in the administrative regions of the Kingdom. To achieve that, rules and standards must be developed for the methodology of regional studies, not only in terms of their content and coverage, but also in terms of technical and planning specifications, data storage and processing, and communications technology in all sectors. Consulting firms contracted by government agencies for the preparation of regional studies must adhere to these rules and standards.

Proliferation of Small Scattered Settlements

Between 1403 and 1415, the number of villages and hamlets in the Kingdom has risen from 11,700 to approximately 20,000. Most of these new settlements were established along newly built roads,

near agricultural or industrial sites, or in remote areas, which lack basic services. This trend undermines the government's efforts to promote development in areas where local production projects may be viable and not to waste resources in the establishment and support of non-viable settlements.

Regional Disparities

The regions of the Kingdom are distinguished by their diversity of economic, social and geographic characteristics, due to the nature of population distribution and the concentration of natural resources in certain areas, as well as to the rapid proliferation of villages and hamlets in some areas. All of these factors have led to inter-regional disparities in the level of services.

Despite great efforts to provide various services throughout the regions in a relatively balanced manner, there are some disparities between urban and rural areas because of the nature of short and long term development. The Sixth Development will give a higher priority to regional planning in order to effect greater balance in the development of the regions.

13.1.3 OBJECTIVES AND POLICIES

Through coordination between the various sectors and agencies, the objectives and policies of regional development during the Sixth Plan have been identified as follows :

13.1.3.1 Objectives

Regional development will be directed through the following long term objectives that conform to the Objectives and Strategic Principles of the Sixth Plan :

- To achieve comprehensive development in all urban and rural areas through the provision of basic facilities and services according to the standards of the development centers, with due consideration to performance efficiency and the optimal utilization of each region's comparative advantages ;
- To encourage the private sector to locate enterprises in the regions, so as to stimulate local economic growth, the transfer of knowledge, the provision of jobs, and to limit internal migration ;
- To encourage and support the private sector to establish investment projects in the regions through the provision of assistance, incentives, consulting services and information ;
- To encourage Saudi citizens to take up employment in rural areas through the provision of career opportunities, material incentives and ongoing training ;
- To enhance the economic efficiency of regional infrastructure through spatial planning, physical development control, the application of appropriate technology, operation and preventive maintenance, and improved inter-agency coordination ;

- To preserve the environment from the adverse impacts of human settlements, industrialization and exploitation of natural resources in various regions ;
- To protect natural and historical areas and to rehabilitate environmentally damaged sites to their original state in all regions ;
- To develop and institutionalize the operational and technical framework for regional planning that is needed to complement the new System of Provinces, in close cooperation with other service ministries and agencies ;
- To improve cooperation among technical departments within each development agency and with other related agencies through the re-organization of administrative procedures and the provision of state-of-the-art management techniques and communications technology in order to facilitate the exchange of vital information.

13.1.3.2 Policies

To achieve these objectives, long term policies and plans should be formulated to guide regional development in the desired direction. Accordingly, the following policies will be implemented during the Sixth Plan :

- Regional planning will be activated at the regional level according to the new System of Provinces, by specifying the tasks and responsibilities of the provincial administrations and planning consultants, while procedures will be adopted to ensure cooperation between the provinces and the ministries involved.
- More attention will be paid to determine the contents, format, specifications and requirements of regional development plans of provinces and to their revision and approval for integration into the national plans.
- The specifications of regional planning data will be standardized, in addition to the computer hardware and software used for their storage, manipulation and transfer between the related agencies.
- Regional information centers will be established to collect, update and deliver regional data to those development agencies participating in regional planning efforts.
- The "Development Centers" and "Village Clusters" systems will be updated in the light of the System of Provinces, so that they can serve as indicators for the regional investments of the public and private sectors.
- The specialized university colleges and the Institute of Public Administration will be encouraged to develop specific education and training programs in order to enhance the regional planning capabilities of Saudi nationals in the light of the new systems and the latest regional development literature.

- Government agencies with regional branches that differ between regions in terms of their number and span of supervision, should unify their administrative divisions into a single branch of that agency within the region, while the regional representation of agencies should be in accordance with the new System of Provinces.

13.2 MUNICIPAL AND RURAL AFFAIRS

13.2.1 PRESENT CONDITIONS

The municipal and rural affairs sector has an important role to play in achieving the Kingdom's development objectives to raise the standard of living and satisfy the basic needs of citizens. Its many contributions to local and national development include the overall spatial planning of cities, towns and village cluster centers (master plans, zoning etc.), the construction and operation of municipal networks (such as water, waste water, storm water drainage, streets) and facilities (slaughter houses, souqs, markets, parks), as well as the maintenance of environmental hygiene through street cleaning, waste collection and environmentally safe disposal, and the removal of debris.

It is through spatial planning and the timely provision of municipal infrastructure that the development efforts of both public and private sectors are spatially directed and supported towards desired objectives. Over the past two and a half decades of planned development in the Kingdom, municipal facilities and services had been primarily concentrated in the main urban centers. More recently, with this crucial task largely accomplished, municipal development has focused increasingly on provincial towns and village cluster centers, and the provision of adequate services to the maximum number of citizens, thereby discouraging population migration to the cities.

It is the government's firm intention to provide municipal services to all regions of the Kingdom in line with the actual needs of a growing population. Thus, in many cities and towns, parts of the existing municipal infrastructure have been modernized or replaced due to completed life cycles or functional deficiencies. At the same time, facilities and networks for water, sewage, storm water drainage and the asphalting, paving and lighting of urban streets have been further expanded to cope with the increase in population. Through the provision of sanitation services the overall appearance of cities and the quality of urban life has been greatly enhanced.

The sustainable economic growth rates of recent years have also had a positive effect on urban development, as the planning, coordination and supervision of public projects have become more manageable. Moreover, land utilization in urban areas has been intensified with the construction of additional, more compact commercial and residential buildings. Thus, the utilization rate of municipal infrastructure has been increased, thereby providing municipal services to a greater number of urban households, even at reduced unit cost.

The scheme of five metropolitan areas (amanat) and 96 municipalities, have been retained in order to use resources more efficiently and concentrate the services and provide them in a better manner although some municipalities have been consolidated. One water and sewage department, however, has been established in Tabuk, thus bringing the total number of these establishments to seven. Also, the number of village clusters has been increased from 43 to 62, now with approximately 2,300 member villages (Figure 13.2), thus providing a wider rural population with better access to schooling, training, health care, communications, markets and other essential facilities and services.

The recent changes in the size and importance of communities have been embodied in the new municipal classification system, with the municipalities being re-grouped within four categories ('A' through 'D'), while village clusters were divided into three categories (B through D), as shown below.

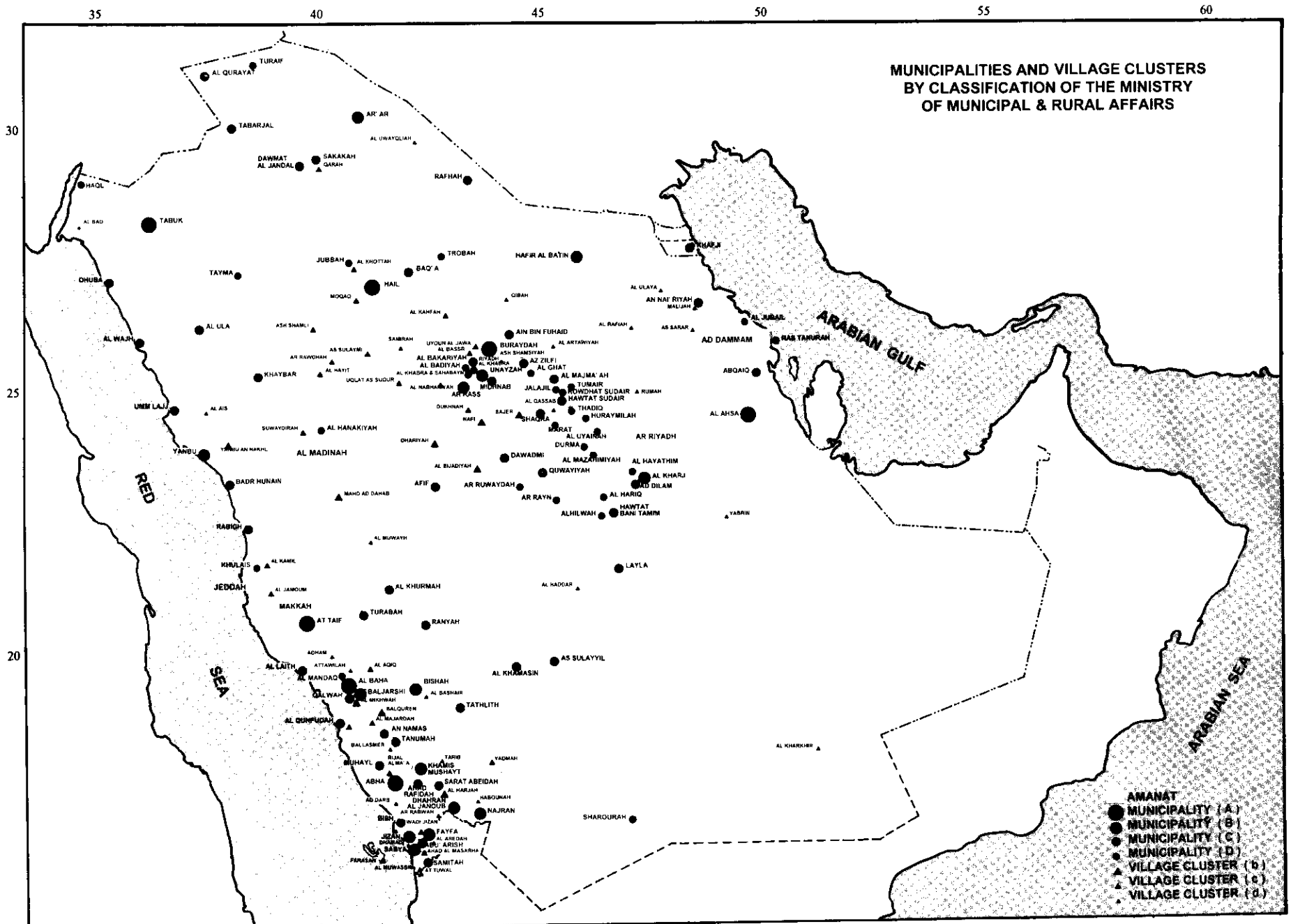
	A	B	C	D	Total
Amanat					5
Water and Sewage Depts.					7
Municipalities	7	14	46	29	96
Village Clusters		9	25	28	62
Total	7	23	71	57	170

Furthermore, ongoing efforts are being exerted to produce digitized maps of all cities in the Kingdom, and to develop local land registration systems.

With the establishment of the new provincial system in the Fifth Plan period (in Shaban 1412), the municipalities in the regions will become more active in development planning and involved in closer dialogue with the respective agencies.Through their institutionalized administrative capabilities , the provinces (amarahs) will now be fully entitled to coordinate the various projects within their region. When this new pattern of systematic planning becomes more firmly established and supported by an information system with regularly updated data, the municipalities are also likely to gain more administrative and planning autonomy.

In spite of reduced municipal expenditure during the Fifth Plan, a total of 1,363 projects had been approved by fiscal year 1413/14, of which 903 projects had been completed. Water, waste water and municipal street projects continued to claim the major share of municipal spending.

Figure (13-2)


MUNICIPALITIES AND VILLAGE CLUSTERS
BY CLASSIFICATION OF THE MINISTRY
OF MUNICIPAL & RURAL AFFAIRS
35
40
45
50
55
60
30
25
20
ARABIAN GULF
RED SEA
ARABIAN SEA
TURAIF
AL QURAYAT
TABARJAL
AR' AR
DAWMAT AL JANDAL
SAKAKAH
QARAH
RAFHAH
HAQL
TABUK
TAYMA
DHUBA
AL WAJH
AL ULA
KHAYBAR
UMM LAJJ
YANBU
BADR HUNAIN
RABIGH
KHULAIS
JEDDAH
MAKKAH
AT TAIF
AL LAITH
AL QUNFUDAH
AL MANDAQ
AL BAHA
BALJARSHI
BISHAH
TATHLITH
AN NAMAS
TANUMAH
MUHAYL
KHAMIS MUSHAYT
ABHA
SARAT ABEIDAH
NAJRAN
FAYFA
SAMITAH
JUBBAH
HAIL
BAQ'A
TROBAN
HAFIR AL BA'TIN
AN NAF RIYAH
AL JUBAIL
RAS TANURAH
AD DAMMAM
ABQAIQ
AL AHSA
AR RIYADH
AL MADINAH
BURAYDAH
UNAYZAH
AL MAJMA' AH
TUMAIR
HAWTAT SUDAIR
HURAYMILAH
AL HAYATHIM
AL KHARJ
AL HARIQ
HAWTAT BANI TAMIM
AL HILWAH
AR RUWAYDAH
AR RAYN
AFIF
DAWADMI
QUWAYIYAH
AL MAZAHIMIYAH
DURMA
AL UYAINAH
MARAT
SHAQRA
THADIQ
AL QASSAB
AL KHURMAH
TURABAH
RANYAH
LAYLA
AS SULAYYIL
AL KHUMASIN
SHAROURAH
AL KHARKHIR
AMANAT
MUNICIPALITY (A)
MUNICIPALITY (B)
MUNICIPALITY (C)
MUNICIPALITY (D)
VILLAGE CLUSTER (b)
VILLAGE CLUSTER (c)
VILLAGE CLUSTER (d)

13.2.2 KEY ISSUES

In the past quarter of a century, the Kingdom has changed from a rural and nomadic society into a predominantly urban one, with more than 60 percent of the population now living in cities and towns. In this rapid transition, the level and quality of facilities and services attained are comparable to those in many advanced countries. However, the unprecedented speed of urbanization has created a number of issues which require increasing attention during the Sixth Plan period.

Statistical Data

Notwithstanding the progress made by the municipal sector in the collection and processing of data during the Fifth Plan period, there is a lack of integrated information about the capacity of municipal facilities and services, their utilization rates, the status of existing structures and their economic and operational efficiency. Furthermore, this sector lacks up-to-date information about the population, in terms of the number of beneficiaries or consumers of services, and about the urban areas covered by these services. This makes the precise identification of needs difficult.

In order to address this situation, it is imperative to establish an automated information system, linking MOMRA and all affiliated agencies, and to establish unified standards, specifications and models for collecting, evaluating, classifying and utilizing data.

Coordination and Overlapping Responsibilities

Rational urban development requires high levels of coordination and integration, but also flexibility, so that the various stages of development can be accomplished efficiently, from planning through to implementation and evaluation. Intensive coordination between MOMRA and other government agencies at all levels will eliminate the duplication of development efforts in some locations, and lead to the efficient and optimal use of services in other areas where they are needed. Improved coordination between MOMRA, MOAW and the Water and Sewage Departments will generate greater efficiency in the provision of water and sewage services to citizens at targeted levels. Also, improved coordination with the SWCC will facilitate the full utilization of projects and ensure that the capacity of water networks will be consistent with the output of desalination plants. Furthermore, enhanced coordination is needed with the Ministry of Communications so that the provision of municipal services can be planned to coincide with the construction of main and secondary roads.

Environmental Hygiene

Environmental hygiene has an important role to play in maintaining the welfare and health of citizens, in the preservation of national resources and in the control of epidemics, diseases and pollution.

The Kingdom's main cities, in particular, have witnessed the rapid physical expansion of their outer boundaries, along with a growing concentration of population. Even the huge investments in urban infrastructure could not cope fully with this rapid growth in such a short period, leading to some adverse impacts, mainly on the environment. In particular, the problem of rising ground water tables and the resulting environmental damage in urban communities will be addressed through the provision of comprehensive sewage services. At the same time, the quality of treated waste water and its suitability for re-use will be raised by expanding the number and capacity of sewage treatment plants.

It is a fact that the quantity of waste increases as cities and urban populations continue to grow. Available statistics show that the Kingdom's per capita production of waste is about double the world rate. This creates a major burden for waste collection, treatment and disposal. Hence, in order to eliminate excessive waste generation, it is imperative to boost the environmental awareness of citizens. It is important that specialized national companies share advanced global experience in dealing with waste. MOMRA has made steps in this direction covering the main cities of Riyadh, Jeddah and Dammam.

Utilization of Treated Waste Water

The total volume of treated waste water in the Kingdom amounts to (1.1) million cubic meters per day, of which only about 200 thousand cubic meters or 18 percent is used for agricultural, industrial or municipal purposes. This low utilization rate represents a waste of a renewable resource that could be used to reduce the burden on primary water resources. More extensive use of treated waste water for industrial, agricultural and municipal purposes will require special distribution networks and measures to promote its wider acceptance. It is crucial that the private sector be encouraged to invest in the construction of treatment plants and in the distribution of the water produced from such plants.

Control of Urban Development

Considerable inconsistencies have emerged between spatial urban expansion and the number of inhabitants, particularly in the main cities. This has led to the inadequate utilization of infrastructure and the accumulation of vacant urban lands. Furthermore, the scattered nature of population settlements in these outlying urban districts prevents their linkage to normal urban facilities and service networks, which will need to be substantially expanded if the needs of such residents are to be met. The Council of Ministers, therefore, in its Resolution No. 175 of 18/9/1409, ordered the limitation of urban expansion and set strict regulations, to be complemented by local plans and studies, for future extensions of urban boundaries in proportion to actual urban growth. The sustained application of these regulations and procedures will ultimately enhance the structural coherence of cities and towns.

Municipal Resources

The provision and operation of municipal facilities and services requires substantial financial resources, particularly when the demand for such services is rising. All efforts must be made, there-

fore, to augment existing municipal revenues and to ensure their best use through the efficient management of municipal facilities and services on a commercial basis. Such commercial practices could encourage greater private sector involvement in certain municipal enterprises. At the same time, existing service charges could be restructured to ensure both rational use and consumption and a financial contribution that at least covers the O & M costs of municipal facilities. Notwithstanding such opportunities, it is imperative to enhance the process of fees collection.

Efforts to make the supply of services more economic should also include greater attention to preventive maintenance, the unification of standards and specifications, and the optimal location of municipal facilities and services.

Intensified use should also be made of leasing urban land owned by the municipalities for setting up investment projects. MOMRA has been quite successful already in this field.

Rural Services

The Village Cluster concept is the most rational way of providing basic public services to the greatest number of rural inhabitants, and of creating centers to attract mainly agriculture-based economic activities and to reduce population migration to the cities. Thus, it is imperative to enhance the potential of existing clusters and to upgrade their efficiency through the provision of needed facilities and equipment, and through linking cluster centers with affiliated villages by rural roads. The establishment of proposed new village clusters according to the specifeid time schedule is also important. During the Fifth Plan period, MOMRA has re-grouped village clusters by size into three categories (B, C and D), so as to further rationalize their development and enhance their efficient operation.

13.2.3 SAUDIIZATION

Total manpower at MOMRA and its sub-agencies reached 52,735 employees and workers by the end of the Fifth Plan period, of which 60.4% were Saudis.

While a high percentage of Saudiization has been achieved in the management positions, Saudiization has not been realized to the same extent in the professional, sub-professional and technical, skilled labor and the manual service worker positions. These groups, however, comprise the majority of the sector's manpower, due to the technical expertise needed for the various municipal activities and services in all cities, towns villages and hamlets.

With respect to the sector's approved positions, the manpower structure shows that management and administrative positions reached 2,024 (of which 95 percent were occupied by Saudis),

professional positions reached 2,593 (of whom 60 percent were Saudis), sub-professional and technician positions reached 5,616 (of whom 57.6 percent were Saudis), clerical positions reached 4,964 (of whom 70 percent were Saudis), skilled labor positions reached 11,957 (of whom 52.6 percent were Saudis) and manual service worker positions reached 32,308 (of whom 47.5 percent were Saudis).

These conditions are expected to continue over the Sixth Plan period due to the nature of the work in this sector, the range of its activities and services, the required expertise and increasing responsibilities. MOMRA will meet its manpower requirements through filling existing approved positions with Saudis, so that the total manpower in this sector will actually reach 59,462 employees and workers by the end of the Sixth Plan, while the rate of Saudiization is targeted to reach 70 percent. By that stage, the management and clerical positions will be completely Saudiized, while the percentage of Saudis is to increase to 84 percent for professional positions, 76 percent for sub-professional and technician positions, 62 percent for skilled worker positions and 56 percent for manual and service worker positions.

13.2.4 ECONOMIC EFFICIENCY

Problems in precisely quantifying both inputs and outputs make productivity in the municipal sector difficult to measure. Nevertheless, more efficient utilization of resources can be achieved in the sector's affiliated agencies through the establishment and enforcement by MOMRA (in coordination with the Ministry of Public Works and Housing) of standard maintenance specifications and schedules, technical norms, performance specifications and procedures for input/output control.

Economic efficiency in the municipal sector will be improved through the following measures :

- rationalizing recurrent expenditures while raising expenditures on operation and maintenance and on new projects ;
- more efficient implementation of new projects through controlling differences between planned and actual costs, and abiding by specified schedules ;
- reducing operational costs and collecting municipal services fees ;
- organizing and improving manpower training programs ;
- forming independent inspection teams for monitoring construction projects and for operation and maintenance activities ;
- expanding the responsibilities and powers of municipalities in the provinces.

13.2.5 PRIVATE SECTOR OPPORTUNITIES

In past years, the private sector implemented municipal projects financed from the government budget. It maintained and operated various municipal facilities and performed

services such as the cleaning of city streets and buildings, and garbage collection and disposal. In recent years, some municipal facilities have also been leased to the private sector, including some public parks, playgrounds, car parks and slaughter houses, with fees being collected for services provided. The private sector has also invested in the establishment of several shopping complexes, children's playgrounds and buildings for holding private functions.

However, during the Sixth Plan period, the municipal sector will have many more opportunities for the private sector to implement programs and projects for a wide range of municipal facilities and services, including the asphalting, paving, lighting and "greening" of municipal streets, the fencing of cemeteries, the development of village cluster services, as well as the establishment of water and sewerage networks and connections, water purification and treatment plants, storm and rain water drainage networks, flood protection projects and the construction of municipal buildings.

Private investment opportunities are further available under other municipal programs and projects, such as the establishment of souqs, comprehensive commercial/residential/car-parking complexes, public parks, water transport services and the utilization of treated waste water.

13.2.6 DEVELOPMENT STRATEGY

The development of the municipal sector will be implemented through the following objectives, policies and programs.

13.2.6.1 Objectives

The main objectives for the development of the municipal sector in the Sixth Plan are :

- to rationalize the use of municipal infrastructure and ensure the economic feasibility of municipal projects ;
- to encourage private sector participation in the development process, where feasible, through the implementation of municipal projects ;
- to enhance administrative and operating efficiency and to improve access to municipal employment, to increase Saudiization rates at all job levels and to raise the productivity of Saudi manpower through systematic training ;
- to complete potable water networks, to develop sewerage services in densely populated urban areas, and to attain the maximum possible utilization of treated waste water ;
- to continue improvements in citizens' living, health and environmental conditions throughout the Kingdom, and to contribute to the completion of infrastructure needed by other ministries to perform their development role.

13.2.6.2 Policies

The main supporting policies for the achievement of the municipal sector's development objectives in the Sixth Plan are as follows :

- enhancing the efficiency of the existing information systems and regularly updating them ;
- planning for urban development at both local and regional levels in cooperation with the concerned public and private agencies ;
- defining the scope for re-organizing the administrative structure of MOMRA and its affiliated agencies, with reference to the new provincial system ;
- promoting the appropriate use of modern technology for the treatment of waste water ;
- developing the financial resources of municipal agencies to ensure sufficient and sustainable revenues, enabling them to develop their services and to maintain their infrastructure ;
- identifying appropriate opportunities for privatization, and establishing rules and regulations necessary for their realization ;
- adopting appropriate techniques for the disposal and economic utilization of waste on the basis of experience from other countries ;
- creating new village clusters and developing existing ones, so that municipal and other services will be available to the rural population at reasonable cost, with the aim of eliminating the gap between urban and rural areas.

13.2.6.3 Programs

The objectives and policies of the municipal sector in the Sixth Plan will be implemented through the following programs :

Management and operation:

This programs aims at administering and operating the executive agencies affiliated to the municipal sector.

Operation and Maintenance

The aim of this program is to operate and maintain the municipal infrastructure and services in an efficient manner.

Manpower Development

This program aims at the development of manpower by providing regular management and technical training to the staff of MOMRA and its executive agencies, particularly in the smaller municipalities and village clusters.

Studies and Research

This program deals with the physical and spatial planning of communities and the optimal utilization of public infrastructure and services. The program includes urban planning and design, zoning, and the technical planning of municipal networks and installations as well as updation of studies.

Water Supply

Under this program, more water tanks, towers and networks will be constructed, particularly in new residential and commercial districts, as well as in village cluster centers. Existing installations will be modernized or replaced in order to increase the quantity and improve the quality of water delivered, and to reduce water losses.

Waste Water Drainage

Waste water networks will be extended in urban areas with high building densities, especially in locations with overflowing waste water. New treatment plants will be established and the existing plants will be upgraded for tertiary treatment. Treated waste water will be used more intensively for irrigation and industrial purposes. Comprehensive measures will be undertaken to eliminate the problems of rising ground water levels in some towns.

Storm Water Drainage and Flood Protection

Under this program, storm and rain water drainage networks will be extended in cities, towns and villages (which have specific climate and topography) in order to protect people and properties against flood damage.

Municipal Streets

This program will expand the existing street networks and provide them with lighting, sidewalks and greenery. Increasing urban traffic volumes will be efficiently accommodated by additional tunnels and bridges at the main intersections, improved traffic signals and more off-street parking.

Municipal Facilities and Services

This group of programs covers the development of the following municipal facilities and services :

Parks and Playgrounds

This program aims at increasing the number of gardens, parks and children's playgrounds particularly in cities with high populatian density. The establishment, operation and maintenance of these recreation facilities will depend largely on the private sector. This program will concentrate less on those rural areas with their own natural parks.

Markets

The private sector is expected to provide more markets in major and medium-sized cities, while in small cities and village clusters emphasis will be placed on the establishment of food retailing outlets. This program will stimulate agriculture-based economic development in the Kingdom's regions.

Municipal Buildings

Under this program, small municipal units will be constructed in areas that currently lack buildings to be used as offices, workshops, laboratories and storage depots. The larger cities that already have several owned and leased municipal complexes will receive less consideration.

Environmental Improvement

This program is concerned with the disposal of waste, the filling-in of swamps and land leveling. With the involvement of the private sector, collected waste will be processed in the larger cities, while improved disposal methods will be introduced in other urban communities.

Miscellaneous Municipal Facilities

This program covers the establishment of a number of public facilities, such as slaughter houses, public toilets, fencing of cemeteries and waste disposal sites in order to protect the public and safeguard environmental hygiene. This program also deals with the development of services in village clusters and the provision of computers for upgrading the efficiency and productivity of the sector.

13.3 HOUSING

13.3.1 PRESENT CONDITIONS

Besides the need to replace old housing stock, the main factors influencing the demand for housing in the Kingdom are the high rate of population growth and the increasing share of young people in the population. On the supply side, both the government and the private sector are active in meeting this demand. By the end of the Fifth Plan period, the total housing stock in the Kingdom amounted to 2,850,000 units, of which 2,604,430 units (or 91.3 percent) were constructed by the private sector, with the remaining 245,570 units constructed by the Ministry of Public Works and Housing and other government agencies.

There are two categories of private sector housing: self-financed units and those financed by Saudi citizens through loans on favorable terms from the Real Estate Development Fund (REDF). The total number of housing units in the first group amounts to 2,058,610, of which 309,490 were completed during the Fifth Plan period. The second group consists of 545,820 units, of which 79,120 were completed in the Fifth Plan.

Housing provided by the government also falls into two categories : units built by the Deputy Ministry of Housing Affairs and distributed to Saudi individuals by the REDF, and units built by various government agencies for their own employees. In the first group, 24,570 units have been built by the Deputy Ministry of Housing Affairs, of which 4,570 units were completed during the Fifth Plan period. The second group includes 221,000 units constructed by government agencies for their employees. Developments in the Kingdom's housing stock are shown in Table 13.1.

Table 13.1

Housing Construction and Stock in the Fifth Plan

	Constructed during the Fifth Plan (units)	Stock at the end of the Fifth plan (units)	Structure of Housing Stock (percent)
Government Housing :			
Ministry of Public Works and Housing	4,570	24,570	0.9
Government agencies for employees	---	221,000	7.8
Sub-total	4,570	245,570	8.7
Private Sector :			
REDF	79,120	545,820	19.1
Self-financed	309,490	2,058,610	72.2
Sub-total	388,610	2,604,430	91.3
Total	393,180	2,850,000	100.0

13.3.2 KEY ISSUES

Although the Kingdom's achievements in expanding the total housing stock are impressive, a number of key issues have emerged which need to be resolved in the Sixth Plan period.

Residential Land in the Main Cities

The limited availability of development land within existing municipal boundaries and the rising demand for such land has resulted in high land prices in the main cities. New households and middle-income groups have thus been bound to build their homes outside existing urban boundaries, where public utilities, such as sewerage networks and electricity, are not yet available.

Data Base

The pace of structural change in these agglomerated areas has not been matched by the availability of statistical information for planning purposes. As a result, public and private sector planners have insufficient knowledge of the real estate market, in terms of land prices, rents and size of transactions, and the likely future patterns of housing demand and supply. The Census of Population and Housing carried out by the CDS in 1413 provides a good information base that must be updated in the future.

Limited Housing Finance

Because of the rapid growth in population, the demand for housing loans on favorable terms from the REDF is likely to exceed the available supply of such loans in the future. At the same time, the financial institutions consider housing finance as a long-term investment that, in some respects, is less profitable and carries more risk than other lending opportunities. A need exists, therefore, to study how the private sector might be encouraged to provide long-term housing finance. In this regard, the employee housing programs of large companies such as ARAMCO and SABIC provide suitable examples for other companies to follow. Thus, the private sector could implement housing projects for various agencies who would then transfer ownership of these housing units to their employees, according to specific conditions and criteria that would ensure full cost recovery and a reasonable rate of return to investors.

13.3.3 SAUDIIZATION

In addition to private sector activity, a number of government agencies are linked to the development of the housing sector, such as the Ministry of Public Works and Housing, the REDF and the Ministry of Municipal and Rural Affairs. The subject of replacing non-Saudi manpower with Saudi manpower is discussed in Chapter 8 of this document under the "Construction Sector" (section 8.4.3).

13.3.4 ECONOMIC EFFICIENCY

Through its linkages with the domestic construction and building materials industries, and a wide range of associated services, the housing sector plays an important role in generating economic growth. Current indicators of development in the housing sector compare favorably with those of other countries. For example, house ownership levels in the Kingdom range between 60 and 65 percent compared to 65 percent in the United States. Expenditure on rent and services by those on middle incomes accounts for 26 percent of personal consumption expenditure compared to 31 percent in the United States.

A more efficient real estate market can be promoted through upgrading the technology and manpower of existing real estate offices so that they become more effective intermediaries between buyers and sellers as well as centers for the cellecton and exchange of data. Further, such market could be promoted through adequate finance arrangements and rationalizing the decisions of real estate dealers. At the same time, the government agencies responsible for the housing sector will continue to raise their performance and productivity levels in the Sixth Plan period through the implementation of appropriate training programs.

13.3.5 PRIVATE SECTOR OPPORTUNITIES

In general, the housing sector in the Kingdom operates according to free market principles and plays an important role in stimulating private investment and economic activity. At the same time, the government supports and encourages the private sector through the following measures :

- the provision of easy long-term loans from the REDF for the construction of private housing units and housing complexes ;
- the granting of residential land to citizens through the Ministry of Municipal and Rural Affairs ;
- the distribution of housing units built by the Ministry of Public Works and Housing to Saudi individuals through the REDF.
- increasing the role of the private sector in housing development.

Whereas the final ownership of housing remains in the hands of private sector individuals, companies or investors, the government's role will be concentrated on providing assistance in kind for the private sector. The government also provides the regulatory framework for a free market environment characterized by competition and equal opportunities, and prepares the spatial and planning indicators needed by the housing sector.

The demand for additional housing in the Sixth Plan is estimated at between 500,000 and 600,000 units, which will be financed mainly by the private sector and loans from the REDF. This incremental demand will require substantial investment and will generate significant new activity in the construction and related sectors, thereby strengthening linkages in the domestic economy.

13.3.6 DEVELOPMENT STRATEGY

The development strategy in the housing sector will be implemented through the following objectives, policies and programs.

13.3.6.1 Objectives

The main objectives for the housing sector during the Sixth Plan include the following :

- to encourage the private sector to provide a sufficient quantity of good quality housing for all citizens ;
- to keep housing costs at affordable levels and to increase the house ownership rate among middle-income groups ;
- to provide the necessary infrastructure and services to Development Centers and areas zoned for housing, in order to enhance the supply of residential land and to facilitate effective urban land management ;
- to use housing policies and programs as incentives and tools to achieve the objectives of comprehensive development.

13.3.6.2 Policies

The following policies will be adopted in pursuit of these objectives :

- Appropriate institutional mechanisms for expanding the sources of private finance for housing development will be studied in order to stimulate the supply side of the housing market.
- The existing loan system of the REDF will be reviewed and the ownership transfer of housing units financed by the REDF between citizens will be expanded.
- The tools and incentives of housing policy will be concentrated as far as possible on regional and local Development Centers, in order to reduce the pressure on the housing market in the major urban centers.
- The supply of land for housing will be regulated through the establishment of housing zones, the provision of public infrastructure and services, and the establishment of necessary measures for distributing and developing residential land grants.
- The national building codes and technical specifications will be revised in order to improve the quality of housing and design standards.
- National housing objectives and policies will be integrated and coordinated with those of other GCC countries.

13.3.6.3 Programs

Studies Program : This program aims to update housing surveys and housing designs, to prepare a field study of occupied housing units, and to conduct studies of various construction techniques and real estate market conditions.

Public Housing Program : This program aims to complete the ongoing housing projects of the Ministry of Public Works and Housing and to continue the maintenance of these buildings until their distribution to citizens by the REDF.

Revision of Building Regulations : This program will review existing building regulations prior to the preparation of a national building code that includes a manual of standard specifications for each building element. This code will take into consideration safety requirements, the need to rationalize consumption of water, electricity and other facilities, social and natural conditions relating to building design, and traditional regional building patterns. The revision of building and planning regulations will focus on "set-back" factors for housing construction appropriate to the desired population density, the land area required for buildings, construction methods and building materials.

Data Base Program : This program will establish and regularly update an integrated and detailed statistical data base, and will publish a directory of technical standards for buildings and their maintenance.

Experience Exchange : This program entails the exchange of training and experience through visits to specialists in GCC and other countries with a view to improving techniques such as the conservation of historical buildings, housing rehabilitation and the preparation of architectural standards. The program also aims to develop the experience of national manpower in consultants' offices and construction and maintenance contractors, and to develop unified standards for building materials testing laboratories, while ensuring supervision of implementation.

13.3.7 GROWTH TARGETS IN THE SIXTH DEVELOPMENT PLAN

The demand for new housing in the Sixth Development Plan is estimated at between 500,000 and 600,000 units. Of these, about 100,000 will be replacement units, or around 3 percent of the total existing housing stock, while the remainder will cover the needs of new families, which will amount to between 14 percent and 17.5 percent of the total units achieved at the end of the Fifth Plan, on the assumption that 75 percent of new families need an independent housing unit.

Around 57,710 housing units are expected to be constructed through REDF loans during the Sixth Development Plan, with a total cost of SR 12.98 billion. Thus, the total number of housing units to receive financial support through the REDF will reach 603,530 units at the end of the Sixth Plan period. The private sector is capable of financing the remaining demand.

CHAPTER 14

DEVELOPMENT AND THE ENVIRONMENT

14. DEVELOPMENT AND THE ENVIRONMENT

The management and protection of the environment have captured the interest of our world today in view of the problems many countries are facing in terms of ever-decreasing strategic reserves of natural resources. These problems are being compounded at the same time by increasing rates of population growth, pollution and environmental degradation, and the danger of extinction for some species.

From a developmental perspective, the environment is best considered as the stock of natural resources available to society over a given period for the satisfaction of human needs. As such, the environment and its resources constitute a basic and indispensable element in the development process in general, and in raising the standard of living and quality of life for citizens in particular.

A major recent development has been the realization on the part of the international community (of which the Kingdom is a part) that the development process cannot proceed indefinitely without due consideration being given to the sustainability of the natural resource base and the environment's capacity for re-generation and continuity. This remarkable breakthrough has found expression in the concept of "sustainable development" which was adopted by the entire world community of nations at the "Earth Summit" in Brazil in 1992, and which has been fostered as the internationally accepted approach to development in the next century and the remainder of this one. In brief, "sustainable development" links the human and natural environments so that available resources are used to meet present needs without jeopardizing the ability of future generations to meet theirs. If such a concept is to be applied, however, several basic principles and conditions must be met. These include:

- the optimal management and rational use of resources;
- the need to upgrade and develop human resources;
- the maximum participation of all members of society in the development process.

Conventional indicators of economic development are confined to monetary values and therefore exclude many factors that more truly reflect the living standards and quality of life of individuals in the local conditions pertaining in each society. A difficult task lies ahead in moving beyond these conventional economic indicators and in developing new concepts and indicators of sustainable development, which focus on the wider aspects of human welfare and the quality of life.

14.1 PRESENT CONDITIONS

Saudi Arabia's awareness of the important complementary nature of development and the environment is not new. The recognition and understanding of environmental issues and their significance for development emerged 15 years ago, in 1401, when the government established the Meteorology and

Environmental Protection Administration (MEPA), which was designated as the central government agency for the environment, in addition to its functions in the field of meteorological services. In response to the increasing interest in environmental concerns at the national level, the Ministerial Committee on the Environment (MCE) was formed in 1410 to act as the highest institutional authority responsible for setting environmental strategies and policies at national level, in addition to determining the Kingdom's international and regional viewpoints in this field. MEPA was assigned to undertake the tasks of the General Secretariat of the MCE and still plays its role in the daily operations of environmental management and in coordinating such matters at national level.

In support of this environmental work, the National Commission for Wildlife Conservation and Development (NCWCD) was established in 1406, as a specialized environmental agency responsible for managing a group of protected areas and implementing programs relating to the Kingdom's wildlife. It is also responsible for conducting biological research and using the results nationwide to protect and preserve rare and endangered zoological and botanical species. Finally, the NCWCD draws attention to wildlife-related environmental issues through environmental awareness campaigns and its participation at local and international conferences.

Through the Ministerial Committee for the Environment, the Kingdom has identified its future development priorities at the national level within the context and understanding of sustainable development. These priorities are included in "Agenda 21: Kingdom of Saudi Arabia". This document deals with the various development sectors in the Kingdom on the premise that the environment is the common denominator which links all sectors of development, with the emphasis on efficient and rational resource utilization, the development and upgrading of human resources, and increasing the contribution of individuals, private firms and institutions in the development process.

The Kingdom's approach in integrating both environmental and development objectives and their related activities is based on Islamic Sharia principles, which direct the individual to conserve and protect natural resources and to be wise and rational in developing the natural environment for the benefit of himself and future generations. Thus, the modern concept of sustainable development partly reflects this Islamic view on the relationship between man and the natural environment.

The major achievements at the national level in this field during the last few years can be summarized as follows:

- The development of environmental management institutions and a national framework for managing the environment, culminating in the formation of the Ministerial Committee on the Environment and its general secretariat in 1410;
- The Kingdom's effective participation in many international and regional fora on environmental issues, in particular the United Nations Conference on Environment and Development (the "Earth Summit") held in Rio de Janeiro, Brazil 1992;

- The distinguished effort in combating and controlling the largest ever oil spill in the Arabian Gulf after the Kuwait liberation war, and in protecting strategic utilities and facilities (Figures 14.1 and 14.2);
- The establishment of the Saudi Environmental Awareness project in cooperation with MEPA and the private sector through the Economic Offset Program; under this scheme -- a pioneer of its type in cooperation between the government and the private sector -- the private sector provided management and finance, while MEPA provided the necessary scientific and technical support;
- The development and upgrading of meteorological services provided to both civilian and non-civilian sectors;
- The conservation and expansion of the Kingdom's vegetational resources, through the activities of the Ministry of Agriculture and Water, including the plantation of more than 10,000 hectares of range and pasture lands, the re-plantation of 80 hectares of forests, and the distribution of 500,000 seedlings; in addition, the Ministry surveyed and classified 200,000 hectares of land and continued the maintenance and development of irrigation and drainage networks;
- The preservation and protection of wildlife by the National Commission for Wildlife Conservation and Development (NCWCD), including the establishment of ten wildlife reserves for rare and endangered species and three research centers;
- The implementation of several projects for the reduction of ground water levels by the High Commission for the Development of Riyadh; these projects covered around 40 percent of the affected areas in the city of Riyadh.
- The attention given to environmental affairs by a number of agencies and organizations in the industrial sector, and, in particular, to the application of measures pertaining to industrial safety; such agencies and organizations include the Ministry of Petroleum and Mineral Resources, the Ministry of Industry and Electricity, Saudi ARAMCO, the Royal Commission for Jubail and Yanbu, and SABIC.

14.2 KEY ISSUES

Indicators of Sustainable Development

Because it is confined to the measurement of market transactions that have monetary values, the traditional concept of national income cannot reflect many aspects of the quality of life, such as the negative effects of environmental pollution and the depletion of natural resources. Under Agenda 21 issued by the Earth Summit in 1992, the majority of nations have adopted the concept of *sustainable*

Figure (14-1)

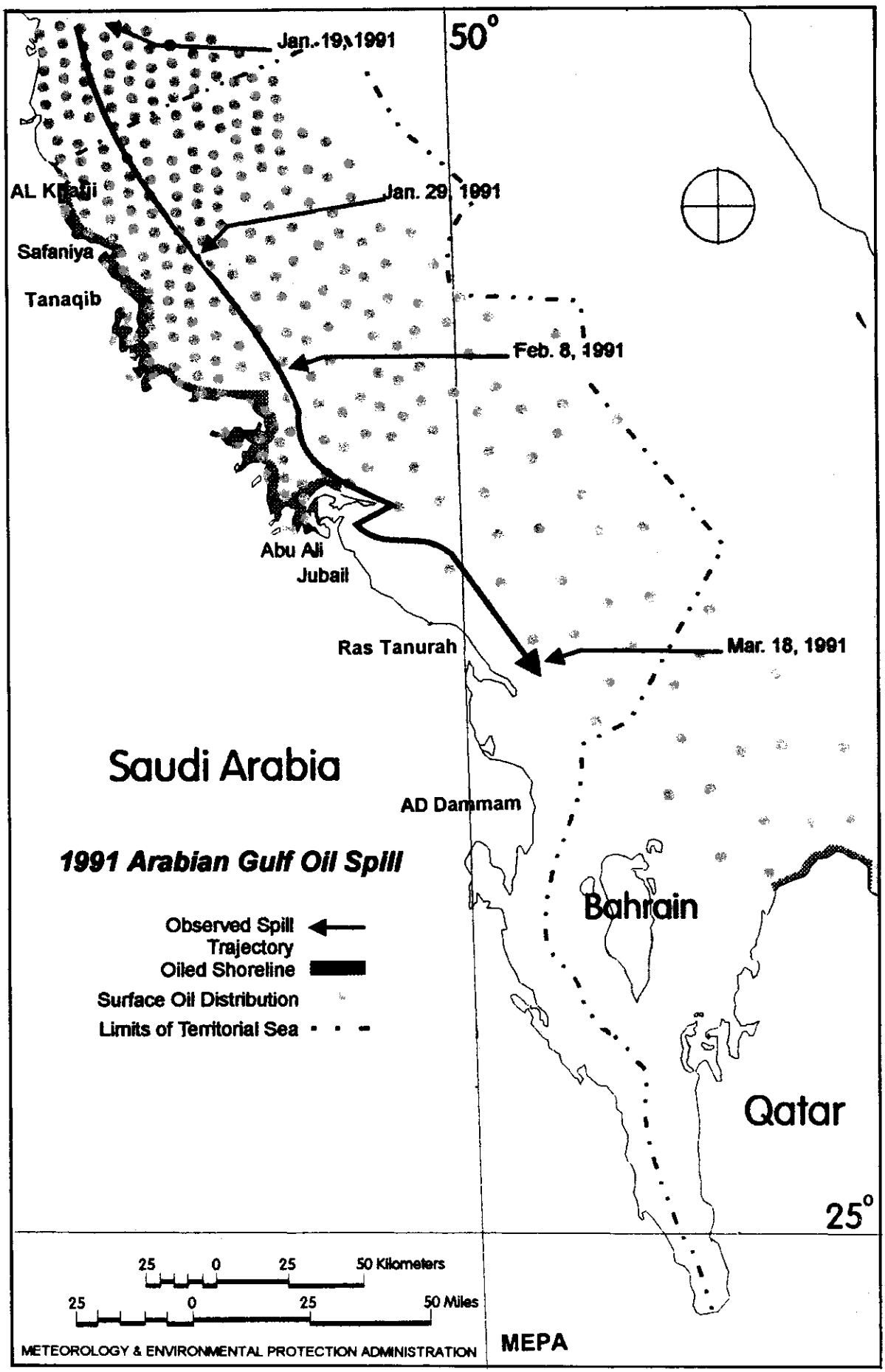
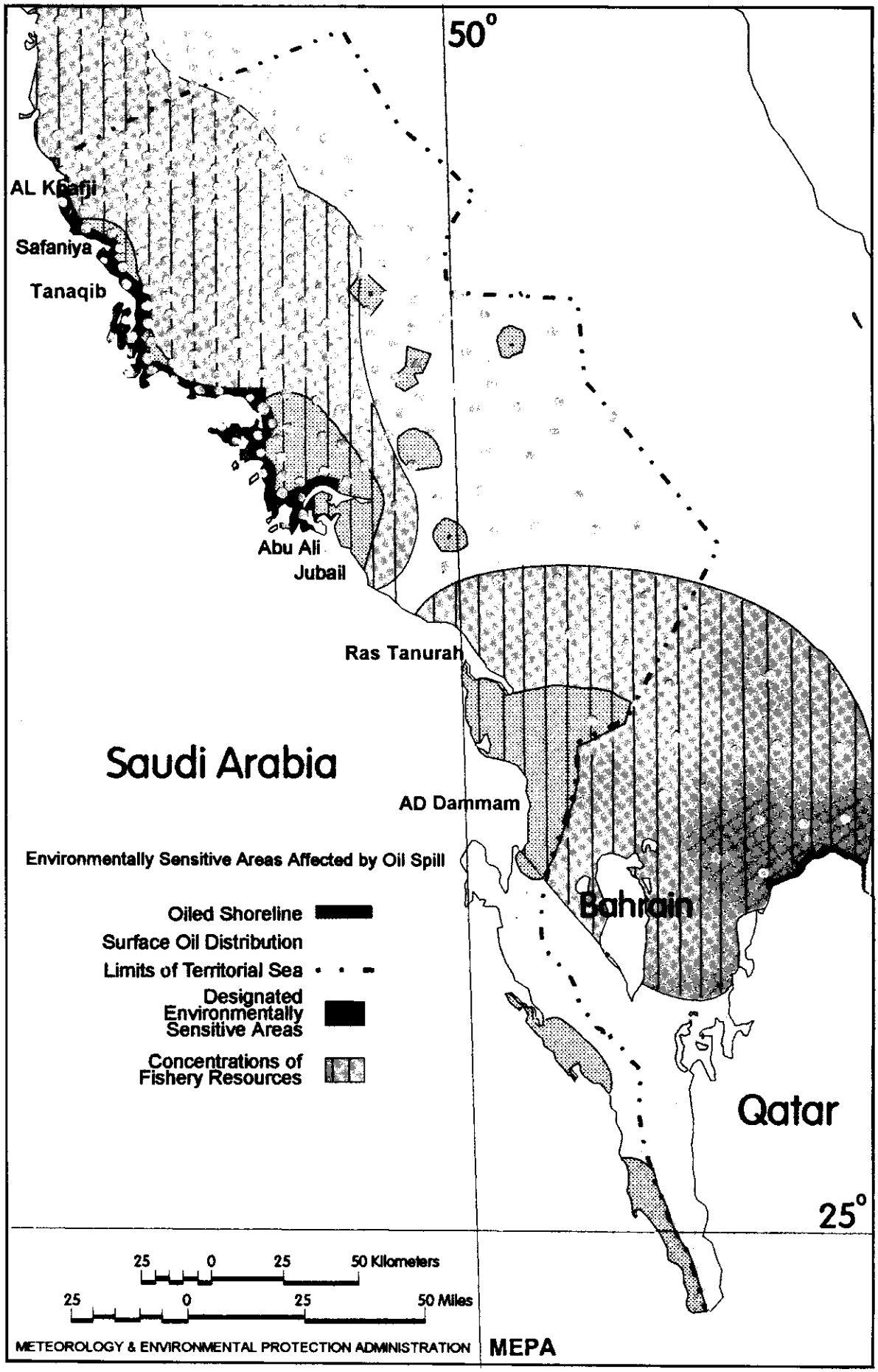

Jan. 19, 1991
50°
AL Khafji
Jan. 29, 1991
Safaniya
Tanaqib
Feb. 8, 1991
Abu Ali
Jubail
Ras Tanurah
Mar. 18, 1991
Saudi Arabia
AD Dammam
1991 Arabian Gulf Oil Spill
Observed Spill Trajectory
Oiled Shoreline
Surface Oil Distribution
Limits of Territorial Sea
Bahrain
Qatar
25°
25 0 25 50 Kilometers
25 0 25 50 Miles
METEOROLOGY & ENVIRONMENTAL PROTECTION ADMINISTRATION
MEPA

Figure (14-2)


50°
AL Khafji
Safaniya
Tanaqib
Abu Ali
Jubail
Ras Tanurah
Saudi Arabia
AD Dammam
Environmentally Sensitive Areas Affected by Oil Spill
Oiled Shoreline
Surface Oil Distribution
Limits of Territorial Sea
Designated Environmentally Sensitive Areas
Concentrations of Fishery Resources
Bahrain
Qatar
25°
25 0 25 50 Kilometers
25 0 25 50 Miles
METEOROLOGY & ENVIRONMENTAL PROTECTION ADMINISTRATION
MEPA

development as the appropriate approach to development for the next century and the remainder of this one. Based on the Kingdom's work priorities under this program (Agenda 21: Kingdom of Saudi Arabia), it is imperative to develop a series of quantitative indicators for measuring and monitoring the activities of sustainable development, taking into account the efficient use of natural resources, their rates of regeneration and depletion, the absorptive capacity of the environment and the conformity of technology in use with the concept of sustainability. In order to prepare and develop these indicators, it is necessary that the national accounts system should include a form of natural resource capital account and a measurement of the extent of human resource development, as well as their impacts on the national economy. All concerned agencies will cooperate and coordinate in the development of such indicators during the Sixth Development Plan period.

Environmental Information and Data

There is a general shortage of environmental information and data at the national level. Addressing this issue requires close cooperation between all agencies entrusted with implementing environment-related activities, within an integrated and coordinated framework for determining the environmental indicators that need to be met in each field (water resources in qualitative and quantitative terms, waste lands, range lands, reserves, environmentally sensitive areas, and air, land, water and noise pollution). In this respect, there is also a need to identify unified standards for recording and measuring the environmental information needed to develop these indicators, and to assign relevant agencies to measure each indicator. All such steps are to be taken for the purpose of providing an environmental data base at the national level. Thus, it is of the utmost necessity that integrated information is made available to identify problems and address their various dimensions, and that a central agency be entrusted with coordinating the process of information collection and analysis and making this information available to other concerned agencies.

Waste Management

As a factor affecting the quality of life, the disposal of solid and liquid waste is an important issue confronting modern communities everywhere, and in this regard, Saudi Arabia is no exception. Waste comes in many forms (domestic, industrial, chemical, hazardous and non-hazardous) and is related to all sectors of the economy -- urban, industrial, agricultural and service sectors -- with varying impacts on the environment and human health. Up till now, there has been a fragmented approach to the collection, removal and disposal of certain types of waste, mainly those which are visible and have a direct impact on human activities. However, in many cases the disposal of such waste itself entails new problems, concerning its management, methods, locations and types of treatment. A comprehensive evaluation is needed concerning all methods of waste management and treatment. At the same time, efforts are

also needed to reduce the generation of such waste, through the adoption of cleaner and more efficient industrial processes that utilize fewer raw materials and the maximum possible volume of recycled materials. In fact, waste has to be viewed as a resource which, if managed correctly, can generate economic profits.

Air Quality

The rapid development of the Kingdom, particularly in urban areas, has been accompanied by a deterioration of air quality as a direct consequence of the massive increase in land transportation (cars, trucks and buses) and the associated growth in the emission of air pollutants. In addition to these mobile sources of air pollution, there has been the growth in stationary sources of air pollution, such as factories, desalination plants, power stations and oil refineries. Air pollutants generated by these sources depend on the quality and mix of fuel used and its efficiency, as well as the level of technology, design efficiency and operating cycles.

It is necessary, therefore, to increase the number of air quality monitoring stations in urban areas, particularly in densely populated areas, and to study the best methods of controlling pollutants from stationary sources. With respect to motor vehicles, there is an urgent need to switch to lead-free fuel and to adopt a plan for the use of catalytic converters, in addition to improved systems for managing traffic flows. Equally important to reducing the hazards of air pollution are the increase in vegetational cover, green belts and forestry plantation.

Fresh Water Resources

Water is a limited resource that is indispensable for human, plant and animal life, so it is important that this vital and essential resource be managed in a manner that rationalizes its consumption and secures its supply for future generations. As a result of agricultural development, population growth and improvements in living standards in the Kingdom, the growth in the demand for water has led to its partial depletion, particularly in the case of non-renewable fossil water which is the main source of fresh water supplies. Accordingly, it is necessary to encourage the rational consumption of water and its management by all sectors on a scientific basis that will ensure its conservation and limit its pollution through regular monitoring. Furthermore, there is a need to develop appropriate water quality standards and to enforce rules and regulations relating to these standards.

On the other hand, efforts are needed to develop water resources through the use of advanced technologies (such as cloud physics to increase the amount of rain) and to improve the recharge efficiency of ground water. It is also important to complete the infrastructure needed for the collection, treatment and re-use of sewage water in all regions of the Kingdom for agricultural and industrial purposes. In this respect, priority should be given to densely populated areas, so as to limit the problem of rising ground water levels in cities, and the severe health, economic and environmental consequences.

Management of Land Use and Combating Desertification

Alternative patterns of land use have important economic and environmental consequences. The classification and analysis of land according to its longer term potential productive capacity is now urgently needed, so that lands suitable for agriculture, pasture, forests, industry, recreation, conservation and preservation of biological diversity (bio-diversity) can be properly identified. Current problems affecting the quality of land in the Kingdom include the deterioration of vegetational cover due to wood cutting, over-grazing of livestock, soil erosion by wind and water, and the ever present threat of moving sand dunes, all of which lead to increased desertification and land contamination. Accordingly, an integrated national database should be established for soil, vegetational and livestock resources, so that long term national plans can be developed for the protection of lands, forests and vegetation, and the control of desertification. Several measures are now needed to limit the desertification process and the deterioration of soil and pastures, the most important of which are the prohibition of over-grazing and the rational use of pastures according to their regeneration capabilities, the control of wood cutting, and the plantation of trees along the coasts to be irrigated by sea water.

Land is also susceptible to pollution from the disposal of waste (particularly hazardous waste) and the excessive use of chemical fertilizers and pesticides. In order to avoid the problems of soil contamination, the use of chemical fertilizers and pesticides should be rationalized and an environmentally sound system for the management of waste adopted.

Management of Coastal and Marine Areas

The Kingdom's long coastline and extensive marine resources are particularly sensitive to environmental pressures from urban, industrial, agricultural, recreational and fishing activities, as well as from the operations of desalination plants, ports and oil drilling. Inevitably, a conflict arises between the need to develop and expand these activities and the need to protect the unique and precious environmental characteristics of these marine areas. A system for managing coastal and marine areas should be promptly developed, so that priorities of land use in coastal areas can be clearly identified, conflicts eliminated, natural resources developed and maintained, and the excessive use of these resources avoided. All relevant agencies should cooperate in the enforcement of such a system. Environmental indicators also need to be developed for these areas, through the collection and analysis of data at stationary and mobile research centers, so that the management system can be based on scientific evidence and so that corrective action can be taken when necessary.

14.3 SAUDIIZATION

Saudi nationals accounted for 94 percent of all employees at MEPA by the end of the Fifth Plan. Management positions are filled entirely by Saudis, while Saudis make up 87.7 percent of professional positions.

During the Sixth Plan, MEPA will meet its manpower needs through the placement of Saudis in all vacant posts. The overall Saudiization rate is expected to rise to 97.5 percent, while the percentage of professional positions filled by Saudis is expected to increase to 95 percent.

As for the NCWCD, the percentage of Saudis in the labor force reached 91.7 percent by the end of the Fifth Plan. Saudis occupied all management positions and 91.7 percent of professional positions. During the Sixth Development Plan, NCWCD will support its staff and the overall Saudiization rate is expected to rise to 95 percent.

14.4 PRIVATE SECTOR'S ROLE IN PROTECTING THE ENVIRONMENT

The responsibility for conserving and protecting the environment is not limited to the government alone, but is the responsibility of all citizens. According to the directives of the Custodian of the Two Holy Mosques, the active participation of citizens and private sector establishments in the various development activities should be encouraged. In particular, the private sector can make an important contribution to the goal of longer term sustainable development by engaging in the following activities during the Sixth Plan period:

- continuing its contribution to managing and financing environmental awareness activities in cooperation with the concerned government agencies who can provide the necessary scientific and technical support for such activities; in this regard, the establishment of voluntary non-profit organizations in the environmental protection field will be encouraged;
- establishing industries to produce environment-friendly products for which demand is already proven at the international level;
- providing environmental consulting services for both public and private sectors, and preparing environmental impact assessments for various government and private projects;
- following existing environmental protection regulations and guidelines with respect to the rational use of natural resources, limiting waste generation, and increasing operational efficiency;
- investing in activities which entail "environmental returns" in addition to their financial returns; examples include industrial projects for treating and recycling solid waste and waste water, and manufacturing equipment required by industry according to sound environmental standards; the development of national parks and recreational facilities and resorts should also be organized according to sound environmental principles.

14.5 DEVELOPMENT STRATEGY

Within the context of a long-term development strategy, all production and consumption activities in society should be re-oriented away from waste or misuse towards the conservation of natural resources and the elongation of their useful life-span. Emphasis should also be placed on enhancing the efficient utilization of these resources, avoiding their depletion and identifying long-run utilization priorities without compromising the right and ability of future generations to meet their needs. This approach is in accordance with Islamic values and teachings defining mankind's mission in this world. An appropriate portion of the financial returns and revenues arising from the exploitation of natural resources - especially depletable and non-renewable resources - must be invested in developing renewable resources, and in particular, human resources, as the development of human resource skills, capabilities and knowledge constitutes a renewable source of human capital. All of these measures are targeted to achieve balanced and sustainable development and to avoid the accumulation of environmental debt (natural resource indebtedness) resulting from the depletion and degradation of these resources.

The field of environmental management is one of the more recent fields requiring a long term strategic approach. Thus, suitably qualified personnel must be attracted into this field which has applications in all sectors of the economy, in terms of environmental considerations and the conservation of natural resources. However, responsibility for such efforts should not be confined to the government alone, as the private sector also has an enormous responsibility to attract qualified Saudis into this field and to develop their skills and knowledge through appropriate training.

From this perspective, the objectives, policies and programs of the Sixth Development Plan are as follows:

14.5.1 OBJECTIVES

Within the framework of integrating development and environmental objectives, all agencies - especially executive ones - will endeavor to achieve the following general and long-term objectives:

- To conserve and develop the environment, and protect it from pollution;
- To upgrade and enhance the quality of life and the well-being of citizens, and to ensure a pollution-free environment with pure air, clean water and healthy food;
- To achieve balanced and sustainable development by conserving natural resources, while reducing pollution and the over-use of such resources.
- To conserve, protect and develop the Kingdom's wildlife and to preserve the bio-diversity which forms an integral part its natural resources, within a framework for achieving balance between environmental and economic considerations, in addition to preserving rare and endangered botanical and zoological species.

14.5.2 POLICIES

The environmental impact of actions in one sector are often felt in other sectors, so that harmonious environmental policies must be adopted for all sectors of the national economy, and coordinated amongst many government agencies. Therefore, the coordinating function of MEPA is crucial to the consistent and general implementation of environmental policies that conform to the development activities of the Kingdom.

To achieve the environmental objectives, the sectoral agencies whose activities have an impact on the environment will implement the following policies during the Sixth Plan:

- Adopt a preventive approach that avoids or reduces environmental deterioration and pollution;
- Issue a national system for environmental impact assessments (EIA) to be adopted in projects undertaken in the various development sectors throughout the Kingdom, especially the industrial, agricultural and urban projects;
- Draft and complete an integrated set of environmental standards and specifications, and update them according to needs and progress, within the context of an integrated environmental system at national level;
- Taking environmental considerations into account in the various stages of development projects (i.e. planning, design, construction, operation) in all sectors, especially the producing sectors of agriculture and industry, whereby all projects shall be subject to environmental impact assessments;
- Take appropriate measures to maintain bio-diversity, preserve wildlife and conserve and manage natural resources according to the concept of sustainable development;
- Enhance environmental management and coordination at national level through:
  - ★ Completion and issuance of a national environmental code;
  - ★ Studying the feasibility of establishing an environment unit within each environment-related agency to coordinate the environment tasks within the agency and between the agency and the general secretariat of the Ministerial Committee for Environment and MEPA;
- Encourage the private sector to participate in environmental protection and pollution control activities, and encourage investment in environmentally oriented activities and industries, such as waste treatment and recycling plants, and to encourage the use of environmentally sound technologies;
- Develop manpower resources in the field of environmental science and attract qualified national manpower into the government and private sectors;

- Establish and manage the set of protected areas in a way that protects and develops the Kingdom's wildlife and preserves the diversity of botanical and zoological species and other natural resources;
- Support research and studies related to the proliferation and breeding of various wildlife species, in order to ensure their continuity and re-settlement in their natural habitats;
- Prepare a comprehensive national environmental awareness plan.

14.5.3 PROGRAMS

Meteorological Services: This program aims at the provision of meteorological and climatic services, the development of observatories at airports, the improvement of weather forecasts on air routes, the provision of information on weather conditions to pilgrims and citizens, and improving the efficiency of the meteorological data base for agriculture.

Environmental Protection: The aim of this program is to address all environmental issues in a comprehensive manner, through the identification and follow-up of environmental problems at national level, contributing to the control of all environment pollution, and boosting citizens' environmental awareness.

Protected Areas: This program aims at the management and operation of a series of protected areas through intensified protection measures therein, as well as the implementation of procedures for re-settling various rare and endangered animal species in their natural habitats.

Information and Environmental Awareness: This program aims to provide information and raise citizens' awareness at all levels about the environmental significance and beauty of wildlife, and to provide them with opportunities for positive responses to the activities of NCWCD through information campaigns, specialized films and scientific symposia.

14.6 GROWTH TARGETS IN THE SIXTH PLAN

Within the long-term general objectives of the environment sector, several environment-related agencies will cooperate in implementing the following targets during the Sixth Plan:

- To achieve a permanent balance between population distribution and the environment's absorptive capacity, with due regard to the effects of population growth and changing consumption patterns on the natural resources base;
- To attain the highest possible level of food production within the limit of available natural resources, particularly water, without damaging or severely depleting the existing non-renewable resource base;

- To use the most advanced and environmentally sound technology, in the field of industrial development so as to avoid pollution and rationalize the use of resources and raw materials at all stages of the production process, i.e. in design, construction and operation.
- To issue a national system for environmental impact assessments to be adopted by the various development sectors throughout the Kingdom, particularly for industrial, agricultural and urban projects.
- To develop and finalize a set of environmental standards and criteria to be updated in response to changing needs and developments, in the context of developing an integrated environmental code at national level.
- To provide environmentally clean energy sources for all production and consumption activities, such as low-pollution fuels for factories, desalination plants and electric power plants, as well as lead-free fuel (gasoline) for domestic consumption.
- To continue the development and breeding of wildlife species in the Kingdom, and their re-settlement in their natural habitats.

APPENDIX

KINGDOM OF SAUDI ARABIA
MINISTRY OF PLANNING

General Objectives and Strategic Bases of the Sixth Development Plan

1415 - 1420 A.H.
1995 - 2000 A. D.

IN THE NAME OF ALLAH
THE COMPASSIONATE
THE MERCIFUL

Kingdom of Saudi Arabia
General Secretariat of
The Council of Ministers

Decree No. (142) of 19/11/1413 H

The Council of Ministers,
Having considered the recommendation of the
General Committee of the Council of Ministers,
No. 230 of 25/10/1413 H;

Hereby Decrees:

First: Approval of the General Objectives and Strategic Principles of the Sixth Development Plan (1415-1420) according to the text attached herewith.

Second: The order of priorities in the Sixth Development Plan shall be as follows:

1. To continue supporting and enhancing the ongoing development of the Kingdom's own defense capabilities, and to deepen citizens' loyalty and sense of belonging;

2. To rationalize government expenditure and make the national economy more dependent on private sector activities, through:

   a. Upgrading administrative efficiency and productivity in government agencies to reduce government expenditures, without affecting the standards and availability of services;

   b. Developing additional policies to encourage private sector capital participation in national investment within the Kingdom;

   c. Expanding the utilization of Saudi private sector capital in financing some government projects;

   d. Considering the feasibility of privatizing some government business-oriented activities.

3. To adopt the necessary measures for addressing the constraints which impede the development and employment of Saudi human resources, particularly through:

a. Laying more emphasis on the quality of general education, higher education and training;

b. Concentrating the efforts of education and training on those fields of specialization which meet the requirements of the private sector;

c. Increasing the absorptive capacity of universities in those fields of specialization which meet the requirements of development; and increasing the absorptive capacity of technical education and vocational training institutions, as well as the technological colleges, to ensure that the number and quality of graduates are commensurate with the requirements of the national economy;

d. Developing the necessary policies for replacing non-Saudi manpower with Saudi manpower;

e. Adopting appropriate policies to stimulate the private sector to provide employment opportunities for Saudi citizens.

4. Adopting appropriate means to achieve steady expansion in infrastructural facilities in line with the increased demand resulting from growth of population and settlements, and in accordance with the above-mentioned priorities and the nature of the infrastructure facility.

Fahd Bin Abdul Aziz
Chairman of the Council of Ministers

THE GENERAL OBJECTIVES AND STRATEGIC BASES OF THE SIXTH DEVELOPMENT PLAN FOR THE KINGDOM OF SAUDI ARABIA (1415 - 1420 A. H.) ARE AS FOLLOWS:

1. To safeguard Islamic values by duly observing, disseminating and confirming Allah's Sharia (God's Divine Law);
2. To defend the Faith and the Nation; and to uphold the security and social stability of the Kingdom;
3. To form the productive national citizen through providing him with the appropriate means and sources of income, and ascertaining his reward on the basis of his work;
4. To develop human resources and continually ensure an increasing supply of manpower, upgrading its efficiency sufficiently to meet the requirements of the national economy, and replacing non-Saudi manpower with suitably qualified Saudis.
5. To achieve balanced growth throughout all regions of the Kingdom;
6. To continue encouraging private sector participation in socioeconomic development;
7. To reduce dependence on the production and export of crude oil as the main source of national income;
8. To continue restructuring the Kingdom's economy through continuing diversification of the economic base, particularly through laying more emphasis on industry and agriculture;
9. To develop mineral resources and to encourage discovery and utilization thereof;
10. To concentrate on qualitative development of already existing utilities and facilities by improving their level of performance;
11. To complete infrastructure projects necessary to achieve overall development;
12. To promote scientific activity and to raise cultural and informational standards to keep pace with the Kingdom's development;
13. To achieve economic and social integration among the Gulf Cooperation Council (GCC) countries, and to strengthen economic cooperation with Arab, Islamic and friendly countries.

First Basic Strategic Principle

Continue to consolidate the presence of a protective defense and security system, to further the continuous development of the Kingdom's intrinsic defense capability, and to forge ahead with inculcating an ever-deepening sense of loyalty and belonging on the part of the individual citizen. The defense and security authorities shall formulate a strategy that will form the basis of an adequate plan for the defense and security of the nation, and shall submit that strategy to the National Security Council prior to presenting it for consideration by the Council of Ministers.

Second Basic Strategic Principle

Concentrate on improving the economic and productive standards of the services, utilities and products which the government provides for citizens -- both directly (such as education and security services) and indirectly (such as electricity, transportation and basic commodities).

Economic performance may be improved by means of:

1. Reducing production costs of public services and utilities;
2. Ensuring that services are appropriate and not excessive: for example, by confining specifications for construction or operation of projects to what is actually required;
3. Utilizing advanced technology in all public service sectors through mechanization and the use of advanced methods;
4. Concentrating on those technologies that are relevant for the needs of the national economy such as automation, use of saline water in agriculture, and other methods;
5. Assessing the economic feasibility of projects of all types by considering not only construction costs, but also operational and maintenance, as well as management costs;
6. Encouraging and providing incentives for the public to invest in feasible and worthwhile industries dependent on local raw materials, and relying on production methods which require minimum labor and minimum quantities of critical natural resources such as water;
7. Emphasizing diversification of the productive base in agriculture, by encouraging investors to establish companies to engage in large-scale feasible agricultural projects using renewable water resources and modern irrigation methods that minimize water consumption, while at the same time encouraging individual investors in agriculture;
8. Supporting the trend to invest in projects applying new technologies for which the Kingdom has economic advantages or which are badly needed, such as solar energy projects, modern irrigation methods and the use of greenhouses;
9. Supporting centers and programs for applied research;
10. Making full provision in all project costs for all necessary maintenance and operational requirements, while minimizing maintenance requirements at the project design stage;
11. Adopting preventive maintenance programs based on asset life span and its utilization rate;
12. Standardizing the technical specifications of projects to facilitate reduced maintenance costs;
13. Developing training programs for machine operation, thereby reducing operational errors;

14. Including general principles of maintenance as part of the educational curricula for the post-elementary stages, to enable individuals to carry out simple maintenance tasks and understand general safety principles;
15. Encouraging the private sector to invest in maintenance projects;
16. Continuing the development of appropriate administrative and financial organizations to serve the new needs of the community.

Third Basic Strategic Principle

Continue the policy of giving the private sector the opportunity to undertake many of the economic tasks of the government, while ensuring that the government does not engage in any economic activity that can be undertaken by the private sector.

This policy may be implemented through:

1. Giving the private sector the opportunity to operate, manage, maintain and renovate many of the utilities currently operated by the government, on condition that this would result in lower costs, better performance and employment opportunities for Saudi citizens;
2. Offering for public subscription at the appropriate time the shares of companies established by the government to develop basic industries, thus giving the private sector the opportunity to participate in the ownership and management of these industries;
3. Continuing the reconsideration of some of the prevailing methods, policies and regulations in the state to enable the private sector to operate with greater freedom and flexibility, to achieve higher performance standards and to become more creative. These considerations include: the equitable adjustment of price control, thus ensuring fairness to consumers and investors alike; and the continued improvement of procedures for commercial courts and notary public offices etc.;
4. Continuing the encouragement of co-operatives, as well as private benevolent and commercial societies and institutions to undertake social and economic projects, such as the management of private sanitaria, hospitals and clinics, and the building of premises for charitable institutions, tourist and recreational centers;
5. Urging commercial banks to extend more credit facilities to production projects instead of concentrating on the import trade;
6. Encouraging the incorporation of more joint stock companies to undertake large projects with economies of scale, so that the greatest number of citizens may benefit from such investments;

7. Continuing the development of the financial market for trading shares, under the continued supervision of the state in order to avoid the dangers of speculation;
8. Encouraging the private sector to participate in the formulation and implementation of training programs;
9. Making information more widely available to citizens by increasing the quality and frequency of special programs which identify investment opportunities in the producing sectors;
10. Carrying out a greater number of studies of investment and marketing opportunities and of the feasibility of projects in the producing sectors;
11. Acquainting investors regularly with results of official studies relating to mining and encouraging them to undertake the utilization and development of available minerals; allowing companies to invest in minerals that have been discovered; and encouraging investment in mining through such means as the provision of basic infrastructure;
12. Continuing to give priority to qualified and classified Saudi contractors in the implementation of various projects. Foreign companies awarded contracts must be required to sub-contract a proportion of the work to Saudi contractors and employ and train a specified proportion of Saudi citizens;
13. Ensuring that projects, whenever technically or economically feasible, are divided into multiple contracts or sub-projects, thus enabling the participation of Saudi companies in their execution;
14. Promoting the incorporation of national financial institutions for the investment of (private) funds within the Kingdom;
15. Enhancing and supporting research and development activities in private sector industrial and productive institutions;
16. Facilitating and encouraging the participation of the private sector in providing opportunities for scientists and researchers to conduct scientific and technological research, with the cooperation of the King Abdulaziz City for Science and Technology (KACST) and of the universities, and with particular emphasis on applied research.

Fourth Basic Strategic Principle

Rationalize the system of direct and indirect subsidies provided by the state on many goods and services through:

1. Studying the system of subsidies granted by the government for goods and services and identifying ways to rationalize their consumption without harming those on lower incomes;

2. Ensuring that all government departments which administer public services make economic efficiency fundamental to their operations by adopting two basic principles:

   First: the cost to the Saudi community of producing such services should be reduced;

   Second: the prices of such services should not be less than their production costs, except in rare cases -- and with the provision that they should be periodically reviewed.

Fifth Basic Strategic Principle

Economic rationality should predominate in the government's investment and expenditure decisions.

In practice, this means:

1. Considering water as a basic factor and an important determinant of efficiency in government projects, as is the case with expatriate labor or inflation;
2. Developing economically promising natural resources such as the exploration of mineral and marine resources, the mapping of their location, their further development and utilization, and the processing of available natural gas to the maximum extent possible;
3. Expanding -- both horizontally and vertically -- the petrochemical industries, as well as the production of gas and petroleum derivatives, through the private sector or joint-venture companies, whenever economic feasibility is proven;
4. Maximizing the capacity for producing refined petroleum products within the bounds of economic feasibility.

Sixth Basic Strategic Principle

Continue the development of Saudi manpower, through the meticulous evaluation of educational curricula and training programs and implementing the developments or modifications suggested by this evaluation in conformity with Islamic Sharia, the changing needs of society, and the requirements of the development process. This continuing development of Saudi manpower can be achieved by:

1. Making primary education mandatory for all boys and girls;
2. Identifying, at each educational stage beyond the intermediate level, the proportion of students qualified to receive higher education, so that the remainder can be guided towards specialized technical institutes, as well as military and security police institutes;

3. Guiding admissions policy in the universities in conformity with the requirements of the development process in the long-run, and developing educational systems, curricula and programs accordingly;
4. Ensuring integration and flexibility between all levels of education;
5. Continually updating curricula and methods of teaching;
6. Giving priority to technical labor force development through the expansion of technical education and vocational training;
7. Limiting university bursaries to those fields of specialization (including technical education and vocational training) identified as deserving incentives;
8. Paying attention to the quality of training by concentrating on the use of advanced technology at the intermediate and advanced levels;
9. Ensuring conformity of training programs, in terms of quality and quantity, to the actual needs of the economy;
10. Placing great emphasis on libraries in order to encourage and accustom students to make use of such facilities;
11. Paying attention to extra curricular activities at all levels of education.

Seventh Basic Strategic Principle

Replacing non-Saudis with appropriately qualified and willing-to-work Saudi manpower in all occupations through:

1. Providing information through the public media, stressing the religious and social value of work as an important and respectable activity, in order to change attitudes towards certain occupations which at present are not acceptable to some individuals;
2. Providing labor market information on a regular and orderly basis for individual members of the labor force and employers, as well as students and educational and training institutions, to enable the right choices to be made regarding appropriate trades and professions;
3. Finding suitable means to encourage the private sector to provide job opportunities for those citizens who want employment;
4. Encouraging the private sector to concentrate on specialized training and on-the-job training;

3. Increase attention for the handicapped and introduce national programs for their rehabilitation and welfare;
4. Introduce compulsory military service;
5. Introduce some basic military principles into the secondary school curriculum;
6. Combat, and ultimately eliminate, illiteracy according to a scheduled plan;
7. Give more attention to local community programs based on the effective participation of citizens in the planning and implementation of local projects;
8. Give attention to primary health care, preventive medicine and health education; increase the effectiveness of preventive and curative institutions in protecting the citizens; and widen the scope of health programs;
9. Improve the capabilities of individuals to increase their income, thereby promoting social balance;
10. Pay more attention to social care programs in all fields and induce private sector participation by encouraging the establishment of yet more private benevolent societies;
11. Encourage the contribution of citizens to urban improvement, landscaping and the establishment of parks;
12. Pay greater attention to youth welfare programs, to developing the capabilities of young people, and to enabling them to gain mental and physical skills in the fields of culture, science and sports;
13. Give due care to matters of industrial safety and occupational health in both public and private sectors.

Ninth Basic Strategic Principle

Achieve balanced development in all regions of the Kingdom by:

1. Establishing development centers as the bases for regional development. These centers should be identified in accordance with selected criteria.
2. Ensuring efficient use of existing facilities and services in all regions of the Kingdom.

Tenth Basic Strategic Principle

Safeguard and enhance the natural environment and prevent pollution by implementing the following policies:

1. Protecting the environment and safeguarding its natural characteristics, in addition to the maintenance of natural resources;

5. Increasing the participation of women in the national work force in accordance with the teachings of Islam (the Sharia);
6. Continuing to place qualified and trained Saudi manpower where they can run vital facilities;
7. Continuing to place Saudi citizens to administer government agencies;
8. Concentrating manpower recruitment from abroad on qualified personnel;
9. Giving more support to services provided by the state for workers and citizens seeking jobs.

Eighth Basic Strategic Principle

Give attention to the development of Saudi society; to the provision of social welfare and health care for all; and encourage society's participation in implementing the programs of the Development Plan, as well as in reaping the benefits of development.

It is therefore necessary to:

1. Create an awareness amongst Saudi citizens of the objectives and requirements of development and of how best to handle its tools.

   This calls for:

   — improving information flows and strengthening the means of disseminating information;

   — the promotion of cultural activity by encouraging literary authorship, translation work, the spread of public libraries, the establishment of museums and the preservation of historical and archaeological sites;

2. Provide enhanced care for children in all fields and at all levels, by:

   — enlightening mothers about various aspects of child care and eliminating illiteracy amongst mothers;

   — developing care programs for juvenile delinquents;

   — stressing the importance of "mother and child" health care; and aiming at the complete coverage of child immunization against infectious diseases;

   — providing space in public libraries for children;

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2. Protecting and developing wildlife in the Kingdom, together with preserving the natural equilibrium of its ecology in terms of the genetic diversity of its zoological and botanical makeup;

3. Maintaining continued equilibrium with regard to optimal population distribution and environmental integration -- taking into consideration the impact of population growth and consumption patterns on natural resources;

Eleventh Basic Strategic Principle

Adopt a fiscal policy which keeps the level of government expenditure in line with government revenues during the entire Sixth Development Plan period, through the following:

1. Studying the optimum ways of increasing government revenues and reducing government expenditure -- on condition that such measures will not cause undesirable social and economic effects -- with due emphasis on:

   (a) Raising performance standards in government agencies by reducing government spending without affecting the scope and quality of services offered to citizens;

   (b) Establishing rules and regulations for financing sundry development programs and projects by the private sector acting under state supervision;

   (c) Developing privatization programs for some government projects in the utilities and other services, and specifying other activities that could be carried out by the private sector;

   (d) Reviewing and further developing the rules and regulations pertaining to non-oil revenues.

2. Ensuring that programs and projects are implemented in accordance with the development plan objectives and strategic principles;

3. Ensuring that projects are implemented with due consideration to the operation, maintenance, replacement and management costs throughout the life span of each project;

4. Continuing to adopt policies aimed at keeping inflation at the lowest possible level.

KINGDOM OF SAUDI ARABIA

SIXTH DEVELOPMENT PLAN

1415 - 1420 A.H.
1995 - 2000 A.D.

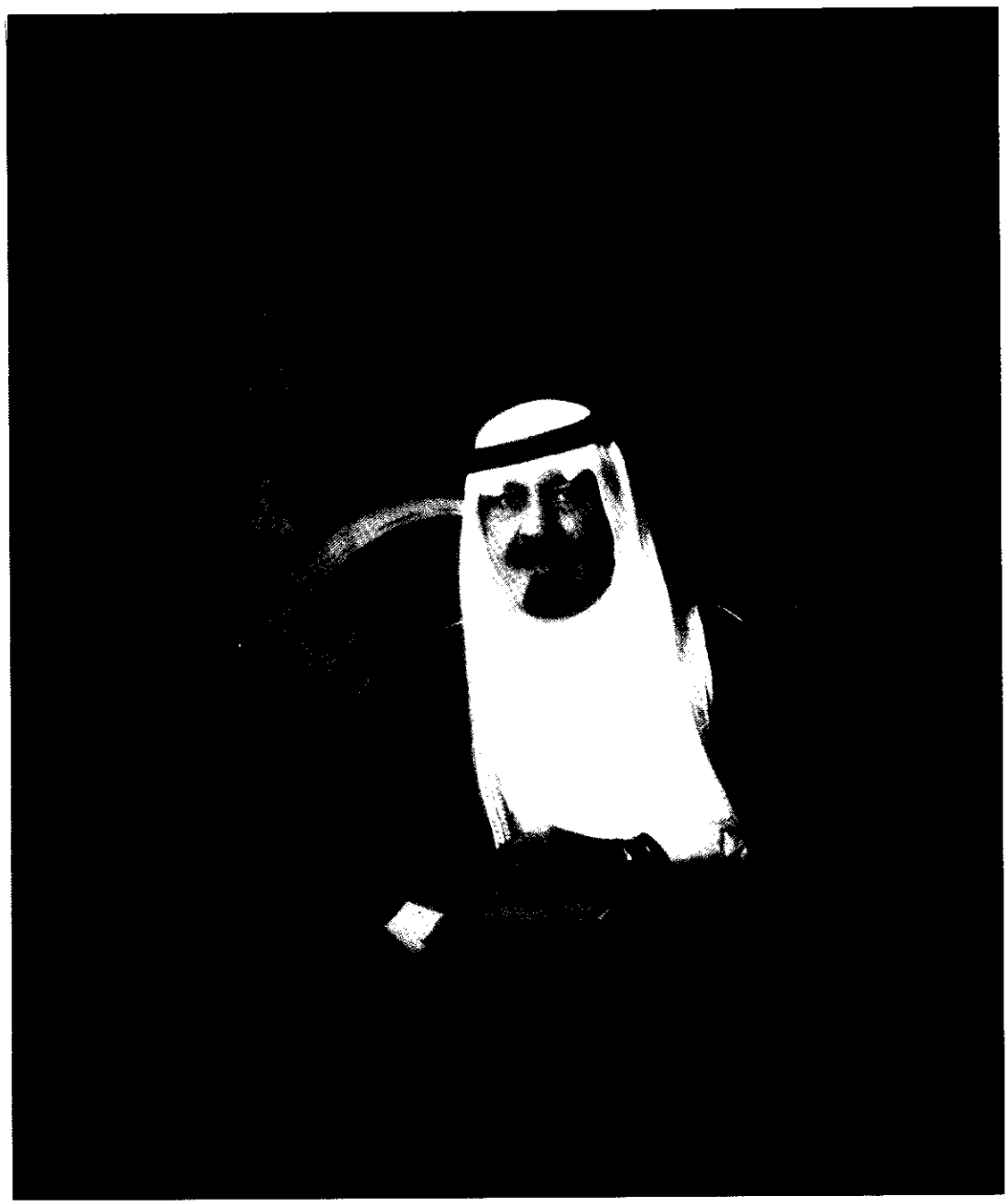
Ministry of Planning

Legal Deposit No. 0695/15

ISSN: 4844 — 1319

In the name of Allah
The Compassionate
The Merciful

Custodian Of The Two Holy Mosques King Fahd Bin Abdulaziz Al-Saud



His Royal Highness Prince Abdullah bin Abdulaziz
Crown Prince and Deputy Prime Minister
and Head of The National Guard

His Royal Highness Prince Sultan bin Abdulaziz
Second Deputy Prime Minister
and Minister of defense and Aviation
and Inspector General

IN THE NAME OF GOD
THE COMPASSIONATE THE MERCIFUL

KINGDOM OF SAUDI ARABIA
COUNCIL OF MINISTERS
GENERAL SECRETARIAT

Decree
(No. 29 dated 5/2/1416)

The Council Ministers,

Having perused documentary issued by the Chamber of Council of Ministers No. 3/1036/8 dated 8/12/1415 including the letter of His Excellency the Minister of Planning No. 1674/1 dated 15/7/1415, pertaining to the Kingdom of Saudi Arabia's Sixth Development Plan for the period (1415-14120 A.H.), drawn up in comformity with the general objectives and strategic bases approved by the Council of Ministers and Promulgated by Decree No. (142) dated 19/11/1413;

And, having perused the Sixth Development Plan's general objectives and strategic bases (1415-1420) issued by the Council of Ministers' Resolution No. (142) dated 19/11/1413;

And, having perused the attached Sixth Development Plan (1415-1420);

And, having perused the Consultative (Shura) Council Resolution No. (35/31/15) dated 9/11/1415;

And, having perused the recommendation of the Council of Ministers General Committee No. 22 dated 19/11/1416;

Decree the following

First: The approval of the attached Sixth Development Plan (1415-1420);

Second: The implementation of the Plan in comformity with the decrees promulgated by the Council of Ministers in respect of the Previous Plans;

Third: Giving due consideration to the preparation of annual implementation programs that ensure the achievement of the objectives included in the Council of Ministers' Resolution No. (142) dated 19/11/1413.

Fahd Bin Abdul Aziz
Chairman of the Council of Ministers

PREFACE

Throughout history, civilizations and nations have been built on the solid foundations of a strong will, a resolute determination and an ability to translate ambitions into tangible achievements. The history of the Kingdom of Saudi Arabia has followed this same course, reflecting an undying and dedicated commitment to build a strong and developed state that can stand amongst the nations of the world, proud of its citizens and its record of achievements.

In our present era of rapid technological change and its associated challenges, science constitutes the primary force — second only to faith in Allah the Almighty — for realizing mankind's potential and aspirations for progress and advancement. In recognition of this fact and the dynamic nature of history, the leaders of this country have always been keen to embrace the benefits of modern scientific advances and ideas, commensurate with the teachings of the true faith of Islam and the customs and traditions of our society. Thus, it was with this goal that the process of development planning was initiated.

Over the course of five development plans, the Kingdom of Saudi Arabia has pursued a thoroughly studied path of comprehensive development planning for a rapid material and qualitative transformation that would place the nation amongst the most advanced and prosperous in the world. With this objective in mind, the Kingdom has successfully undergone a rich and fruitful experience that has greatly surpassed many expectations.

With the start of this Sixth Five-Year Plan, the Kingdom of Saudi Arabia will have completed a quarter of a century of this development process and is ready to forge ahead with the next stage. These five-year phases of development do not represent sudden shifts or changes in direction, but are better seen as a continuing process guided by a comprehensive planning philosophy, constructed from the teachings of the true Islamic faith and with a time perspective that weaves together both an appreciation of the past and our aspirations for the future. Thus, the Kingdom's development planning philosophy is firmly based on principles for guiding its longer term development objectives, but which provide scope for each five-year plan to address the particular challenges of the period, both in terms of domestic socio-economic conditions and in dealings with the international community.

Over the past twenty-five years, the development plans have focused on the establishment of a solid infrastructural base, on the development of human resources and on the diversification of the economic base away from its dependence on a single natural resource, with the aim of forming a durable economic foundation with diversified resources. Future plans will stress the continuing commitment to these tasks by emphasizing, building upon and extending the developments already accomplished.

The Sixth Development Plan has been prepared against the background of international and local conditions that have been particularly notable. The most salient features on the international front have been the continued uncertainty over oil prices, the repercussions of world trade blocs and environmental issues; while the continued growth of population and the limits on government revenues have been the key domestic factors affecting expenditure on targeted development programs.

It is against this background that three major themes have been chosen for the Sixth Development Plan, namely, to develop and increase the employment opportunities of Saudi manpower, to raise the levels of economic efficiency in both government and private sectors, and to enhance the private sector's role in the national economy.

Towards these ends, the Plan features a set of policies and programs designed for the further development of human resources, through increasing the absorptive capacity of the universities and other education and training institutions. Specific targets have also been included to replace non-Saudi manpower with Saudi nationals in the government sector, while policies and incentives have been designed to encourage the private sector to provide more job opportunities for citizens.

The Plan also lays special emphasis on the need to place efficiency in the forefront of factors affecting the decisions of both the government and private sectors. Such decisions must increasingly be based on the proper analysis of real costs and benefits, so that their implementation will lead to the optimal utilization of available resources. A number of policies, institutional measures and incentives have been formulated for the achievement of this end.

In its endeavor to boost the private sector's role, the Sixth Development Plan envisages a number of options for organizational measures and policies designed to expand the private sector's range of activities and scope of operations. Such options include the transfer of ownership and management of some government-owned business activities to the private sector, measures to increase the scope for financing some government schemes through private capital, and a range of other possible and gradual privatization options that will suit prevailing conditions in the Kingdom.

Thus, the Sixth Plan is launched at a time of changing international and local conditions that pose a real challenge to the development process in the Kingdom. In this respect, it is the Saudi citizen who can be relied upon as the best asset to meet this challenge. Having succeeded in the past to overcome hardship in times of scarcity, and having reaped the fruits of prosperity and progress, the Saudi citizen is now better equipped to accommodate the impacts of international and domestic developments and to face the future with a determination and commitment to effective participation, so that the development process will continue to bear fruit in a more efficient and productive way.

Minister of Planning

Abdulwahab A. Attar

SAUDI FISCAL AND HIJRA YEAR DATES AND GREGORIAN EQUIVALENTS

Saudi Fiscal Year	Starts on ★	Gregorian Year	Hijra Year	Starts on ★
Fifth Development Plan Period 1410/11 to 1414/15				
1410/11	4 Jum. II 1410	1990	1410	2 Aug. 1989
1411/12	15 Jum. II 1411	1991	1411	23 July 1990
1412/13	25 Jum. II 1412	1992	1412	12 July 1991
1413/14	7 Rajab 1413	1993	1413	30 June 1992
1414/15	18 Rajab 1414	1994	1414	19 June 1993
Sixth Development Plan Period 1415/16 to 1419/20				
1415/16	29 Rajab 1415	1995	1415	10 June 1994
1416/17	10 Sha'ban 1416	1996	1416	30 May 1995
1417/18	21 Sha'ban 1417	1997	1417	19 May 1996
1418/19	2 Ramadhan 1418	1998	1418	8 May 1997
1419/20	13 Ramadhan 1419	1999	1419	27 April 1998

Hijra Months	Gregorian Months
Muharram	January
Safar	February
Rabi I	March
Rabi II	April
Jumad I	May
Jumad II	June
Rajab	July
Shaban	August
Ramadhan	September
Shawwal	October
Dhul-Qi'dah	November
Dhul-Hijjah	December

★ Dates are approximate for future years

GLOSSARY OF TERMS AND ABBREVIATIONS

billion	thousand million
CDS	Central Department of Statistics
CSB	Civil Service Bureau
DGMR	Directorate General for Mineral Resources
DMSA	Deputy Ministry of Social Affairs
DMSC	Deputy Ministry of Social Care
DMSS	Deputy Ministry of Social Security
GCC	Gulf Cooperation Council
GDP	Gross Domestic Product
GOSI	General Organization for Social Insurance
GOTEVT	General Organization for Technical Education and Vocational Training
GPGE	General Presidency for Girls Education
GPYW	General Presidency for Youth Welfare
HIDA	Al-Hasa Irrigation and Drainage Authority
IPA	Institute of Public Administration
KAAU	King Abdul Aziz University
KACST	King Abdul Aziz City for Science and Technology
KFU	King Faisal University
KFUPM	King Fahd University of Petroleum and Minerals
KSU	King Saud University
Kwh	kilowatt hour
MEPA	Meteorology and Environmental Protection Administration
MOAW	Ministry of Agriculture and Water
MOC	Ministry of Communications
MOE	Ministry of Education
MOH	Ministry of Health
MOI	Ministry of Information
MOLSA	Ministry of Labor and Social Affairs
MOMRA	Ministry of Municipal and Rural Affairs
MOP	Ministry of Planning

MOPTT	Ministry of Posts, Telegraphs and Telephones
MW	megawatt (1 million watts)
NCWCD	National Commission for Wildlife Conservation and Development
PCA	Presidency of Civil Aviation
PHC	Primary Health Center
PIF	Public Investment Fund
R&D	Research and development
REDF	Real Estate Development Fund
SAAB	Saudi Arabian Agricultural Bank
SABIC	Saudi Arabian Basic Industries Corporation
SAMA	Saudi Arabian Monetary Agency
SAPTCO	Saudi Arabian Public Transport Company
SASO	Saudi Arabian Standards Organization
SAUDIA	Saudi Arabian Airlines Corporation
Saudi ARAMCO	Saudi Arabian Oil Company
SCIs	Specialized Credit Institutions
SGRRO	Saudi Arabian Railroad Organization
SIDF	Saudi Industrial Development Fund
SPA	Saudi Ports Authority
SR	Saudi riyals
SWCC	Saline Water Conversion Corporation

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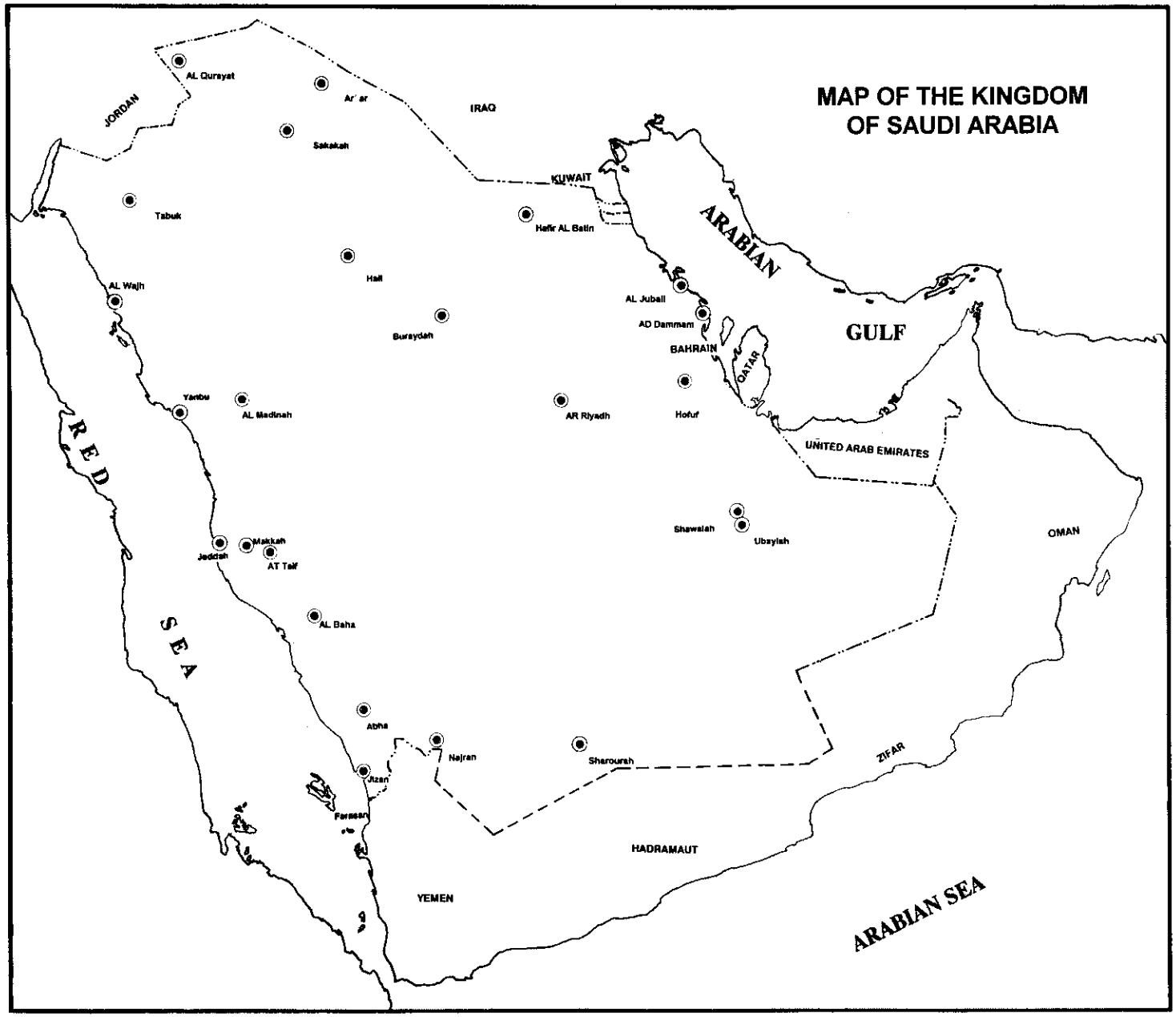
MAP OF THE KINGDOM
OF SAUDI ARABIA
JORDAN
IRAQ
KUWAIT
ARABIAN
GULF
BAHRAIN
QATAR
UNITED ARAB EMIRATES
OMAN
YEMEN
HADRAMAUT
ZIFAR
ARABIAN SEA
RED
SEA
AL Qurayat
Ar' ar
Sakakah
Tabuk
Hafir AL Batin
Hail
AL Wajh
AL Juball
AD Dammam
Buraydah
Yanbu
AL Madinah
AR Riyadh
Hofuf
Shawaiah
Ubaylah
Jeddah
Makkah
AT Taif
AL Baha
Abha
Najran
Sharourah
Jizan
Farasan