

CHAPTER ONE

PLANNING FOR DEVELOPMENT IN THE KINGDOM OF SAUDI ARABIA

1. PLANNING FOR DEVELOPMENT

The steadily rising accumulation of surpluses from oil sales since the early 1970s (1390s H) following the sharp price and production increases which continued for quite a time, enabled the Government of the Kingdom of Saudi Arabia to make a prudent decision to utilize these surpluses for the development of human and natural resources through a series of five-year development plans. Over the past thirty years, six development plans have been implemented and the Seventh Development Plan will be implemented during the period 1420-1425H (2000-2004).

With respect to planning methodology and approach, a comprehensive multi-dimensional (economic, social and institutional) planning methodology has been selected comprising both directive and indicative planning approaches. However, the relative importance of indicative planning has increased in line with the steady increase of the private sector's contribution to socio-economic development, thereby accelerating the growth of various sectors of the economy which, at the start of the development planning process, had been suffering from the domination of the oil sector as a single source of income, an undiversified production base, inadequate institutional and administrative structures, a weak infrastructure and a shortage of qualified Saudi human resources. The situation now is quite different. The economic base and sources of income have witnessed a marked diversification. Infrastructural projects, including those of public education and health services, have been completed. Human resources have been developed sufficiently for the majority of government jobs to be Saudiized and for higher rates of Saudiization in the private sector. The Saudi economy is now prepared to deal in a flexible and efficient manner with local, regional and international developments, particularly the WTO which the Kingdom will join shortly.

The following sections provide a brief overview of the last six plans and their directions, priorities, achievements, methods of preparation and the changes which took place in their objectives and approaches.

1.1 DIRECTIONS OF PLANNING

The long-term strategic development objectives were first formulated during the preparation of the First Development Plan in 1390/1391 (1970). Over the past three decades, development planning in the Kingdom has acquired its unique characteristics whereby each plan has been tailored to adapt to prevailing conditions and to deal flexibly and efficiently with developments of the coming stage, thereby paving the way for the next plan. This concept has become the basis for defining the pillars and themes of each individual plan and for ensuring the continuity of development efforts. Moreover, each plan has adopted objectives, programs and policies that guarantee substantial development achievements in each stage. Thus, each individual plan encompassed the basic dimensions of development which are: (1) the *social* dimension, with emphasis on safeguarding Islamic values, developing manpower and improving the social welfare of citizens through upgrading the health, education and cultural aspects of their lives; (2) the *economic*

dimension, focusing on supporting the economic base, diversifying sources of income, realizing balanced growth of the various economic sectors, seeking optimal utilization of economic resources and realizing high productivity of human and economic resources; (3) the *institutional* dimension, directed at raising the efficiency of government services by amending inadequate administrative regulations and rules, restructuring of some government agencies and establishing new ones in order to enhance government performance and upgrade productivity of government agencies entrusted with serving the economy and society.

Successive development plans have placed on-going emphasis on these dimensions as a basic framework for development planning efforts. Thus, over the course of successive development plans, the Kingdom has realized balanced urban, physical, material and social development as well as improved standards of living and quality of life of citizens. This made the development processes acquire their uniqueness in terms of depth and comprehensiveness as well as the volume of achievements made over a relatively short period, while avoiding the adverse consequences of development experienced by most other developing countries.

Since the early stages of development planning, the ultimate goal of development in the successive plans has been the development of Saudi citizens' capabilities, the realization of their aspirations, meeting their needs and improving their standard of living, while expanding the development process to cover all economic and social sectors throughout the Kingdom. In implementing its development strategy, the Kingdom has depended on Islamic values and principles, the free enterprise system and an open economy policy.

The major strategic objectives of the previous development plans are summarized as follows:

- To safeguard Islamic values and confirm Allah's Sharia.
- To defend the Faith and the Nation; to uphold security and social stability; and to deepen the values of national loyalty and belonging.
- To improve the standard of living and the quality of life.
- To develop human resources, increase productivity and replace non-Saudi manpower by qualified Saudis.
- To realize balanced growth throughout all regions of the Kingdom.
- To diversify the economic base and to reduce dependence on the production and export of crude oil through development of other natural resources and promotion of other economic activities.
- To provide a favorable environment for the activities of the private sector, and to encourage it to invest and to play a leading role in the development process.
- To enhance the Kingdom's position within the global economy, promote economic integration among the Gulf Cooperation Council (GCC) countries and strengthen economic cooperation with other Arab and Islamic countries.

Within the context of these objectives, each of the past six development plans built sequentially on the accomplishments of the earlier plans and laid the foundations for further achievements in the subsequent stage. The First Development Plan placed particular emphasis on laying the foundation for the Kingdom's rapid transformation into a more advanced nation by focusing on the provision of infrastructure and basic government services such as water supply and electricity generation, along with the expansion of social programs and the development of Saudi human resources.

The Second Development Plan was prepared under more favorable economic conditions as the Kingdom's oil revenues increased substantially due to the increase of crude oil prices in international markets. No financial constraints, similar to those that had accompanied the preparation of the First Plan, existed, thus enabling the Second Plan to focus on four major directions: maximum possible expansion of transport, electricity, water and housing infrastructure; conservation of hydrocarbon resources; encouragement of energy-intensive industries; and export of their high value added products. This direction was supported by the establishment of the Royal Commission for Jubail and Yanbu with the aim of providing infrastructure necessary for hydrocarbon industries. On the other hand, the Second Development Plan placed particular emphasis on the development of financial and administrative policies and regulations in conformity with development requirements and the progress of the national economy, as well as facilitating cooperation between the public and private sectors in order to realize higher growth rates. To this end, the plan proposed a set of measures to develop administrative staff in various domains. The fourth direction concentrated on supporting and encouraging the private sector through the establishment of specialized credit funds and a series of policies and measures supporting private sector activity.

The preparation of the Third Development Plan coincided with a substantial expansion in the national economy and increased oil revenues that made the Kingdom a great financial power through its economic role as the largest exporter of oil in the world. These conditions accompanying the preparation of the Third Plan required adjustments in the planning directions of the Kingdom towards higher growth rates in selected areas and making more efficient use of non-Saudi labor. Thus, the Third Development Plan focused on achieving structural changes in the national economy through defining oil and gas production levels to maintain national resources, continuing to build hydrocarbon industries and completing the infrastructural projects. The plan also aimed at supporting growth factors and development potential in all regions of the Kingdom along with enhancing economic and management efficiency through improving administrative organization and government procedures.

The Fourth Development Plan constituted a new model in terms of planning methodology and focus. Methodologically, the plan shifted from a central planning and projects-based approach towards the program planning method that would ensure greater flexibility for government agencies. The plan focused on the operation and maintenance of projects, diversification of the production base and restructuring the national economy to enable the private sector play a substantial role in the economic development process. The Fourth

Plan also concentrated on the need to adapt to changing world oil market conditions and certain adverse impacts on the internal and external balance of the Saudi economy through the adoption of strict macroeconomic management policies.

During the Fifth Development Plan, the private sector was encouraged to play a greater developmental role and to increase its participation in some areas where the government traditionally provided services, such as some public utilities and the transport sector. The Fifth Plan also adopted important development initiatives such as improving the technical base in many economic sectors through the use of modern technologies and their adaptation to the requirements of the Kingdom. However, implementation of the Fifth Plan was adversely affected – to some extent – by the Gulf War (1991) which necessitated some adjustments in the priorities of government expenditures, which in turn, affected private sector investment. Nevertheless, the Fifth Plan realized tangible progress in achieving its objectives.

The Sixth Development Plan was prepared under extraordinary domestic and global conditions that prevailed in the aftermath of the Gulf War in addition to the adverse developments that took place in the world oil market in recent years. However, the Sixth Plan endeavored to realize its objectives in particular through boosting the private sector's role in diversifying the economic base and reducing dependence on oil revenues. Consequently, the Sixth Development Plan stressed the need to realize the following three objectives:

- Development of human resources through increasing the absorptive capacity of universities, educational institutions, vocational training and technical colleges, with due emphasis on the quality and development of curricula at all education and training levels in order to meet the requirements of development and the needs of the private sector.
- Realization of economic efficiency in both public and private sectors as a prerequisite for the success of policies to diversify the economic base and rationalize government expenditure.
- Enhancing the role of the private sector and encouraging it to invest, and thereby increase its contribution to the development process, through policies and regulatory initiatives, as well as starting the implementation of privatization programs.

1.2 PRIORITIES OF EXPENDITURE ON DEVELOPMENT

Table (1.1) and Figure (1.1) show the attention given by the successive development plans to expenditures of development agencies. The table and the figure also show the changing priorities and areas of focus over the first five development plans, 1390/91 (1970) to 1414/1415 (1994).

- Average expenditure on infrastructure development during the First and Second Development Plans reached 41.4 and 49.3 percent respectively of the total actual expenditure of the development agencies, exceeding average expenditure on the development of economic, human, social and health resources, thus establishing an integrated base of infrastructure needed to accelerate socio-economic development.

Table 1.1
Actual Expenditures by Development Agencies
during the First Five Development Plans
1390/91- 1414/15 (1970-1994)

	First Plan		Second Plan		Third Plan		Fourth Plan		Fifth Plan	
	SR Billion	(%)	SR Billion	(%)	SR Billion	(%)	SR Billion	(%)	SR Billion	(%)
Economic Resources Development	9.5	27.7	97.3	28.0	192.2	30.7	71.2	20.4	34.1	10.0
Human Resources Development	7.0	20.6	51.0	14.7	115.0	18.4	115.1	33.0	164.6	48.0
Social & Health Development	3.5	10.3	27.6	8.0	61.2	09.8	61.9	17.7	68.0	20.0
Infrastructure Development	14.1	41.4	171.3	49.3	256.8	41.1	100.7	28.9	74.2	22.0
Total	34.1	100	347.2	100	625.2	100	348.9	100	340.9	100

- During the Third Development Plan, 41.1 percent of total actual expenditure of development agencies was directed towards the completion of infrastructure related to the producing sectors, while expenditure on economic resources development reached 30.7 percent.
- During the Fourth and Fifth Development Plans, emphasis was placed on enhancing the capabilities of the Saudi labor force and improving standards of education, health and social services. Thus, expenditure on human resources development accounted for 33 percent and 48 percent, while social and health development expenditure reached 17.7 percent and 20 percent respectively of total actual expenditure during both plans.
- Expenditure on infrastructure continued over the five plans in response to the growth in demand resulting from population growth and socio-economic development. Thus, expenditure on the completion of infrastructure during the Fourth and Fifth Plans averaged 25.5 percent of total actual expenditure.
- There has been a steady increase in the share of expenditure on human resources development over the last three plans, which rose from 18.4 percent of total actual expenditure on development agencies during the Third Plan to 33 percent during the Fourth Plan and 48 percent in the Fifth Plan, thereby reflecting the increasing importance of human resources development.

Figure 1.1: Expenditure by Development Agencies in Previous Plans

1.3 SOCIO-ECONOMIC ACHIEVEMENTS

1.3.1 Economic Growth and Social Stability

In the course of its planning for comprehensive development throughout six 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. The provision of opportunities for all members of Saudi society to participate in the development process has been a permanent goal of successive Development Plans so as to avoid any adverse social impacts which may result from rapid economic growth and modernization seen in many developing countries. Despite the adverse impacts of volatile global oil markets, the Kingdom has, overall, been highly successful in realizing these objectives, as highlighted by the following achievements:

- * Real GDP growth averaged 4.34 percent per year between 1389/90 (1969) and 1419/20 (1999). During the same period, the annual rate of growth in the non-oil sectors averaged 5.22 percent.
- * The period 1390/1391-1419/1420 (1970-1999) has been characterized by a gradual decline in inflation (measured by the consumer price index), whereas average inflation for the period 1404/1405 – 1415/1416 (1984-1995), did not exceed 2 percent.
- * Average annual inflation during the Sixth Plan period 1415/1416-1419/20 (1995-1999) steadily declined and did not exceed 1.2 percent, mainly due to effective demand management by the government and the rationalization of public expenditure. Undoubtedly, low inflation contributes to monetary stability and maintaining the purchasing power of the national currency, which is positively reflected in the standard of living and welfare of citizens.
- * Total Saudi employment has risen from about 1.2 million in 1389/90 (1969) to almost 3.2 million in 1419/20 (1999), or at an average annual growth rate of 3.3 percent.
- * Per capita income or GDP share of the Saudi citizen has increased from SR 3,750 in 1389/90 (1969) to SR 24,150 in 1419/20 (1999).

1.3.2 Raising the Standard of Living and Improving the Quality of Life

Over the past thirty years, the successive five-year development plans have focussed on raising the standard of living and improving the quality of life for the Saudi citizens. The following indicators reflect the most significant accomplishments made in some relevant domains:

- * Life expectancy at birth in 1418/19 (1998) averaged 71.4 years compared to 54 years in 1389/90 (1969), reflecting the dramatic improvement in the standard of living and easy access to high quality health services.
- * Private consumption of goods and services in constant prices of 1414/15 (1994) has risen at an average annual rate of 7.68 percent during the period 1389/90 (1969)-1419/20 (1999).

- * The number of physicians in the Kingdom has risen from 1,172 in 1389/90 (1969) to 30,281 in 1418/19 (1998), while the number of hospital beds has grown from 9,039 to 45,032 over the same period.
- * Soft loans provided by the Real Estate Development Fund (REDF), amounting to SR 124 billion since its establishment in 1394 (1974) up to 1419/1420 (1999), have made high quality housing affordable to about 574,800 Saudi families.
- * Payments from the regular social security system amounted to more than SR 2.5 billion in 1418/19 (1998) compared to SR 39.4 million in 1389/90 (1969), while payments to people in need of temporary assistance reached SR 450 million in the same year. These social systems, together with government food production subsidies, have provided protection for affected groups during periods of rapid economic transition.

1.3.3 Development of Human Resources

International experience in the field of socio-economic development clearly demonstrates that the ultimate source of a nation's wealth increasingly lies in its human resources and the productive skills of its labor force, or in its "human capital". Recognizing this trend from the onset of development planning, the Kingdom's successive plans have given greater attention to human resources development through continuous support of primary, intermediate, secondary and higher education, as well as of technical education, vocational training, and pre-service and in-service 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 reflect the major achievements in the field of human resources development:

- * Eight universities, 35 girls' colleges, 12 technological colleges, 68 technical education institutes and vocational training centers, 3,082 secondary schools, 5,896 intermediate schools and 12,196 primary schools have been established during the last thirty years.
- * Graduates (male & female) of secondary level increased from 3,745 in 1389/90 (1969) to more than 165,000 in 1419/20 (1999).
- * Graduates of technical education and vocational training increased from 417 in 1389/90 (1969) to 13,832 in 1419/20 (1999).
- * Enrollment in all educational institutions increased from around 600,000 in 1389/90 (1969) to about 4,748,000 students (male & female) in 1419/20 (1999), or at an average annual growth rate of 7 percent.

1.3.4 Diversifying the Economic Base

Successive development plans paid persistent attention to diversifying the economic base and reducing dependence on the production and export of crude oil, which is a depletable resource and is subject to fluctuations of the world markets. Significant achievements have been made in the area of economic diversification, including – inter alia – the following:

- * Non-oil GDP increased more than fivefold during the period 1389/90-1419/20 (1969-1999). The percentage contribution of non-oil sectors to GDP increased from 52 percent to 68.4 percent, during the same period, at constant prices of 1414/15 (1994).
- * The value of non-oil merchandise exports have risen from almost nothing in 1389/90 (1969) to about SR 397 billion in 1419/20 (1999) representing 18.6 percent of total merchandise exports, at current prices.
- * The contribution of non-oil revenues to total government revenues increased from 11.5 percent in 1390/91 (1970) to over 24 percent in 1416/17 (1996) and to 34.3 percent in 1419/20 (1999).
- * The value added of manufacturing industries grew at an average annual rate of 7.4 percent over the period 1390/91-1419/20 (1970-1999) and the contribution of this sector to GDP increased from 2.1 percent to 5 percent during the same period.
- * The value of agricultural production increased from SR 4.4 billion in 1390/91 (1970) to SR 35.8 billion in 1419/20 (1999).
- * Agricultural production increased about threefold over the period 1404/1405-1418/1419 (1984-1998), with a trend towards the production of high value added products where the Kingdom enjoys comparative advantages. Over the same period, agricultural subsidies decreased by more than 75 percent. These developments illustrate the radical structural change made in the agricultural sector during these years, thus enabling the Kingdom to achieve the objectives of economic growth and diversification of the economic base while rationalizing government expenditures at the same time.
- * The number of factories operating in the Kingdom increased from 199 with total investments of SR 2.8 billion in 1390/91 (1970) to 3,123 factories with total investments of SR 230 billion in 1419/20 (1999).

1.3.5 Strengthening the Role of the Private Sector

From the outset of development planning in the Kingdom, the adoption of free market principles ensured that the private sector was intended to be a main focus of economic activity. Although the increases in oil revenues in the first three plan periods necessarily accorded to the government the leading role in guiding and stimulating economic development, the investment and 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 assets.

The government has used a wide range of financial and regulatory measures to encourage the private sector to engage in joint ventures with foreign firms and to invest in new capacities using the latest available capital-intensive technology, mainly in agriculture and industry. As a result, the number of private sector companies has risen rapidly, along with the volume of private investments in fixed assets and the range of private manufacturing

activity. Moreover, the private sector's dependence on government expenditure has decreased significantly. The growing maturity of the private sector and its resilience to declining government expenditure are evident in the following indicators:

- * Private sector production increased by an average annual rate of 5.6 percent over the period 1389/90 - 1419/20 (1969-1999), surpassing the 4.3 percent average annual growth rate of GDP during the same period.
- * The private sector's contribution to GDP and to non-oil GDP amounted to 50.6 percent and 74 percent respectively in 1419/20 (1999), at constant prices of 1414/15 (1994).
- * Annual private investment rose from SR 1 billion in 1390/91 (1970) to about SR 78.6 billion in 1419/20 (1999), thus bringing the contribution of the private sector to fixed capital formation to 67.3 percent at current prices.

1.3.6 Development and Maintenance of Infrastructure

The present infrastructural network in the Kingdom represents one of the most prominent achievements of development planning over the last thirty years. This network is comparable, in terms of quality and capacity, with international standards and provides a solid foundation for future economic and social development in the Kingdom. The following indicators illustrate the quantitative changes in this regard:

- * The paved road network grew from 8,000 kilometers in 1389/90 (1969) to about 45,400 kilometers in 1419/20 (1999). A high quality road network now connects all cities and most of the villages. This extensive network provides a strong base for the balanced growth of economic activity in all regions of the Kingdom;
- * The Kingdom now has 25 modern airports, including three international airports capable of accommodating the most advanced types of aircraft. This high-quality air transport network ensures swift connections between all main cities;
- * Electricity generating capacity increased from 344 megawatts in 1389/90 (1969) to 20,266 megawatts in 1418/19 (1998) at an average annual growth rate of 15.7 percent;
- * Desalination plants' capacity increased from 19,400 cubic meters per day in 1389/90 (1969) to about 2.2 million cubic meters per day in 1419/20 (1999), at an average annual growth rate of over 16.7 percent;

The large-scale construction of infrastructure carried out through the six development plans has supported the rapid economic and social development of the Kingdom. However, the high demand resulting from a rapidly growing population has increased the need to expand the Kingdom's physical infrastructure.

1.4 PLAN MANAGEMENT AND IMPLEMENTATION

1.4.1 The Planning System

The Kingdom adopts an integrated planning methodology, which comprises both directive and indicative approaches, in realizing the aspirations of its development process. The five-year plans which provide guidelines for the processes of plan implementation, represent the general framework for economic and social development. The planning system in the Kingdom undertakes four major functions:

- * Preparation of a long-term vision for the direction of the development process.
- * Preparation of a regulatory framework for coordination of development efforts of both public and private sectors.
- * Allocation of government resources according to the priorities of the socioeconomic development plan.
- * Support for macroeconomic management through periodic reviews of the development plans' policies and programs and assessment of their impacts and outputs.

The five-year plans are prepared according to the General Objectives and Strategic Bases approved by the Consultative (Shoura) Council and the Council of Ministers. The major elements of planning comprise the following:

- **Plan Document:** It includes the quantitative and qualitative objectives of the plan and the executive policies needed to achieve them, as well as the programs and key issues at the national and sectoral levels of the economy for a span of five years. It represents a link in the series of the long-term vision of the development process.
- **Operation Plan:** It is a detailed plan for individual government agencies, which comprises the objectives, policies and targets, analyses of the needs, key issues and programs and identifies the financial and human resource requirements.
- **Regional Reports:** They describe the socioeconomic conditions, the strategic alternatives and the future development needs of the regions.
- **Follow-up Reports:** These reports are prepared by the Ministry on a regular basis, and they represent an important aspect of planning and development management. Through such reports, performance is monitored, assessed and reviewed.

Although the Ministry of Planning plays the key role in the process of preparing and coordinating all sectoral plans at the national level, other government agencies and the private sector contribute effectively to various stages of the plan preparation.

1.4.2 Planning Methodology

The planning methodology includes the following main elements:

- * Planning approaches which comprise appropriate methods, policies and mechanisms required for achievement of the plan objectives.
- * The planning process which takes place with the participation and coordination of other government agencies with the aim of reaching a unified concept about development policies and the priorities of development programs in various sectors.
- * Technical tools of planning including information bases and economic models as well as data provided by field surveys.

The successive development plans witnessed significant developments regarding planning approaches. The first evolution is reflected in the shift in orientation from projects to sectoral programs with the aim of concentrating on the main outcomes and providing sufficient financial flexibility for government development agencies.

The second evolution concentrated on the economic policies, measures and instruments that ensure realization of the comprehensive concept (investment, production and organization) of economic efficiency.

The third evolution expanded the planning approach to include indicative planning for the private sector in addition to directive planning for the public sector. In the indicative planning approach, appropriate policies and alternatives are defined to prepare a favorable investment climate for the private sector. This evolution in the planning approach reflects the growing attention given to the role of the private sector in boosting economic development.

The fourth evolution in the planning approach has been characterized by the increased attention given to the spatial dimension of the development plans through the use of analytical and statistical tools for realizing balanced development among the various regions of the Kingdom. This shift has been in harmony with the progress of the national economy with the issue of development in the Kingdom's various regions receiving greater attention in the planning process.

The following three elements comprise the planning methodology in the Seventh Plan:

- * **Strategic Planning:** Strategic planning provides a guide to the expected future growth paths. However, such planning requires provision of a favorable environment for realizing sustainable development aspirations in the long run. In this context, the third chapter of the Seventh Plan document provides a long-term perspective for the Saudi economy comprising a strategic vision consistent with long-term economic and financial policies as a reference on which sectoral investment decisions can be based.
- * **Indicative Planning:** Indicative planning aims mainly at encouraging private sector participation in achieving the plan objectives without prejudicing the private

investment objective of profit maximization. Thus, indicative planning guides economic policies (fiscal, monetary, trade and labor market policies) towards the creation of a favorable climate for private investment, while reviewing relevant rules and regulations with a view to streamlining procedures and enabling the private sector to operate in a more free and flexible manner.

This planning approach has become more important because of various developments and changes at domestic, regional and international levels, particularly the trends of globalization and privatization. Ensuring an appropriate economic environment and an adequate institutional framework for private sector activities is one of the most important directions of the Seventh Plan. Thus, the Plan encompasses an integrated set of measures that continue to enable the private sector to perform many social and economic tasks previously undertaken by government, provided that such measures should result in actual benefits in terms of cost reductions, improved performance and employment of Saudi citizens.

- * **Directive Planning:** Directive planning uses the operational plans of government agencies as methodological tools for implementing their programs and ensuring their participation in realizing the objectives and strategic bases of the development plan, by applying economic and social policies designed to achieve the planned growth targets at macro and sectoral levels and the rational utilization of economic resources.

Directive planning played an important role in accelerating the economic and social development process during the first three plans. However, the subsequent plans adopted both directive and indicative planning approaches due to the increasing role of the private sector and its participation as a partner in the development process.

- * **Technical Instruments of Planning:** An integrated system of econometric models has been developed comprising four correlated models. These models are:
 - **"Century Model"**, for long-term perspectives relevant for analyzing trends of economic resources as well as long-term forecasts of demand for non-Saudi labor under various growth rate assumptions.
 - **"Selection Model"**, for medium-term forecasts that help to identify priorities of development planning and analysis of implications of various policy options.
 - **"Implementation Model"**, for short-term forecasts related to follow-up of the plan implementation and identifying sectoral trends.
 - **"Oil Model"**, for projection of oil revenues and the preparation of alternative scenarios for world oil markets-related forecasts.

The "Selection Model" and the "Oil Model" have been used in the Seventh Plan preparation. The "Century Model" will be used in the preparation of a long-term perspective for the development of the Saudi economy as well as the long-term plan. The "Implementation Model" will be used for follow-up and implementation of this plan.

1.4.3 Coordination between the Five-Year Plan and Annual State Budgets

A close linkage between the plan and the preparation of the annual state budgets is crucial to the success of the plan implementation process. The Seventh Plan emphasizes the significance of linking budget chapter allocations with the objectives and priorities stated in the plan document and the programs and projects included in the operational plans. The plan also affirms the importance of commitment to the plan objectives and strategic bases in monitoring the programs and projects.

1.4.4 Management of Plan Implementation

The management of plan implementation is an important part of the planning system and directly affects the realization of the plan objectives. In light of rapid developments and the inevitability of integrating within the global economic system with its various dimensions and variables, the coming development stage requires further emphasis on evaluating the effectiveness of policies in realizing the socio-economic objectives within the priorities specified in the plan, along with placing particular emphasis on evaluating the quality of public services and performance efficiency in the implementation of programs. To this end, work will continue during the Seventh Plan period on formulating a series of criteria for measuring actual performance at both macro and sectoral levels. The most important measures for managing the plan implementation are as follows:

1.4.4.1 Follow-up and Evaluation

The Ministry of Planning monitors the plan implementation process annually in collaboration with agencies concerned and according to certain regulatory resolutions and rules. The completion of this follow-up process integrates both macroeconomic and sectoral levels through specific data collection and processing, and by reproducing these data in the form of information and indicators to achieve the following:

- * Ensuring the implementation process is in accordance with the plan objectives.
- * Addressing bottlenecks and other deviations from plan objectives, or difficulties that emerge during the implementation process, defining the nature of such difficulties, identifying their causes and developing measures to overcome these difficulties.
- * Carrying out detailed study and diagnosis of socio-economic conditions to derive the most significant information and data to be used as inputs for the next plan.

1.4.4.2 Coordination with the Private Sector

In light of the trend in government support to the private sector through encouraging its entry into new economic activities and the removal of obstacles that impede its development, the Seventh Plan reaffirms the need for greater coordination between the government and private sector through: improved quality and dissemination of reliable

information and analyses about national economic performance, the organization of meetings, conferences and symposia, and the preparation of studies about investment opportunities by the universities, research centers, other government agencies or the Council of Saudi Chambers of Commerce and Industry.

The plan anticipates an increasingly important role for the private sector in the development process in the future, as free market policies and the provision of various incentives and facilities for the private sector make the Saudi economy more attractive for domestic and foreign investments.

1.4.4.3 Databases and Information Systems

The Ministry of Planning is developing databases and information systems in order to enhance management and follow up of plan activities. It is also improving the quality and scope of socioeconomic data necessary for effective planning, in cooperation with related agencies. Similarly, the development agencies are strengthening their own data bases and management information systems to meet the needs of plan implementation and follow up, as well as providing the Ministry of Planning with data and information needed for the monitoring and evaluation processes.

CHAPTER TWO

SOCIO-ECONOMIC DEVELOPMENTS
DURING THE SIXTH PLAN

2. SOCIO-ECONOMIC DEVELOPMENTS DURING THE SIXTH PLAN

2.1 OVERVIEW

The Sixth Development Plan was implemented in an environment of rapidly changing conditions in the international economy, which presented great challenges for the national economy and affected some key Plan targets. After three consecutive years of accelerating economic growth in 1414/15-1417/18 (1994-1997), the decline in global oil prices by about 38 percent during the fourth year of the plan 1418/19 (1998) affected both the government budget and the balance of payments. Thus, the Government implemented measures during 1419/20 (1999) to rationalize expenditures and raise non-oil revenues and other structural reforms to mitigate the impact of these developments. These measures, together with steps aimed at improving oil prices on the international markets, significantly mitigated the impacts on the economy of the weakening oil markets.

Despite these unfavorable developments during the fourth and fifth years of the Plan, the performance of the Kingdom's economy during the Sixth Development Plan demonstrates the coming to maturity of a private sector which has become more independent of Government expenditures and shows resilience against adverse international economic and financial conditions. Significant progress was also made on Saudiization and in creating job opportunities for the growing Saudi labor force. The rapid advances of education, training, health and social services sectors continued, as funding for priority sectors was provided, despite the strained revenue situation towards the end of the Plan.

The high degree of stability in consumer prices and the value of the Saudi Riyal, which has characterized the Kingdom over the past two decades, continued during the Sixth Development Plan, as the inflation rate remained below 2.1 percent per annum on average, which was well below international inflation rates over this period.

2.2 OBJECTIVES OF THE SIXTH DEVELOPMENT PLAN

The Council of Ministers' resolution No. 142 dated 19/11/1413 identified the following 13 objectives for the Sixth Plan:

- * To safeguard Islamic values by duly observing, disseminating and confirming Allah's Sharia (God's Divine Law).
- * To defend the Faith and the Nation and to uphold the security and social stability of the Kingdom.
- * 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.
- * 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 Saudis.
- * To achieve balanced growth throughout all regions of the Kingdom.

- * To continue encouraging private sector participation in socio-economic development.
- * To reduce dependence on the production and export of crude oil as the main source of national income.
- * To continue restructuring the Kingdom's economy through continuing diversification of the economic base.
- * To develop mineral resources and to encourage discovery and utilization thereof.
- * To concentrate on qualitative development of already existing utilities and facilities by improving their level of performance.
- * To complete infrastructure projects necessary to achieve overall development.
- * To promote scientific activity and to raise cultural and information standards to keep pace with the Kingdom's development.
- * To achieve economic and social integration among the Gulf Cooperation Council (GCC) countries, and to support economic cooperation with Arab, Islamic and other friendly nations.

2.3 PRIORITIES AND CENTRAL THEMES OF THE SIXTH PLAN

The Sixth Development Plan identified the following priorities:

- * To continue supporting and enhancing the on-going development of the Kingdom's own defense capabilities, and to deepen citizens' loyalty and sense of belonging.
- * To rationalize government expenditure and make the national economy more dependent on private sector activities.
- * To adopt the necessary measures for addressing the constraints which impede the development and employment of Saudi human resources.
- * To continue the expansion and maintenance of infrastructural facilities in line with the increased demand resulting from growth of population and settlements.

Guided by these priorities, emphasis was put on three central themes in the Sixth Plan. These are:

Development and Utilization of Saudi Human Resources

The Plan concentrated on policies and programs aimed at training Saudi human resources, preparing them for work, providing them with appropriate job opportunities and raising the level of their productivity. The Plan included targets for replacement of non-Saudis with Saudis in both public and private sectors, as well as policies for encouraging the private sector to provide more job opportunities for Saudis.

Economic Efficiency

The Sixth Development Plan concentrated on enhancing economic efficiency in both the public and private sectors, particularly investment, production and organization efficiency, as a prerequisite for the success of privatization programs and policies to diversify the economic base and rationalize government expenditure.

Strengthening the Private Sector's Role in the National Economy

The Plan included regulatory measures and policies to expand private sector activities, including increased utilization of private capital in financing some government activities and studying the feasibility of gradually transferring ownership and management of some business-oriented government activities to the private sector according to particular privatization models that would be suitable for conditions of the Kingdom and that would bring real benefits to the national economy.

2.4 PERFORMANCE OF THE NATIONAL ECONOMY

To monitor national economic progress during the Sixth Development Plan quantitative and qualitative indicators have been developed which match the plan's major themes and the type of activities undertaken by related agencies and sectors.

The following section reviews national economic performance during the Sixth Plan according to the themes and priorities identified above and the most significant developments in the state budget, the financial sector, inflation, foreign trade and the balance of payments.

2.4.1 Development and Utilization of Human Resources

Civilian employment grew during the Sixth Development Plan despite the slow-down in economic activity during the last two years of the Plan. Total civilian employment increased at an average annual rate of about 2 percent, while Saudi employment increased by about 628,100, or an average annual rate of 4.5 percent, from 2.54 million workers at the beginning of the Plan to 3.17 million by the end of the Plan (Table 2.1). The increase in the percentage of Saudis in total employment indicates significant progress in meeting the targets of the Saudiization program laid out in the Sixth Development Plan.

The services sectors, particularly personal and community services (which includes household maids and drivers) and government and commercial services, contributed about two thirds of the total employment increase during the Sixth Development Plan, growing at an average annual rate of 2.3 percent. Employment in the producing sectors increased by an annual rate of 1.5 percent. Employment in the government sector during the Sixth Development Plan grew at an average annual rate of 1.3 percent.

Table 2.1
Civilian Employment during the Sixth Development Plan
(Thousand)

	1414/15 (1994)	1419/20 (1999)	Cumulative change	Average annual growth rate %
1. Producing Sectors:	2107.0	2273.3	166.3	1.5
- Agriculture	500.9	557.9	57.0	2.2
- Manufacturing	530.9	589.0	58.1	2.1
- Other producing sectors	1075.2	1126.4	51.2	0.9
2. Services Sectors:	4289.8	4804.1	514.3	2.3
- Private	3429.5	3887.9	458.4	2.5
- Government	860.3	916.2	55.9	1.3
Total Non-oil sectors	6396.8	7077.4	680.6	2.0
3. Crude oil and gas	93.1	98.9	5.8	1.2
Total	6489.9	7176.3	686.4	2.0
Of which:				
- Saudi	2544.8	3172.9	628.1	4.5
- Non-Saudi	3945.1	4003.4	58.3	0.3

2.4.2 Economic Efficiency

During the Sixth Development Plan, economic efficiency and performance standards improved in some producing and services sectors as described below:

Producing Sectors

- Some private sector establishments improved their economic efficiency, while the Saudi Arabian Basic Industries Company (SABIC) achieved almost 100 percent capacity utilization in its production plants in 1418/19 (1998). Revenues per worker also increased to about SR 1.7 million in the third year of the Plan compared to SR. 1.5 million at the beginning of the Plan, or an increase of 13.3 percent.
- Productivity in the electricity sector continued to progress favorably with tangible improvement experienced by all indicators. Subscribers per worker increased from 104 at the beginning of the Plan to 117 in 1418/19 (1998), at an average annual growth rate of 3 percent. The volume of electricity sales per worker also increased from 3043 MWH to 3477 MWH over this period, at an average annual growth rate of 3.4 percent. Moreover, the peak load per worker increased during the same period, from 643.8 KW to 746.2 KW, at an average annual growth rate of 3.8 percent. This improved productivity was reflected in the cost of electricity

production.

Services Sectors

- The operational efficiency of transport sector agencies improved during the Sixth Development Plan, with SAUDIA's seat load factor increasing from 62 percent in 1414/15 (1994) to 64 percent in 1418/19 (1998), and labor productivity rising from 228,000 available ton kilometers to 231,300 during the same period. Operational performance of the ports improved remarkably, with employee productivity increasing by 7 percent during the period 1414/15-1418/19 (1994-1998) and revenues per ton of freight handled increasing by 20 percent. The rate of operational costs covered by direct revenues in the Saudi railroads increased from 52 percent in 1414/15 (1994) to 68 percent in 1418/19 (1998) and employee productivity in the field of passenger and freight traffic increased by 60 percent from 258,000 (ton + passengers) kilometers in 1414/15 (1994) to 412,000 in 1418/19 (1998).
- Productivity of the telecommunications sector improved markedly during the Sixth Development Plan, with employee productivity reaching 7.2 employees per thousand working lines in the middle of the last year of the plan 1419/20 (1999) compared to 13 employees per thousand lines at the beginning of the Plan 1415/16 (1995). With respect to postal services, the rate of mail delivered within 24-48 hours increased from 14 percent by the end of the Fifth Development Plan to 28 percent by the end of the Sixth Development Plan. The number of postal items handled per employee also increased from 117,000 in 1414/15 (1994) to 124,500 in 1418/19 (1998) or an increase of 6.4 percent, and is expected to reach 125,000 items in the last year of the plan 1419/20 (1999).

2.4.3 Strengthening the Role of the Private Sector

Practical steps were taken during the Sixth Development Plan period to enhance the general direction towards privatization, as reflected in the issuance of the Council of Ministers' Resolution No. (60) dated 1.4.1418 which stated "continuing with increasing the private sector's share and expanding its contribution in the national economy". The first paragraph of the resolution states, "expanding the private sector's participation in the national economy and enabling it to undertake its role in investment and financing should be in line with the national development plans, and that this process shall be positive for both the government and private sector". This resolution has defined the major objectives of privatization, considerations to be observed, organizational and administrative arrangements related to coordination and supervision, as well as preparation and monitoring of the implementation program through a ministerial privatization committee, along with assigning the Ministry of Finance and National Economy and the Ministry of Planning the task of preparing a "national strategy" to ensure the realization of objectives while observing the considerations included in the resolution.

During the Sixth Development Plan, the privatization process witnessed a tangible shift in terms of regulation and application. As for regulating the trend towards privatization, the preparation of the "privatization strategy" is a significant achievement since the Council of

Ministers' Resolution No. 60 was issued. The privatization strategy covers the following:

- * The general objectives indicated in the resolution as well as relevant implementation policies.
- * Management and implementation arrangements.
- * Major techniques and measures.
- * Key issues.

Concerning the practical application of privatization principles, it has been decided to start with "ownership privatization" schemes. This is reflected in the telecommunications sector through the Council of Ministers' Resolution No. 135 (dated 15/9/1418) covering the transformation of the telecommunications utility (telegraph and telephone) with all its components into a Saudi joint stock company, and resolution No. 213 (of 23/12/1418) which approved the establishment of a Saudi stock company named "Saudi Telecommunications Company". Furthermore, the Council of Ministers' Resolution No. 57 (dated 28/3/1420) establishes a "Saudi Joint Stock Company for Service in Jubail and Yanbu Industrial Cities" to undertake operation, maintenance, management and construction works for infrastructure projects (sea water cooling systems for factories, desalinated water, sewerage and industrial wastewater, and electricity) through private sector participation, particularly those companies engaged in industrial activity, in order to ensure continuous service, industrial expansion and investment in existing infrastructure facilities and the ongoing development and economic diversification of the Kingdom.

Other practical steps in the privatization process include the introduction of "leasing contracts", an example of which has been the lease of port berths. This trend has been affirmed by the Council of Ministers' Resolution No. 201 (of 16/11/1419), while Council of Ministers' Resolution No. 169 (of 11/8/1419) regarding the restructuring of the electricity sector with its main components (generation, transmission and distribution), has also been issued, along with measures to rationalize electricity consumption.

Generally, the national economy developed favorably during the Sixth Development Plan, at an average annual growth rate of 1.11 percent at constant prices despite decline of world oil prices by about 38 percent in 1418/19 (1998), table (2.2) and figure (2.1). The non-oil sector's share in GDP increased from 66.8 percent in 1414/15 (1994) to about 68.4 percent in 1419/20 (1999) while private sector's contribution in GDP increased from 49 percent to 50.6 percent during the same period, indicating increased contribution of this sector to diversification of the production base and provision of job opportunities for the citizens.

Although government expenditure increased in 1416/17 and 1417/18 (1996 and 1997) as a result of the improved revenue situation, it subsequently declined in 1418/19 and 1419/20 (1998 and 1999) in response to the decline of oil revenues. Over the Sixth Development Plan period as a whole, government consumption increased at an average annual rate of 0.07 percent as shown in table (2.2) and figure (2.2).

Private sector expenditure on investment, after contracting in 1415/16 and 1416/17 (1995 and 1996), expanded by 8 percent in 1417/18 (1997), in response to growing investment opportunities and business confidence in the Saudi economy and easing of liquidity. Despite the downturn in oil revenues and the decline in new Government contracts in 1418/19 and 1419/20 (1998 and 1999), private investment has held up well as work on major construction projects continued. During the Sixth Development Plan period as a whole, private investment grew at an average annual rate of 6.4 percent.

Government expenditure on investment grew at an average annual rate of 2.7 percent over the Sixth Development Plan period. Investment in the oil sector, which declined at an average annual rate of 0.77 percent, was directed mainly towards operation and maintenance of existing facilities.

Table 2.2
Performance of the National Economy in the
Sixth Development Plan at constant prices of 1414/15 (1994)
(SR Billion)

Indicators	1414/15 (1994)	1419/20 (1999)	Average Annual Growth Rate (%)	Share in GDP (%)	
				1414/15 (1994)	1419/20 (1999)
<u>Gross Domestic Product (GDP):</u>	450.0	475.7	1.11	100	100
- Non-oil sectors	300.7	325.4	1.59	66.8	68.4
Private sector *	220.6	240.9	1.78	49.0	50.6
Government sector	80.1	84.5	1.08	17.8	17.8
- Oil sector **	147.0	147.8	0.11	32.7	31.1
- Net import duties ***	2.3	2.5	1.16	0.5	0.5
<u>Consumption:</u>	305.4	308.9	0.23	67.9	64.9
- Private	185.8	188.9	0.33	41.3	39.7
- Government	119.6	120.0	0.07	26.6	25.1
<u>Gross Fixed Capital Formation:</u>	84.2	106.3	4.77	18.7	22.3
- Private sector	52.1	71.1	6.41	11.6	14.9
- Oil sector	8.1	7.8	(0.77)	1.8	1.6
- Government sector	24.0	27.4	2.71	5.3	5.8
Consumer Prices Index	1	1.06	1.2		

* Private sector: includes petroleum refining and excludes bank service charges.
** Oil sector: includes crude oil and natural gas only.

*** *Import duties less bank service charges.*

2.5 PUBLIC FINANCE

During the first four years of the Sixth Development Plan, actual government revenues grew at an average annual rate of 1.2 percent while actual government expenditure grew at 4 percent. The main reason for the low growth in government revenues was the adverse developments in international oil prices.

The growth of government expenditure was driven by the government's commitment to provide basic services for citizens in the face of relatively high population growth. Measures to rationalize government expenditure during this period limited the actual growth of expenditure and contained the adverse impacts on the budget balance.

During the Sixth Development Plan, non-oil revenues developed steadily, reflecting the impact of measures to adjust prices of some goods and to amend tariffs of some utilities in 1415/16 (1995). These adjustments have supported the diversification of Government revenues. Nevertheless, developments in 1418/19 (1998) related to the sharp decline of world oil prices presented challenges for fiscal management and consequently an urgent need arose to develop a broader set of alternative revenue sources.

Wages and salaries, which account for the dominant share of Government recurrent expenditures, expanded rapidly during the first years of the Sixth Development Plan as additional employees were recruited in response to growing demand for public services.

Despite the unfavorable fiscal situation towards the end of the Sixth Development Plan, total spending on development agencies reached SR 420.4 billion during the Plan period, nearly 23.3 percent higher than during the Fifth Development Plan (Table 2.3). In line with the trend in previous Plans and the priority given to human resources development and social and health services, these areas received 51.5 percent and 20.8 percent respectively, or a combined 72.3 percent of total expenditure over the Sixth Development Plan period.

Table 2.3
Actual Expenditures by Development Agencies
in the Fifth and Sixth Development Plans
(SR Billion)

Development Agencies	Fifth Plan		Sixth Plan	
	SR Billion	(%)	SR Billion	(%)
Economic Resources	34.1	10.0	48.2	11.5
Human Resources	164.6	48.0	216.6	51.5
Social and Health Services	68.0	20.0	87.5	20.8
Infrastructure	74.2	22.0	68.1	16.2

Total	340.9	100.0	420.4	100.0
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Fig 2.1: GDP during the Sixth Development Plan

Fig 2.2: Final Domestic Demand during the Sixth Development Plan

2.6 FINANCIAL SECTOR DEVELOPMENT

Financial Services Sector and Monetary Developments

Great advances have been made in the financial system during the Sixth Development Plan – as illustrated by major indicators such as the capital adequacy ratio of the commercial banks in the Kingdom of over 20 percent in 1418/19 (1998) compared to the 8 percent minimum recommended by the Basle Committee. The fiscal and regulatory policies pursued enabled the Saudi economy to maintain stability and growth despite the turmoil affecting many other countries for a variety of reasons, particularly the Asian economic crisis.

During the Sixth Development Plan, commercial banks and specialized credit institutions assumed a major responsibility in financing private sector investments. They extended SR 27 billion in loans to the private sector during the Sixth Development Plan. The volume of commercial bank credit to the private sector increased by over 40 percent during the 1413/14-1418/19 (1993-1998) period. The first four years of the Sixth Development Plan also saw a tangible increase in the share of commercial banks' medium and long-term loans to the private sector which amounted to SR 123.8 billion during 1415/16-1418/19 (1995-1998), and constituted about 20.6 percent of the total loans of SR 599.5 billion extended during this period. Medium term loans increased from about SR 10.3 billion in 1415/1416 (1995), to SR 27.2 billion in 1418/19 (1998), while long-term loans increased from SR 8.2 billion in 1415/16 (1995) to SR 17.5 billion in 1418/19 (1998). This increase in the medium and long-term loans reflects the growth in investment opportunities in the national economy.

Efforts to develop capital markets, particularly the stock market, have led to the achievement of tangible outcomes. The number of listed companies increased from 56 in 1410/11 (1990) to 74 in 1418/19 (1998), while market capitalization nearly doubled from SR 97 billion to SR 190 billion during the same period.

During the Sixth Development Plan, the Government's monetary policies continued to be directed towards maintaining price stability by ensuring that liquidity growth was broadly in line with the growth in GDP, while enabling the banking system to meet the need for credit by all sectors of the economy.

Inflation

The inflation rate was only a modest 1.2 percent on average during the Sixth Development Plan, which is very low by international standards. Several factors contributed to this price stability, including the prudent monetary policies designed to contain excess liquidity and the stability of the Saudi Riyal against the US Dollar.

CHAPTER THREE

THE LONG-TERM PERSPECTIVE FOR THE SAUDI ECONOMY

3. THE LONG-TERM PERSPECTIVE FOR THE SAUDI ECONOMY

3.1 INTRODUCTION

The Kingdom's planning experience over the past thirty years has proved that the successive five-year development plans constitute sound links in a series of development-oriented efforts within an overall and comprehensive strategy for the development process. This experience has also proved that the success of the development strategy substantially depends on the availability of a clear and comprehensive perspective for the future of the Saudi economy in the long-term. Such a long-term perspective helps to diagnose and analyse the major interacting factors and variables and to define their inter-relations and conformity with the potential or possible developments during time spans that extend beyond the medium-term planning period.

Based on this accumulated planning experience, the planning process in the Kingdom will, at the beginning of the Seventh Development Plan, undergo a qualitative shift reflected in the adoption of a long-term strategic planning approach. This approach is characterized by two major steps; the first encompasses the formulation of an overall future vision through the preparation of detailed studies at the macroeconomic and sectoral levels covering all socio-economic aspects, while the second step involves the preparation of a plan aimed at realizing this future vision within a time span ranging between 20 to 30 years.

This chapter reviews the preliminary outcomes of the long-term strategic planning process, and provides the basic elements of a long-term perspective for the Saudi economy based on initial studies and analyses carried out by the Ministry of Planning. The Ministry will prepare detailed studies at the level of the national economy and its various sectors. The outputs of these studies will be presented for discussion in the context of an open symposium with local and international participation and with contributions by all agencies concerned and representatives from private sector establishments. These studies, along with the presented views about possible development trends, will constitute a methodological basis for preparing a comprehensive long-term plan for the development of the Saudi economy which will form the framework for future development plans.

3.2 MAJOR ELEMENTS OF THE LONG-TERM PERSPECTIVE

With the advent of the second centenary of the Kingdom's foundation, the development process in the Kingdom faces a broad range of challenges at both domestic and international levels, which are now emerging as key issues or are expected to emerge in the future as economic or social variables influencing the trend of future development. Within the context of preparing for the long-term development plan, the following topics have been identified which constitute the key elements of the long-term perspective for the national economy:

- Population growth and its expected socio-economic impacts up to 1440/41 (2020).
- Long-term structural changes and competitiveness of the national economy.
- Long-term development of human resources.
- The future position of the Kingdom in global energy markets.
- Economic stabilization and diversification of government revenues in the long run.
- Management of supply and demand for water resources in the long run.
- Role of science, technology and informatics in future development.

3.2.1 Population Growth and its Expected Socio-Economic Impacts up to 1440/1441 (2020)

3.2.1.1 Long-term Economic Implications of Demographic Changes

There is an interdependence between demographic variables and economic development, whereby the rate of economic growth, the pattern of economic resources utilization and allocation for consumption and investment and for the various sectors and regions, are affected by the rate of population growth and other demographic characteristics. On the other hand, the pace of economic development and its associated social impacts also affect demographic variables. While demographic variables have direct and immediate impacts on economic development, the impacts of economic development (with its social and cultural dimensions) on demographic changes take a longer time. The major demographic variables which have economic development implications are as follows:

- Rate of population growth.
- Age structure of the population.
- Spatial distribution and density of population.
- Rate of participation in the labor force.

The rate of population growth in the Kingdom is relatively high by international standards. The formulation of the long-term perspective for socio-economic development requires that these demographic changes be properly addressed and their long-term economic implications assessed. Projections from the population census indicate that the population of the Kingdom will increase by 56.6 percent during the period 1420/1421-1440/1441 (2000-2020), while the Saudi population will increase by almost 90 percent over the same period.

This population increase has substantial implications for the growth of demand for basic services in the fields of education, health, transport, communications and vital public utilities and services including water and electricity. It also implies increased demand for housing and the need for directing economic resources to meet the requirements of investment in fixed assets and human resources in order to develop production and institutional capacities.

The relation between population growth and human resources development indicates two major requirements: *first*, the necessity of realizing qualitative development of human resources in line with their quantitative growth by expanding the absorptive capacities of the various levels and types of education and training institutions to accommodate the growing number of students, along with on-going improvement in the quality of education and training to match the requirements of economic development in an era characterized by accelerated scientific and technological development; *second*, the significance of providing job opportunities in various economic sectors through a combination of measures, including training programs for the Saudi labor force, to improve labor market efficiency in matching demand and supply in various professions and specializations throughout all regions of the Kingdom.

3.2.1.2 Long-term Demographic Development Indicators

According to the 1412/13 (1992) population census, the total population of the Kingdom was estimated at about 21.4 million in 1419/20 (1999), of which 15.7 million are Saudis and about 5.7 million non-Saudis. Estimates also indicate that the total Saudi population will increase from 15.7 million in 1419/20 (1999) to about 29.7 million in 1440/41 (2020), or by 89.2 percent. Furthermore, the average annual growth of the Saudi population of working age will remain high, ranging between 3.5 percent and 4.1 percent during the period 1419/20-1440/41 (1999-2020).

3.2.1.3 Expected Economic Impacts of Population Growth

- Forecasts of Labor Force Supply and Demand

Studies conducted by the Ministry of Planning about the long-term perspective of the Saudi economy, indicate that the Saudi labor force will increase from 3.17 million in 1419/20 (1999) to around 3.99 million in 1424/25 (2004), i.e. at an average annual growth rate of 4.7 percent, and to 8.26 million in 1440/41 (2020). With the acceleration of Saudiization policies and intensification of training programs, the number of non-Saudi workers is expected to decline at an average annual rate of 2.25 percent during the next two decades and at 2.57 percent annually during the Seventh Plan. This expected development in the growth rates of Saudi and non-Saudi employment will increase the share of Saudi nationals in the total labor force. (see Table 3.1).

Concerning the demand for labor, the private sector is expected to absorb most of the new entrants to the labor market as it is planned to maintain the size of government employment at the level reached by the end of the Sixth Plan 1419/20 (1999) with the exception of the education and health sectors.

Table 3.1
Manpower Demand and Supply Projections
1419/20 – 1440/41 (1999-2020)

Description	(Thousand)			Average Annual Growth Rate %	
	1419/20 (1999)	1424/25 (2004)	1440/41 (2020)	Seventh Plan 1420/21-1424/25 (2000-2004)	Long-term Perspective 1420/21-1440/41 (2000-2020)
1. Demand:					
Government services	916.2	932.3	984.0	0.35	0.34
Crude oil and gas	98.9	100.4	127.0	0.30	1.20
Private sector	6161.2	6472.2	9635.0	0.99	2.15
Total Demand	7176.3	7504.9	10746.0	0.90	1.94
2. Supply:					
Saudi population	15658.4	18520.3	29717.0	3.41	3.10
Saudi labor force	3172.9	3990.2	8263.0	4.69	4.66
3. Demand/Supply balance:					
Non-Saudi labor force	4003.4	3514.7	2483.0	(2.57)	(2.25)

Source: Ministry of Planning.

Figures in brackets are negative.

- Demand for Municipal Water

Demand for municipal water is forecast to increase from 1.8 billion cubic meters (bcm) in 1420/21 (2000) to 2.03 bcm in 1424/25 (2004) and to 3.10 bcm in 1440/41 (2020) at average annual growth rates of 2.9 percent and 2.7 percent respectively^(**). By 1440/1441 (2020), consumption is expected to be distributed over population settlements as follows:

- * Major cities with populations of more than 250,000 persons are expected to account for about 63 percent of total consumption, while the number of these cities will increase from 11 at present to 17 in 1440/1441 (2020).
- * Medium and small cities, with populations of 25,000 – 250,000, are expected to account for 16 percent of total consumption, while the number of these cities is expected to increase from 60 at present to 73 in 1440/41 (2020).
- * The remaining part of demand (21 percent of total consumption) is expected to be consumed by other settlements with populations of less than 25,000 persons.

- Demand for Housing

Total number of housing units at the beginning of the Seventh Plan 1420/21 (2000) is estimated at about 3.12 million, provided by both government and private sectors. Total

^(**) *Source: Ministry of Agriculture and Water (1420/21-1424/25) and MOP Projections for the ensuing period.*

demand for additional housing units during the Seventh Plan 1420/21-1424/1425 (2000-2004) is expected to reach 800,000 units. Policies for meeting demand during this period have been included in the housing sector chapter of the Plan document.

Over the coming two decades, population growth is expected to increase total demand to 3.9 million additional housing units. Thus, the cumulative number of housing units is expected to reach about 7 million units in 1440/1441 (2020).

- **Demand for Electricity**

Demand for electricity is determined by population growth rates, overall economic activity and electricity prices.

There will be substantial restructuring and development in the electricity sector, the first stage of which will commence during the Seventh Plan. The main projections from the long-term electricity plan in the Kingdom, prepared by the Ministry of Industry and Electricity are:

- 1- The peak load (maximum daily demand for electricity) is expected to reach about 59 million kilowatts (mKW) in 1440/41 (2020) compared to 21 mKW in 1418/19 (1998), implying an average annual growth rate of 4.5 percent.
- 2- To meet this increased demand, actual generation capacity during this period is expected to increase from about 21 mKW to 70 mKW.
- 3- According to the long-term plan, the value of total investments in the electricity sector during the coming two decades is estimated at about SR 300 billion at constant prices of 1414/15 (1994), of which investments in generation account for 54 percent, in transmission and sub-transmission 29 percent and in distribution 17 percent. The private sector is expected to be the major investor in the electricity sector through the scheduled restructuring and privatization process.

- **Demand for Telecommunication Services**

Demand for telecommunication services up to 1440/1441 (2020) will be influenced directly by demographic developments. The number of housing units represents the major factor influencing household sector demand for telecommunication services, while demand of the business and commercial offices sector for these services is determined by the number of employees in this sector.

Notwithstanding the significant role played by data transmission and mobile telephone networks, the fixed public telephone exchange network will continue to constitute the main infrastructure over the coming two decades, particularly after full digitalization of the network.

In the long run, demand for telephone communications is expected to increase, due to population growth and economic expansion, to more than 11 million telephone lines in 1440/41 (2020).

- **Demand for Transportation Services**

In addition to population growth, future demand for transportation services will be influenced by other factors such as GDP growth, fuel prices and transport tariffs.

Preliminary studies prepared by the Ministry of Planning indicate that demand for inter-city transport services between various cities of the Kingdom and in rural areas will grow at an average annual rate of 3 percent during the coming two decades, which is approximately similar to the growth rate achieved during the Sixth Plan (1415/16-1419/20) (1995-1999).

Demand for intr-city transport services in major cities and population settlements is expected to grow at an average annual rate of 3.3 percent during the period 1420/1421-1440/1441 (2000-2020), despite expected traffic congestion in major cities which is expected to limit the growth in private transport and stimulate the expansion of urban public transport.

3.2.2 Long-Term Structural Changes and Competitiveness of the National Economy

3.2.2.1 Long-Term Perspective for Economic Growth and Diversification

Since its inception thirty years ago, development planning in the Kingdom has been based on a long-term perspective related to the structure of the national economy, as the First Development Plan general objectives stated: "Diversifying the national income sources and reducing dependence on oil through enhancing the contribution of other producing sectors in GDP". Experiences of the Kingdom throughout the past six development plans, have affirmed the validity of this strategic direction and its growing significance for the accomplishment of sustainable development.

The quantitative indicators of the long-term perspective for the national economy have been prepared in light of the strategic directions related to diversification, Saudiization, privatization and other long-term policies as follows:

- The Saudi economy continued to realize favorable growth rates despite the challenges it faced during some years of the Sixth Development Plan due to sharply fluctuating world oil prices following the economic crisis of the South East Asian countries, the impacts of which extended to Japan, Russia and Latin America.
- GDP is expected to grow at an average annual rate of 4.15 percent at constant prices of 1414/1415 (1994) during the period 1420/21-1440/41 (2000-2020) and at a rate of 3.16 percent during the Seventh Plan period 1420/21-1424/25 (2000-2004), or the first five years of the long-term perspective (Table 3.2).
- The Kingdom will continue to be the main oil producer in the world in the long run, with the oil sector's contribution to GDP at current prices forecast to grow at an average annual rate of 2.19 percent during the coming two decades, and at an annual average rate of 1.21 percent during the Seventh Plan.

- Value added in the government sector is expected to grow at an annual rate of about 1.28 percent during the coming two decades, whereas the private sector's role is targeted to increase gradually in the field of production, services and public utilities (such as electricity and telephone services). The government sector will continue to provide education, health and housing services directly to citizens, while the private sector is also expected to perform an increasing role in these areas.
- The private sector is expected to grow rapidly and steadily, through improved productivity and efficiency, the planned removal of institutional constraints, specialized industrial development based on comparative advantage and competitiveness in petrochemicals and energy/capital intensive activities, and the expected transfer of some family enterprises into joint stock companies and others into multinational companies.
- Long-term projections indicate the growth of value added of the private sector at an average annual rate of 5.73 percent during the next twenty years, and at an annual rate of 4.93 percent during the Seventh Plan years.

According to these expected growth rates, the percentage contribution of the private sector to GDP is expected increase from 51.2 percent in 1419/20 (1999) to about 55.6 percent in 1424/25 (2004) and to 69.2 percent in 1440/41 (2020), while the percentage contribution of the government and oil sectors to GDP will decline (Table 3.2).

Table 3.2
Long-Term GDP Growth Rates and Structure
at constant prices of 1414/1415 (1994)

Description	Average Annual Growth Rate (%)		Percentage Contribution (%)		
	Seventh Plan 1420/21-1424/25 (2000-2004)	Long-term Perspective 1420/21-1440/41 (2000-2020)	1419/20 (1999)	1424/25 (2004)	1440/41 (2020)
Oil Sector	1.21	2.19	31.0	28.2	20.9
Government Sector	1.21	1.28	17.8	16.2	9.9
Private Sector	4.93	5.73	51.2	55.6	69.2
Total GDP	3.16	4.15	100.0	100.0	100.0

Source: MOP Estimates

3.2.2.2 Global Strategic Challenges

Rapid growth of foreign trade has been the major driving force behind global economic growth throughout the past forty years. Countries that isolated themselves from international trade lagged behind, while those which adopted a model of integration and specialization within the global trading environment have developed successfully. Thus,

specialization based on comparative advantages within the global economy is of utmost significance for future development. The economic globalization process is firmly established and the Kingdom's economy must be prepared to deal with the following international developments in a resilient and efficient manner.

* **Continuous Growth of Foreign Trade**

International trade liberalization is expected to continue with the decline of tariff and non-tariff barriers on all industrial and agricultural products as well as on intermediate goods and services. At the same time, more countries will become committed to international trade laws, thereby promoting further growth and specialization at the global level. Some high population countries have begun to take significant steps towards liberalizing their international trade and specializing in certain activities. Economic liberalization in China, India and Russia will materialize fully during the coming two decades. The Kingdom's ratio of goods and services exports to GDP reached about 41.4 percent in 1419/20 (1999) and is expected to reach 43.9 percent by the end of the Seventh Development Plan 1424/25 (2004), thereby reflecting the growing significance of this sector.

* **Continuity of the Information Revolution and Software Technologies**

All evidence suggests that the information revolution will continue to expand rapidly during the coming two decades. In the new era of information technology, demand for advanced software is likely to grow faster than for other material goods.

* **Increasing Significance of International Trade in Services**

The recent liberalization of international trade in services is likely to intensify in future. For example, demand for tourism services is growing. Recent developments in international telecommunications, the information media and electronic commerce will further stimulate the growth of trade in services. In highly competitive international markets, countries must determine where their comparative advantage lies in the marketing of these services.

* **Globalization and Regional Economic Blocs**

The establishment of regional blocs and free trade areas is likely to accelerate in the future. In recent years, the EU has been preparing for expansion to include the countries of Central and Eastern Europe, while efforts have also been made to establish a Mediterranean free trade area. As for the western hemisphere, the free trade area of North America (NAFTA) is expected to expand to include Latin American countries. Asia will witness the development of ASEAN and APEC, while a great Arab free trade area may also be established.

3.2.2.3 Long-Term Strategic Themes and Policies

3.2.2.3.1 Comparative Advantages of the Saudi Economy and Specialization within the Global Economy

In response to these external developments, the Kingdom will have to formulate its future strategy on the basis of the Saudi economy's comparative advantage taking into account the fact that the success or failure of any economic project – in the final analysis – depends on the capabilities and skills of those responsible for organization and management affairs in these projects. The long-term policies will concentrate on supporting the following industries:

Petrochemicals

The petrochemicals industry is the backbone of Saudi industry, where the country enjoys comparative advantage at the global level and this advantage increases with the increase of oil prices. The future perspective for developing the petrochemicals industry in the Kingdom is based on the following:

- (A) Building on the success achieved by the Saudi Arabian Basic Industries Company (SABIC) through expanding the application of this model and modifying it according to changing conditions.
- (B) Encouraging the private sector, including foreign companies, to enter all basic and downstream stages of this industry, and ensuring a competitive environment in this sector.
- (C) Paving the way for further integration between Saudi petrochemical industries and international companies operating in the downstream industry or marketing areas, in order to make optimal use of these companies' technical and marketing capabilities.

Other Energy-intensive Industries

The Kingdom enjoys comparative advantage in energy-intensive industries due to its huge resources of oil and gas. These industries include steel, aluminum and other metal industries, mechanical engineering, mining, glass, ceramics and building materials. Demand for the output of these industries is likely to grow, thereby enabling Saudi companies to establish a successful export trade in many of these industries.

Capital-intensive and Advanced Technology Industries

The Kingdom will continue to give priority to the development of capital-intensive industries, which use advanced technologies and skilled technical manpower. The cost of such manpower will constitute a relatively low proportion of the total operating costs of these industries, so that they will be able to provide relatively high wages and an

appropriate work environment for the skilled Saudi manpower expected to be attracted by such industries. The Kingdom will ensure a favorable environment for the growth of advanced technology and capital-intensive industries and will provide the necessary support for exporting products to international markets.

Regional Trade

With its favorable geographic location between Europe and the Indian sub-continent, the Kingdom can develop transport services to Egypt, North Western Africa and the northern Arabian Peninsula countries, and enhance its contribution to the development of regional trade. The Saudi private sector can also enhance its position in the region through the modern infrastructure and telecommunications facilities now available and likely to develop further. Moreover, the establishment of free trade areas will encourage regional trade and industrial activities by exploiting opportunities in the markets of North Africa and the northern Arabian Peninsula.

3.2.2.3.2 Supporting the Private Sector and Enhancing its Productivity

In earlier stages of the development process in the Kingdom, policies to support private sector growth were concentrated on the provision of easy-term finance, the establishment of a sound banking system and the construction of new infrastructure. These policies have helped to build up the production base, particularly for previously imported goods. In the coming decades, the Kingdom will continue to support private sector efforts to improve efficiency, enhance competitiveness and expand and diversify the production base.

Productivity and efficiency constitute the cornerstone for building a prosperous economy, particularly in the context of high population growth rates. Thus, the general objectives and strategic bases of the development plans emphasize policies aimed at enhancing the private sector's productivity and economic efficiency through:

- 1- Transfer of investments from low productivity sectors and activities to higher productivity ones.
- 2- Facilitating the transfer of modern management techniques and advanced technologies through the establishment of strong linkages with leading foreign countries beyond the simple arrangements of buying and selling.
- 3- Encouraging research and studies aimed at developing products where the Kingdom enjoys a comparative advantage or has the capabilities needed to realize such comparative advantages.
- 4- Establishing the economic and institutional environment needed to enhance productivity, along with the continuous provision of more infrastructure and the adoption of incentive systems leading to improved efficiency.

3.2.2.3.3 Encouraging Foreign Direct Investment

Foreign direct investments bring advanced technology into the Kingdom and play a vital

role in expanding the scope of local competition, thereby leading to increased productivity and efficiency. At the same time, there is growing competition at a global level for foreign investment inflows.

The Kingdom enjoys many favorable elements and advantages that constitute a sound incentive for attracting foreign investment, including its social and political stability, its track record of economic stability and its ongoing commitment to economic growth based on market economy policies.

In the context of the long-term perspective, the Kingdom will continue its efforts to improve the general environment for private sector activities, improving and expanding infrastructure services and developing new regulations for investment, business, markets and economic activity in general. These efforts will conform with local and global developments, such as the Kingdom's accession to WTO, and will also emphasize the development of human resources and increased labor and total factor productivity.

3.2.2.3.4 Improvement of Competitiveness and Development of Non-Oil Exports

Raising productivity is essential for improving the competitiveness of non-oil exports. Productivity growth and improved international competitiveness of Saudi export industries can be enhanced through an improved regulatory and institutional environment for private business, the provision of modern infrastructure, and a broad base of qualified and productive Saudi manpower. The government will continue to support the expansion and promotion of non-oil exports, through:

- continuous support of the Exports Development Center established at the Council of Saudi Chambers of Commerce and industry;
- simplification of export related regulations;
- continuing efforts to enhance free trade relations among Arab countries and to deepen cooperation with GCC countries.

Long-term forecasts prepared by the Ministry of Planning indicate that non-oil merchandise exports will continue to grow over the next twenty years at an average annual rate of 10.2 percent, and as a percentage of total imports, these exports are expected to reach 32.2 percent in the year 1424/25 (2004), rising to 62.7 percent in 1440/41 (2020). (See Table 3.3).

It is noteworthy that services exports, which amounted to 11.6 percent of the total value of imports in 1419/20 (1999), will grow at an average annual rate of 8.1 percent during the coming two decades and are expected to amount to 19.6 percent of the total imports value in 1440/41 (2020).

These forecasts indicate that the total value of non-oil exports (goods and services) will cover 82.3 percent of the total value of imports by 1440/41 (2020) and will thereby enable the investment of oil revenues in productive capital (financial or physical assets) and contribute to the continuous diversification of government revenues.

Table 3.3
Growth Rates of Non-Oil Exports and their Ratio to Imports
1420/21-1440/41 (2000-2020)

Description	Average Annual Growth Rate (percent)		Exports as Percentage of Imports		
	Seventh Plan	Long-Term Perspective	1419/20	1424/25	1440/41
	1420/21-1424/25 (2000-2004)	1420/21-1440/41 (2000-2020)	(1999)	(2004)	(2020)
<u>Total Non-Oil Exports:</u>	10.2	9.6	36.2	45.6	82.3
<u>Non-Oil Merchandize Exports:</u>	11.0	10.2	24.5	32.2	62.7
* Petrochemicals	13.1	8.8	8.4	12.0	16.2
* Others	9.9	10.9	16.1	20.1	46.5
Services Exports	8.3	8.1	11.6	13.5	19.6

Source: Ministry of Planning Projections

3.2.3 Long-Term Development of Human Resources

3.2.3.1 Long-Term Perspective of Saudi Human Resources

Long-term sustainable development and the ability to face international competition must be based on the accumulation of “human capital” through the education and training of highly skilled manpower that can keep abreast with recent scientific developments through the effective transfer and adaptation of technology.

3.2.3.2 Strategic Challenges

Recent trends towards closer integration and greater competition in the world economy, along with the growing dependence on information technology, present key challenges for the Kingdom in the future. The Kingdom’s ability to assimilate new scientific innovations and advanced technologies is closely related to the level of Saudi manpower development and efficiency.

A gap currently exists between the outputs of the education system and the requirements of the domestic labor market. If this gap is to be closed by 1440/41 (2020), standards of general and higher education must be raised to the levels of the advanced countries and enrollment rates must be raised at all levels of education.

The challenges facing the development of human resources that should be addressed during the next two decades, can be summarized as follows:

- 1- Providing adequate job opportunities for new entrants to the labor market, whose number is expected to grow at an average annual rate of 4.7 percent during the next two decades;

- 2- Substituting Saudis for non-Saudis in various jobs and activities of the private sector;
- 3- Reducing the technological gap between the Kingdom and other countries, which requires intensive efforts towards development of Saudi manpower and upgrading their skills and innovative capacities;
- 4- Reducing the gap between the outputs of the higher, vocational and technical education systems and the requirements of the labor market.

3.2.3.3 Long-Term Themes and Policies of Human Resources Development

The human resources development strategy for the realization of the long-term perspective by 1440/1441 (2020) has the following long-term themes and policies:

Theme # 1: Matching Supply and Demand for Saudi Labor Force and Replacement of Non-Saudis by Saudis:

The cumulative number of expected Saudi new entrants to the labor market will reach 5.1 million by 1440/41 (2020), posing a substantial absorption challenge for the national labor market. This theme concentrates on providing a favorable environment for creating job opportunities for new entrants to the labor market through appropriate policies and measures for directly influencing the following variables:

First: Rates and Sources of Economic Growth

The set of long-term policies concentrates on achieving high growth rates in the private sector through stimulation of investment in the productive areas which create new job opportunities, such as modern information technologies, finance and business services, tourism services as well as petrochemicals and small scale industries. Such policies include the following:

- Reconsidering the rules, regulations and legislation pertaining to investment promotion, including foreign direct investment;
- Increasing the level of coordination and consistency between education and training outputs and the requirements of the labor market;
- Encouraging and supporting small and medium scale firms and industries in various economic sectors.

Second: Enhancing the Policies of Saudiization

Long-term policies will be adopted to ensure high growth rates in the private sector resulting in a net increase in the number of Saudis employed in this sector. These policies will emphasize the following:

- Reducing the present wage gap between national and foreign manpower to make employment of Saudis more feasible for private firms. This could be realized through continuous review of visa and Iqama fees to reflect the actual long-term economic costs of foreign labor.
- Enhancing productivity and administrative efficiency of the national manpower through expansion and development of all types of training programs, as well as preparation of an adequate framework for encouraging the private sector to be more dependent on national manpower.

Theme # 2: Intensifying Efforts to Improve and Upgrade the Efficiency of Education and Vocational Training Systems

During the next two decades, the Kingdom will continue its efforts to build a comprehensive and advanced education system which meets the requirements of the national economy and matches the levels reached by the advanced countries, in order to contribute effectively to the development of human resources with the aim of eliminating the gap between the output of the education system and the requirements of the labor market by 1440/41 (2020).

This theme includes three sets of policies and mechanisms which will be discussed, in detail, in the Seventh Plan and in subsequent five-year plans:

- First:** Continue to give utmost priority to expansion and development of the general education system through integrated initiatives of both government and private sectors and to provide education opportunities to all citizens and to raise the cost effectiveness and efficiency of the system.
- Second:** Quantitative and qualitative expansion of the higher and university education system in order to increase the major specializations needed by the national economy during the next two decades, and the applied research facilities needed in various economic sectors. Furthermore, the private sector should be given full opportunity to establish private universities and colleges.
- Third:** Quantitative and qualitative expansion of the technical education and vocational training system by both the government and the private sectors, so that skilled technical manpower can be prepared to meet the requirements of the labor market for various specializations during the next two decades.

3.2.4 Future Position of the Kingdom in World Energy Markets

3.2.4.1 Long-Term Perspective for the Role of the Oil Sector in the Saudi Economy

Since its early stages, development planning in the Kingdom has been concerned with the long-term perspective and role of oil resources in the development process. The Fourth Strategic Objective of the First Development Plan states: "Diversifying the sources of national income and reducing the dependence on crude oil by increasing the contribution of other producing sectors in the GDP."

The long-term perspective for oil resources in the Kingdom is based on the full utilization of such resources and their transformation into renewable productive resources, in the form of fixed capital assets and highly efficient human resources. The long-term perspective of the Saudi oil sector, up to 1440/41 (2020), has the following aspects:

- Maintaining the position of the Kingdom in world energy markets commensurate with its share of world oil reserves;
- Optimizing production levels and maximizing crude oil revenues, while using such revenues to finance investment programs;
- Developing the Kingdom's natural gas resources and enhancing their role in the long-term strategy for sustainable development.

3.2.4.2 Strategic Challenges and Development Forecasts of World Energy Markets

The first half of the second decade of the 21st century (2010-2015) could be a decisive stage in the development of the energy market, for many reasons, the most important of which are:

- Obsolescence of most existing nuclear power generation plants established during the 1970's and 1980's which will require strategic decisions on whether or not to replace them with nuclear plants;
- The likely impacts of scientific research and modern inventions on energy markets (e.g. electric modes of transport, transformation of gas to petroleum products etc.) which will reach their peak by the end of the second decade of the coming century, and the wide use of which may lead to substantial changes in the structure of supply and demand for various types of energy.
- Environmental decisions related to the "greenhouse effect", which aim to reduce carbon dioxide emissions from their levels in 1420/21 (2000). The impacts of such decisions will be manifest by 1440/41 (2020).

Added to these factors is the volume of global reserves of oil and gas, which are expected to start declining during the coming two decades. Among the major strategic challenges arising in this sphere are the following:

- Forecasts of Primary Energy Sources Supply

Most estimates concerning global oil market developments indicate on-going expansion in global crude oil production over the next two decades to accommodate the annual increase in demand by about 1.5 - 2 percent. However, some significant structural changes in the global energy markets are likely and may fundamentally affect the Kingdom's oil revenues.

The global oil industry is also expected to devote further efforts to the development of new drilling and exploration technologies, in order to achieve further cost reductions.

Estimates of “unconventional” oil reserves – such as extra heavy oil, tar sands and shale oil in various parts of the world – indicate that the volume of such reserves is very large. Technological progress in the exploitation of these resources is rapid and extraction rates are steadily improving. Production from these reserves is expected to accelerate over the next few decades, with the possible share of unconventional oil rising to more than 9 percent of the total global energy use in 1440/41 (2020), compared to less than 1 percent in 1419/20 (1999).

Coal accounts for the largest reserves of fossil fuels. However, its future role is highly uncertain because of the adverse environmental impacts of burning coal using conventional techniques. Large increases in oil prices may boost the role of coal through improving the feasibility of clean coal technologies.

The environmental and non-environmental hazards of nuclear energy are not yet fully resolved. The period 1430/31-1435/36 (2010-2015) will be decisive for the future of nuclear energy as most of the existing plants (in the USA, France, Germany, Russia, the United Kingdom and Japan) will become obsolete by then and need to be replaced. This will bring to the fore the issue of resolving the future of nuclear energy.

Most long-term forecasts indicate a significantly increasing role for natural gas, which will account for about one-third of world production of primary energy sources by 1440/1441 (2020). In Western Europe, natural gas consumption is expected to grow three times faster than the growth rate of total energy demand during the next two decades.

Renewable energy is expected to play a significant role in the future global energy balance. Moderate fossil fuel prices will hamper the development of renewable energy sources, while implementation of the Kyoto Protocol for Climate Change will induce industrial countries to accelerate research and development activities related to the various renewable energy resources. The share of renewable energy in the total supply of primary energy sources is estimated to reach 10 percent in 1440/41 (2020).

International estimates indicate that total world crude oil production may increase from about 78 million barrel per day in 1419/20 (1999), to around 115 million barrel per day in 1440/1441 (2020).

- **Forecasts of World Demand for Oil**

The uncertain global economic outlook makes the preparation of long-term forecasts for global economic growth rates quite difficult. However, most long-term forecasts assume that world economic growth will continue, albeit at declining rates, during the coming three decades. The future growth of South and East Asian countries’ economies represent a key element in most forecasts of long-term developments in the global demand for oil. These countries are expected to remain major markets for oil of the Arabian Gulf over the coming two decades. Some studies of long-term trends in world oil markets indicate that around 50 percent of the increase in total world energy demand and 40 percent of the

increase in the demand for oil during the coming two decades will come from these Asian countries. Whereas this region's share of the global oil reserves is less than 2 percent, total imports of this region are expected to increase to more than 20 million barrels per day by 1440/41 (2020).

Notwithstanding the on-going world efforts to rationalize energy consumption and enhance the efficiency of using this resource in industrial and many developing countries, the total global demand for crude oil is expected to increase by 48 percent up to 1440/41 (2020) to reach more than 114 million barrels per day. Furthermore, the share of OPEC countries in total world oil production is expected to increase to more than 50 percent that year compared to 39 percent in 1419/20(1999).

3.2.4.3 Long-Term Trend in Oil Prices

Past experience demonstrates great difficulties in predicting future oil prices. Because both demand and supply are inelastic in the short-term, price changes below certain minimum levels are ineffective as a mechanism for market balance. Beyond the short-term, prices therefore tend to oscillate between:

- * A *maximum* level at which major industrial consumers begin to switch to alternative fuels such as methane, coal or non-conventional sources of oil. When crude oil prices reach this maximum level, demand becomes elastic and decreases rapidly, effectively limiting the scope for future price increases.
- * A *minimum* level at which marginal oil fields become uneconomic and are closed down thus reducing supply. Even before this level is reached, oil companies announce cutbacks in their investments plans for bringing new oil on stream, thus sending a clear message to the market that total supply is poised to be reduced.

The difference between the maximum and minimum level of prices is considerable, leaving a very broad margin of uncertainty in all forecasts for oil prices. However, even if it is impossible to project future oil prices, it is nevertheless possible to analyze the evolution over time of the maximum and minimum levels within which prices oscillate.

3.2.4.4 Long-Term Direction of Energy Policies in the Kingdom

The Kingdom of Saudi Arabia, which possesses about 25 percent of the world's proven crude oil reserves and about 4 percent of the world's proven natural gas reserves, carefully studies all developments in world energy markets.

Because of uncertainty surrounding the future of the world energy system, and the fact that oil constitutes part of an international technological and geographical system where several factors and variables interact, the Kingdom will adopt the following policies:

- First:** Monitoring and analyzing world energy market developments in a continuous and regular manner through developing an advanced system for carrying out this task. The development of this system becomes of great significance due to

the growing impact of environmental and technological policies on world energy markets, a matter which entails precise follow-up and in-depth analysis of the rationale and future directions of these policies.

- Second:** The objective of strengthening cooperation and consultation between OPEC and non-OPEC producers will remain among the Kingdom's strategic priorities. The issue of discriminatory and high taxes is considered among the important topics for consultation. The Kingdom will, in collaboration with other oil producing countries, exert efforts aimed at including oil trade within the WTO as the existing exception is discriminatory and unfair for the oil producing countries.
- Third:** The Kingdom will strive to confirm its role and active partnership in energy and environmental affairs, as well as its support and contribution to scientific research and technological development in the domain of energy and environmental conservation.
- Fourth:** Because of the gap between the Kingdom's share in world oil reserves (25 percent) on the one hand and its share in world oil production (12 percent) on the other hand, and in light of the comparative advantage of Saudi oil, economic efficiency arguments require a closing of this gap while maintaining oil market stability.
- Fifth:** Continuing to develop natural gas supply sources and its local and regional markets. In this context, a national grid covering all parts of the Kingdom will be developed with the aim of supporting industrial sectors and services.
- Sixth:** Assigning a substantial role to the domestic and foreign private sector to invest in programs designed to increase natural gas production and develop its uses.
- Seventh:** Developing oil markets within a strategy for maintaining the role of oil in world energy markets as a means for maintaining the share of oil in these markets.

3.2.5 Long-Term Economic Stabilization and Diversification of Government Revenues

3.2.5.1 Need for Stabilization and Diversification of Government Revenues

Since 1403/04 (1983), the government budget continued to experience imbalances as a result of declining oil prices and the need to continue financing development programs, developing infrastructure and providing quality services to the growing population, as well as meeting security commitments, particularly during and after the Gulf war. Although the present condition of infrastructure is still impressive, in recent years some infrastructure capacities have not been growing in line with population growth and the need to maintain and replace various facilities.

Moreover, substantial expenditures will be required during the next two decades to finance investments in replacement of aging infrastructure and to add new capacities to meet the needs of expected population and economic growth and ensure provision of efficient and

high-quality education and health services to the Kingdom's entire population. There will be increased pressures on the state budget to provide the resources necessary for financing expansion in these fields in the long run. Thus, stability and growth of government revenues are needed to ensure the continued provision of quality services to the growing population and to meet the needs of economic growth while maintaining macroeconomic balance. Thus, it is necessary to study how to broaden and diversify the government's revenue base, particularly non-oil revenues, to rationalize expenditure and to upgrade the performance of government agencies, so that non-oil revenues shall completely cover recurrent expenditure by 1440/41 (2020). This makes it possible for oil revenues to cover education, training and health expenditures, which are to be considered as investment expenditures.

3.2.5.2 Strategic Challenges and Key Issues

New measures and mechanisms are needed to increase non-oil revenues and to improve the structure and scale of existing revenues, including enhancing collection efficiency. These measures should conform to the Kingdom's basic development objectives and should be transparent, stable and simple to implement. Moreover their implementation should not require the establishment of large management, supervisory or administrative structures.

The long-term objective for non-oil revenues is their gradual and sustained increase which will permit them in the long run to cover fully recurrent expenditures in the government budget with the exception of expenditures on education, training and health. This will necessarily entail the allocation of oil revenues to finance human capital formation and the accumulation of productive assets in non-oil sectors, thereby ensuring a smooth transition towards a future when oil reserves will have been transformed into productive assets, technologies, knowledge and efficient human capital capable of dealing with likely developments in the coming century.

3.2.5.3 Major Themes and Long-Term Policies

The policies adopted in the Seventh Plan for government revenue stabilization and diversification are closely linked with policies implemented in previous development plans, the themes of which are:

- **Stabilization of Government Revenues**

Some developing countries depend mainly on the export of a single commodity for generating foreign exchange and enhancing budgetary revenues. Thus, they may experience major fluctuations in foreign reserves from time to time. Such countries normally resort to institutionalized arrangements aimed at dampening the impacts on the domestic economy of fluctuating export prices and terms of trade. One of the most common arrangements in this connection is the establishment of funds for revenues from major exports of raw materials.

In line with the Ninth General Objective of the Seventh Plan, which calls for the adoption of measures that will enable the national economy to adjust flexibly and efficiently to global changes and developments, it is imperative to study the establishment of an oil revenue stabilization fund on the following bases:

- * Defining the average value of oil revenues for a number of previous years. This average could be titled “Long-term Oil Revenues”.
- * If the actual oil revenues in any year exceed expected long-term oil revenues, then the difference will be added to the fund. When the actual oil revenues fall short of expected long-term oil revenues, the difference is covered from the fund.
- * The accumulated surplus in the fund shall be invested.

In order to ensure smoother and more predictable changes in budgetary expenditures, the proposed stabilization mechanism would make annual budgetary allocations in line with the following principles:

- * limiting the growth of recurrent expenditures except those targeted to grow in specific sectors, while aiming to maintain expenditure on capital formation.
- * Allocations for capital expenditures would depend on the availability of long-term revenues after funds for the main recurrent expenditure items have been allocated.

Mobilization and Development of Non-Oil Revenues

This theme encompasses a series of horizontal and vertical policies for expanding and enhancing the efficiency of the non-oil revenue base. These policies are:

- 1- Reconsidering the current tax system and studying the feasibility of developing and diversifying its sources.
- 2- Reviewing the methods of collecting custom duties and developing means for improving collection efficiency and enhancing revenues.
- 3- Continuing to adjust current service fees and charges along with enhancing collection efficiency based on the actual costs of producing and delivering such services.

3.2.6 Long-Term Management of Demand for Water

3.2.6.1 Long-Term Perspective

Supplies of water in adequate quantities and of acceptable quality is a vital factor for socio-economic development in any society. Population growth, standard of living and economic development contribute to determining the quality and size of demand for water, while the availability, quality and costs of water affect the level of achieved economic and social development. In a country like the Kingdom of Saudi Arabia, scarcity of water resources constitutes a key element in determining the long-term trend of development. Therefore, supply of water resources represents an integral part of the comprehensive development process of the Kingdom.

Over the next two decades, the Kingdom will urgently need to implement an integrated strategy for conservation and optimal utilization of water resources, in order to meet on-going industrial and agricultural production requirements in the long-run and to meet the present demand for water for domestic purposes, without jeopardizing the requirements of coming generations.

The long-term perspective for water resources in the Kingdom implies the realization of balance between available water resources and the demand for such resources by 1440/1441 (2020) and a reduction of the share of non-renewable water resources in total consumption to less than 40 percent in that year.

3.2.6.2 Strategic Challenges and Key Issues

The prevailing environment in the Kingdom means that water must be considered as the most critical natural resource. Total consumption of water in the Kingdom increased 7.5 times during the period 1400/01 (1980)-1420/21 (2000) due to population growth and the pattern of consumption in the domestic sector as well as increased consumption by the producing sectors, particularly agriculture. Growth of domestic agricultural production, particularly wheat, barley and fodder, is the main reason for the increased demand for water, besides the increased growth of cities, towns and villages and the changing patterns of population life styles, as well as industrial growth.

- Forecasts of Sectoral Demand for Water

Total demand for water in the Kingdom reached 21.07 bcm in 1420/21 (2000) and is expected to increase at an average annual rate of 1.3 percent during the Seventh Plan to reach 22.48 bcm in 1424/25 (2004). Demand is expected to grow at an annual rate of 1.4 percent to reach 27.76 bcm in 1440/41 (2020), (see Table 3.4). Forecasts of sectoral demand for water up to 1440/41 (2020), including domestic, industrial and agricultural sectors, are discussed below:

Domestic Sector: Total supplies of potable water in the Kingdom reached 1.80 bcm in 1420/21 (2000), of which desalinated water constitutes 44 percent, with the remainder coming from ground and surface water. Taking into consideration the population growth projections as a key factor of demand in this sector, the consumption of water for domestic purposes is expected to reach 2.03 bcm in 1424/25 (2004), rising to 3.1 bcm in 1440/41 (2020), at average annual growth rates of 2.4 percent and 2.8 percent respectively (Table 3.4). With the increasing role of desalinated water as a source which supports ground water in meeting this demand, the great challenge is to raise the economic efficiency of the desalination industry and reduce the costs of production on the one hand, and to develop ground and surface water resources, on the other hand, in order to raise the efficiency of the integrated system of production, transport and distribution operations.

Industrial Sector: Due to large and steady expansion of the industrial sector in the Kingdom and the importance of this sector for economic and social development, the

industrial demand for water is expected to grow at higher rates during the next two decades. Estimates indicate that industrial consumption of water will increase during the Seventh Plan from 0.47 bcm in 1420/21 (2000) to 0.6 bcm in 1424/25 (2004) and to 1.66 bcm in 1440/41 (2020), at average annual growth rates of 5 percent and 6.5 percent respectively (Table 3.4).

Reclaimed water is expected to play a major role in supplying water for this sector in the future. The potential for this source of water supply is substantial judging by the experience of the industrialized countries. The reuse of reclaimed water for industrial purposes in Japan constitutes more than 76 percent of the total consumption, about 40 percent in Britain, and about 30 percent in the State of Arizona in the USA.

Agriculture Sector: Agriculture is still the main consumer of water in the Kingdom with a share of about 90 percent of total water consumption for all purposes. Agricultural water consumption for irrigation purposes reached 18.8 bcm in 1420/21 (2000). However, this level could be reduced substantially by adopting appropriate irrigation technologies as well as efficient techniques for management of irrigation projects. Furthermore, agriculture policies of the Kingdom, which call for reducing production of high water consuming crops and concentrating on crops which need less water, will continue within the context of available water resources in the long-run. Given the aforementioned factors, water consumption in the agricultural sector is expected to grow at an average annual rate of 1.1 percent during the Seventh Plan from 18.8 bcm in 1420/21 (2000) to 19.85 bcm in 1424/25 (2004) or at a rate of 1 percent per year in the long-run to reach 23 bcm in 1440/41 (2020) (Table 3.4).

Table 3.4
Projections of Demand for Water for Different Purposes (*)
1420/21-1440/41 (2000-2020)

	Billion Cubic Meters			Average Annual Growth Rate %	
	1420/21 (2000)	1424/25 (2004)	1440/41 (2020)	Seventh Plan 1420/21-1424/25 (2000-2004)	Long-Term Perspective 1420/21-1440-41 (2000-2020)
Domestic Sector	1.80	2.03	3.10	2.4	2.8
Industrial Sector	0.47	0.60	1.66	5.0	6.5
Agriculture Sector	18.80	19.85	23.00	1.1	1.0
Total Demand	21.07*	22.48*	27.76**	1.3	1.4

* *MOAW estimates.*

** *MOP estimates.*

3.2.6.3 Major Themes and Long-Term Policies for Management of Water Resources

First Theme: Managing Demand for Water and Maintaining Water Balance

In order to meet the increasing demand for water, agencies concerned will prepare an integrated program within a long-term plan for the development and utilization of water resources. This plan shall ensure the continuity of agricultural production and industrial expansion in the long run, along with meeting the population's need for water. This entails taking a series of steps in different directions.

Priority will be given to water conservation through reducing losses from transmission and distribution networks. The private sector will also be invited to develop and operate the networks as part of the service privatization process. The national interest requires the conservation of water and rationalization of its use through ensuring that water rates are consistent with production and distribution costs, with due emphasis being given to cultivation of high value added crops which can be irrigated from renewable sources while avoiding cultivation of crops which require intensive use of water.

Second Theme: Developing Water Resources and Enhancing Water Supply

Non-Renewable Groundwater

As groundwater is the basic water resource in the Kingdom, efforts will be made for its optimal utilization and conservation, through the following measures:

- * Conducting exploratory and geological studies to determine the volume and prospects of this resource along with studying means for its development and conservation;
- * Abiding by the government's policy of protecting water sources against all types of pollution through strict enforcement of pertinent regulations and rules;
- * It is imperative, in preparing the feasibility studies of all new agricultural and industrial projects, to consider water as an element of basic cost evaluated on the basis of the marginal cost of alternative sources.
- * Developing a unified information base for water sources covering data about quantity, quality and utilization rates provided that this data base shall be available to all concerned agencies as well as scientific and research agencies.

Wastewater

The volume of treated wastewater has reached 1.5 million cubic meters/day, of which 340,000 cubic meters/day is used for agricultural purposes, or only 23 percent. Thus, there is wide scope for long-term utilization of treated wastewater. This activity will be

developed within the national wastewater program, which aims at raising the coverage rate of population served by wastewater projects to 60 percent in the medium-term and to more than 90 percent in 1440/41 (2020).

The private sector is expected to be provided with the opportunity of establishing water networks, treatment of wastewater and re-use of treated water for agricultural and industrial purposes.

Desalinated Water

The evaluation of available and sustainable long-term alternatives indicates that desalinated water will likely constitute the basic and primary water resource required for the development process. The desalination industry not only substantially augments existing water sources, but future technologies are also promising for the prompt solution of water shortages. In the long-term, water desalination may become possible using renewable energy sources such as solar energy, wind energy and nuclear fusion energy, thereby providing sustainable potential for water desalination.

During the coming two decades, the desalination industry based on normal energy sources (oil, gas and electricity) will witness substantial growth with the participation of the private sector. Opportunities will be provided for private companies to establish water desalination plants and dual-purpose plants (water and electricity) within a competitive market for the provision of water and electricity, thereby leading to improved economic efficiency and reduced costs.

Third Theme: Regional Cooperation

The issue of limited water resources in the medium and long-terms is considered as a regional issue that is one of the most prominent challenges facing socio-economic development in the world, in general, and the Middle East, in particular. Cooperation between neighboring countries in the field of development and management of new water resources is expected to be among the major areas of future regional and international cooperation. The activities of scientific research and technology development, and the exchange of experience in the development and management of water resources may constitute the most prominent areas of this cooperation.

The growing coordination and integration among countries in the regions, along with growing exchange and participation activities among these countries, will pave the way for various patterns of cooperation in the future regarding the provision of water resources.

3.2.7 Role of Science, Technology and Information Technology in Future Development

3.2.7.1 Long-Term Perspective

In the coming two decades, the Kingdom is expected to face several challenges at both

domestic and external levels that must be addressed through a comprehensive and clear vision for the various aspects of the Saudi economy, including science, technology and informatics.

In this context, the successive five-year development plans have concentrated on implementing a specific strategy for developing this sector and building a national science and technology base capable of innovation as well as dissemination and adaptation of technology. The Kingdom will prepare a comprehensive future vision for science, technology and informatics system within an overall long-term national plan covering the following elements:

- 1- Reducing the technological gap between the Kingdom and industrialized countries by 1440/41 (2020) through encouraging R & D activities in the various technological areas and upgrading national skills in vital development activities.
- 2- Dedicating science, technology and informatics to the development of human resources and upgrading their standards to international levels capable of dealing with advanced technologies.
- 3- Acquisition of strategic technologies, particularly those related to water desalination, food production and defense.

3.2.7.2 Strategic Challenges and Key Issues

Rapid scientific and technological developments, particularly in the field of information technology and advanced materials technology (atomic and molecular engineering) will affect all aspects of economic life. The twenty first century will witness accelerated growth in scientific inventions and technological applications, particularly in those fields which will deepen economic and cultural globalization and provide promising opportunities for sustainable development. They will also bring more challenges.

The challenges which will face the Kingdom in the fields of science, technology and informatics, and which should be addressed during the next two decades, could be summarized as follows:

- 1- Increased significance of intellectual property protection and its relevant impacts on the Kingdom.
- 2- The tendency towards further privatization of scientific research will require encouragement of the private sector to undertake research and development activities, as well as identifying the respective fields of research and development which should be undertaken by the public and private sectors.
- 3- A change of emphasis from dependence on investment returns from production to dependence on returns from research and development, which may require new corporate structures, organizations and work priorities in the Kingdom.
- 4- Accelerated innovations and technological advances will affect corporate plans in the Kingdom and the process of negotiating technology transfers.

- 5- Increased global expenditure on research and development (in both public and private sectors) as a percentage of GDP that must be reflected in the science and technology strategy of the Kingdom.

3.2.7.3 Central Themes and Long-Term Policies

To develop the Kingdom's own scientific and technological capabilities, it is very important to prepare long-term plans, strategies and policies which aim at identifying scientific and technological development trends in the Kingdom. This will entail the mobilization of necessary resources and capacities within a comprehensive plan for science and technology and a similar plan for informatics. Work has already started on the preparation of these two plans in cooperation between KACST, the Ministry of Planning and related agencies.

The long-term science, technology and informatics plan, which extends up to 1440/1441 (2020), comprises the following themes and long-term policies:-

Theme # 1: Developing Science and Technology (S&T) System and Enhancing Awareness

Emphasis will be laid on the adoption of a comprehensive plan for development of the S&T system by ensuring integration of its elements and consistency of its plans and linkages, and on promoting S&T awareness among citizens by all means and at all levels. This theme could be dealt with through the following policies:

- 1- Coordinating the efforts of S&T system elements, research and development, and acquisition of technology as well as supporting technological services.
- 2- Establishing intermediate institutions between the elements of S&T system such as engineering development laboratories, technological development centers, technology finance funds, and incubators.
- 3- Disseminating a S&T culture broadly among citizens through various information media.
- 4- Developing various means of S&T awareness, upgrading capabilities of staff and ensuring continuous upgrading of quality in order to attract all segments of society.
- 5- Including the fundamentals and concepts of scientific research, technological development and informatics in the curricula of general and university education.
- 6- Using the Arabic language in scientific research and technological development and translating international scientific and technological books into Arabic.

Theme # 2: Supporting Scientific Research and Technological Development

Enhancing national strategic and development research capabilities in fields such as electronics, petrochemicals, pharmaceuticals manufacturing and water desalination will stimulate the producing sectors and increase non-oil exports as well as contribute to import

substitution. This theme includes the following policies:

1. Continuing to support scientific research and technological development related to water resources (conventional and unconventional) in order to preserve, develop and utilize those resources in an optimal manner.
2. Supporting scientific research and technological development related to desalination and treatment of wastewater.
3. Paying attention to research and technology necessary for enhancement of the Kingdom's defense and security capabilities.
4. Pursuing scientific and technological developments in the field of electronics, information technology and telecommunication so as to embark on research and development of strategic significance to the Kingdom.
5. Conducting studies and research pertaining to natural resources and environmental protection.
6. Supporting research and development needed to achieve permanent and competitive growth in the major sectors (oil, gas, petrochemicals, agriculture, transport, telecommunications, electricity and desalination).

Theme # 3: Transfer, Endogenization and Creation of Own Technology in the Kingdom

Transfer of technology has become increasingly dependent on specific plans and programs that classify the needed technologies according to their strategic positions, and seeking to endogenize and develop them locally according to domestic capabilities and conditions. This could be achieved through the following policies:

- 1- Monitoring advanced technologies in all fields.
- 2- Paying attention to selection of appropriate technologies for sustainable development in the Kingdom and supporting their transfer and effective application in the Kingdom.
- 3- Encouraging transfer of advanced technologies from universities and national research centers to producing and services sectors.
- 4- Developing negotiation capabilities and setting regulatory rules to ensure actual transfer of technology when implementing investment projects.
- 5- Enhancing the means and methods needed to endogenize technology in the Kingdom in a manner that allows full assimilation and adaptation of imported technology.

Theme # 4: Supporting and Encouraging Innovation, Invention, Talent and Intellectual Products

Investing in outstanding national talents will lead to the formation of a team of excellence

in science and technology, thereby expanding the S&T base in the Kingdom. This theme could be addressed through the following policies:

- 1- Nurturing local talent, particularly in the field of science and technology.
- 2- Encouraging the adoption of new local and international inventions by the private sector.
- 3- Implementing cooperative education programs in all technical education and vocational training institutions.
- 4- Attracting talented individuals to join research centers.
- 5- Demonstrating the talents and innovations of talented individuals in different information media.
- 6- Enhancing the role of the family, the school and society in discovering and nurturing talented individuals.

Theme # 5: Increased Utilization of S & T Cooperation Programs

During the next two decades, the Kingdom will concentrate on supporting and developing all types of S&T cooperation with the Gulf, Arab and Islamic countries as well as advanced countries and international organizations, through adoption of the following policies:

- 1- Making use of bilateral and multilateral agreements signed between the Kingdom and countries which are scientifically and technologically advanced, in developing the fields of priority for the Kingdom, such as petrochemicals, telecommunications, electronics, water, mineral resources and environment.
- 2- Making optimal use of the training opportunities, technical consultations and other services provided through bilateral agreements and the various international organizations.
- 3- Making use of the opportunities provided by the new global directions in the techniques of scientific and technological cooperation.
- 4- Enhancing S & T cooperation among the GCC countries in order to achieve full integration in the field of S & T, and increasing bilateral and joint cooperation with Arab, Islamic and other friendly countries in the field of S & T.

CHAPTER FOUR

STRATEGIC DIRECTIONS OF THE SEVENTH DEVELOPMENT PLAN

4. STRATEGIC DIRECTIONS OF THE SEVENTH DEVELOPMENT PLAN

The strategic directions of the Seventh Plan comprise dimensions of development, domestic and international challenges, general objectives and strategic bases of the Plan and their focus, and the key issues as shown below:

4.1 DIMENSIONS OF DEVELOPMENT

In its planning for development, the Kingdom has adopted a long-term strategy that serves as a framework for successive development plans. Thus, each plan was designed to address prevailing conditions and to meet the challenges of the plan period, while building on previous planning experience to mobilize resources and capabilities to meet the challenges of the next stage.

As a result, each five-year plan was launched to consolidate the achievements of preceding plans and to lay the groundwork for subsequent plans, thus maintaining consistency and continuity in the planning process while also identifying favorable opportunities to realize the objectives of development with its economic, social and institutional dimensions. The Seventh Development Plan, therefore, reinforces this basic feature of the development process while providing sufficient flexibility to respond to prevailing conditions and new developments in domestic, regional and international arenas.

4.2 DOMESTIC AND INTERNATIONAL CHALLENGES

The Seventh Development Plan acquires a special significance as it will be implemented at a time when the national economy has completed its first hundred years, during which it has demonstrated its resilience and capacity to deal with international and domestic developments and is now preparing to move confidently towards its second centenary. It is noteworthy here that the following significant features loom large in the economic horizon of the twenty-first century:

- The growing trend of economic “globalization” marked by increased integration and linkages between various sectors and activities of the global economy, and the growth in world trade as a result of international trade liberalization.
- On-going revolutionary breakthroughs in information and telecommunications technologies resulting in enormous progress in data and information processing, storage, retrieval and transmission facilities that provide domestic and global high speed flows of information at affordable costs.
- The growing importance of science and technology as an essential means of achieving economic gains in the context of increasing competition at both domestic and international levels.
- Unstable international financial, foreign exchange and raw materials markets and the resulting sharp fluctuations in prices and revenues.

- The unification of the monetary system and the emergence of the new single currency (EURO) of the European Union (EU), with its increasing importance as an international trade block alongside other trade blocks such as NAFTA and APEC.

Because the Kingdom adopts the philosophy of a free market economy which is open to and interactive with the global economy, the Saudi economy has come to constitute an effective element in international trade transactions in harmony with the various trends in the world economy, such as the formation of the aforementioned economic blocks and international agreements such as the WTO and others.

At the domestic level, continued rapid population growth brings increased demand for government services and growing pressure on infrastructure and on education, training and health services, along with a growing number of new entrants to the labor market. Further consideration will be given to these issues in the Seventh Plan. On the other hand, these growth-related demands at the domestic level can be effectively met by a free market national economy that is firmly bolstered by a mature and well developed private sector which enjoys adequate technical and investment capacities and which contributes effectively to economic activity by efficiently satisfying the social demand for various goods and services. The government's initiative in implementing the privatization program has been a forward step in this direction with the aim of expanding the scope of private sector participation and enhancing its leading role in the development process. Furthermore, the Kingdom enjoys the benefit of an advanced system of infrastructure facilities and other economic services which enhance the level of economic activity and boost its efficiency.

4.3 GENERAL OBJECTIVES AND STRATEGIC BASES

Against this background of domestic and international conditions, the General Objectives and Strategic Bases of the Seventh Development Plan 1420/21-1424/25 (2000-2004) have been formulated to reflect and affirm the development approach adopted in the previous plans, based on free market principles and in accordance with Islamic teachings and values. Thus, the General Objectives and Strategic Bases of the Seventh Plan emphasize the safeguarding of Islamic values and confirming Allah's Sharia (God's Divine Law), upholding national security and social stability, continuing with the development and utilization of Saudi human resources, providing basic services to citizens including education, health and social care services, diversifying the national economic base, encouraging the private sector, completing infrastructure development in conformity with the growing demand for such facilities and realizing comprehensive and balanced growth throughout the Kingdom's regions.

4.3.1 GENERAL OBJECTIVES

The General Objectives of the Seventh Development Plan 1420/21-1424/25 (2000-2004) approved by the Council of Ministers' Resolution No. (58) dated 28/3/1420 based on the

Shoura Council recommendation included in its decree No. (30/34) dated 17/9/1419, state the following:

- To safeguard Islamic values by duly observing and endeavoring to confirm and disseminate Allah's Sharia (God's Divine Law);
- To defend the Faith and the Nation; to uphold the security and social stability of the Kingdom; and to deepen the values of national loyalty and belonging;
- To improve the services provided to Hajj and Umrah performers so as to facilitate easy performance of religious rites and support economic activity;
- To provide an appropriate range of services to enable the individual citizen to become more productive and capable of a positive contribution, and to expand the provision of basic services to citizens in education, health and other services along with diversifying the means of financing and managing such services;
- To develop human resources and continually ensure an increasing supply of manpower; upgrading its efficiency through training to meet the requirements of the national economy, and replacing non-Saudi manpower with Saudis;
- To promote cultural and informational activities to keep pace with the Kingdom's development;
- To continue to achieve balanced growth throughout all regions of the Kingdom, and increase their contribution to national development;
- To enhance the private sector's participation in socio-economic development;
- To prepare the national economy to adjust in a more flexible and efficient manner to economic changes and international developments;
- To reduce dependence on the production and export of crude oil as the main source of national income, and to increase the value added to crude oil prior to exporting;
- To diversify the sources of national income and to expand the production base of services, industry and agriculture;
- To develop mineral resources and to encourage discovery and utilization thereof;
- To complete infrastructure projects necessary to achieve overall development, to maintain them and improve their performance and methods of finance;
- To keep abreast of developments in science, technology and information technology, and to encourage research, development and technology assimilation;
- To continue to protect the environment against pollution and develop appropriate systems; and to preserve natural resources and conserve wildlife;
- To promote integration among the Gulf Cooperation Council (GCC) countries and to strengthen the Kingdom's relations with Arab, Islamic and friendly countries.

4.3.2 Strategic Bases

The aforementioned resolutions of the Council of Ministers and the Shoura Council identified 17 strategic bases and 97 policies for implementation of the Plan's general objectives, which are attached in full as an appendix at the end of the plan document.

4.3.3 Areas of Emphasis and Central Themes

The basic emphasis of the Seventh Plan is derived from the general objectives and strategic bases approved by the Council of Ministers, which focus on the most significant domestic and global issues and developments expected to be faced by the Saudi economy over the Seventh Development Plan period. Moreover, the general objectives and strategic bases of the plan also confirm the basic features of the development approach adopted by the Plan, with its priority on the development and increased utilization of human resources in conformity with previous plans' attention to this vital strategic resource, with the development of citizens' capabilities and the realization of their aspirations being the ultimate goal of development. In this context, the fifth objective of the plan states *"To develop human resources and continually ensure an increasing supply of manpower, upgrading its efficiency through training to meet the requirements of the national economy, and replacing non-Saudi manpower with Saudis"*. Similar attention is also given to the educational, health and social sectors with the aim of ensuring such basic services, whereas the fourth objective states *"To provide an appropriate range of services to enable the individual citizen to become more productive and capable of a positive contribution, and to expand the provision of basic services to citizens in education, health and other services along with diversifying the means of financing and managing such services"*. In this connection, the Second Basic Strategic Principle states *"To improve efficiency in the production of services, utilities and products which the government provides for citizens both directly (such as education, health, municipal and security services) and indirectly (such as water, electricity, transportation and basic commodities)"*.

Since the Kingdom has already taken substantial practical steps in its privatization strategy that will encourage a new dynamism in the economic environment based on private sector initiatives to meet society's needs for goods and services, the Objectives of the Seventh Development Plan assign special significance to the continued implementation of the privatization policy in its various forms. This drive is highlighted in the Plan's eighth objective which states *"To enhance the private sector's participation in socio-economic development"* and the third basic strategic principle which states *"Continue the policy of giving the private sector the opportunity to undertake many economic and social tasks of the government, on condition that this would result in real benefits through lower costs, better performance and employment opportunities for Saudi citizens"*.

Furthermore, the General Objectives and Strategic Bases of the Seventh Plan encompass new objectives. In serving the Islamic Faith and caring for the interest of Muslims, a new

(third) objective has been added: *“To improve the services provided to Hajj and Umrah performers so as to facilitate easy performance of religious rites and support economic activity”*. This objective derives its significance from three basic facts which are:

- First:** The continuous keenness of the government of the Custodian of the Two Holy Mosques to upgrade the standard of services provided to Hajj and Umrah performers.
- Second:** The steady increase in the number of Muslims who travel to the Two Holy Mosques due to natural factors (population growth), and economic factors, a matter which entailed the continuous expansion of the services provided to Hajj and Umrah performers.
- Third:** To enhance the activities of the domestic economy so as to ensure services and benefits for Hajj and Umrah performers.

The Seventh Development Plan also gives particular attention to enhancing technological advancement and building a national science and technology base. Accordingly, the Fourteenth Objective of the Plan states *“To keep abreast of developments in science, technology and information technology, and to encourage research, development and technology assimilation”*, while the Fourteenth Basic Strategic Principle states *“Establishing a national science and technology base capable of innovating and inventing as well as adapting technology”*.

In recognition of the significant interaction and interdependence between environment and development, the Fifteenth Objective of the Plan states *“To continue to protect the environment against pollution and develop appropriate systems; and to preserve natural resources and conserve wildlife”*.

Special attention is given by the plan objectives to the maintenance of existing infrastructure, as an essential requirement for raising its efficiency and attaining the maximum output levels compatible with design capacity. In recognition of the importance of comprehensive maintenance in prolonging the life span of infrastructure facilities, the Seventh Plan has set a basic strategic principle exclusively for the purpose of maintenance. The plan’s Fourth Basic Strategic Principle calls for *“Emphasizing the maintenance of existing infrastructure in a proper operational condition with maximum efficiency of utilization and minimum costs”*. Policies developed for this basic strategic principle emphasize that projects must include provision for future operation and maintenance programs, and that particular attention should be given to the costs of operation, maintenance and renovation following decisions on the economic feasibility of the projects involved. The second policy of the Fourth Basic Strategic Principle specifically stipulates *“Reducing the costs of maintenance through standardizing specifications whenever possible and feasible”*.

Voluntary services receive special attention in the objectives of the plan, which has dedicated a separate strategic base comprising a set of policies for their realization. In this

respect, the Fifth Basic Strategic Principle states: *“Developing voluntary services, inculcating the concept and significance of such services on the part of individual citizens, and improving their methods and performance techniques”*.

With respect to education and training services, as well as health and social services, the objectives of the plan stress the need to develop such services based on accurate quantitative and qualitative projections of population developments and their geographical distribution. Thus, the Fifteenth Basic Strategic Principle states: *“Adopting a population policy that takes into account quantitative and qualitative population variables and their geographical distribution, and enhances the correlation between population variables and economic and social development”*.

The significance of this basic strategic principle stems from the following aspects:

1. The steady increase in the demand for social services resulting from population growth and the young age structure of the Saudi population, as well as growing social awareness.
2. The volume of the available resources which necessitates adoption of scientific methods in providing required social services primarily based on optimal utilization of available capacities (in existing public utilities) as well as expansion and development of such resources on a scrutinized basis.

The Seventh Development Plan also focuses on the continuous upgrading of Saudi manpower skills and development of their productive capacities to deal effectively with various technological developments. The Sixteenth Basic Strategic Principle states: *“Emphasizing training and upgrading of manpower to raise labor productivity, thereby achieving optimal utilization of technology and equipment used in development activities”*.

This strategic principle and its related policies constitute an important element of the Seventh Plan’s strategy aimed at preparing the Saudi economy for the stage that follows the Kingdom’s joining of WTO and the greater integration of the national economy within the global economy. The implementation of this strategic principle will lead to the steady upgrading of Saudi manpower skills through training and re-training, developing their production capabilities and enabling them to deal efficiently with production technologies and equipment in use, thereby enhancing the competitiveness of national products in domestic and export markets through lower costs and higher quality, and providing the Saudi economy with the flexibility needed to respond to changes in the structure of domestic and global demand. Moreover, this strategic principle is an effective instrument for accelerating the process of Saudiization.

The Seventh Plan focuses on the concept of rationalization as a means for realizing economic efficiency in the use of resources at both production and consumption levels and the elimination of waste. The plan’s Seventeenth Basic Strategic Principle calls for *“Concentrating on rationalization as a basis for supporting socio-economic development”*. This important strategic principle lists several policies designed to raise efficiency, including:

- Ensuring the optimal utilization of existing facilities and services in all regions of the Kingdom.

- Increased application of advanced technology for conservation of critical natural and economic resources and improvement of their utilization efficiency.
- Enhancing public awareness of the importance and benefits of optimum resource use in general, and of water and energy in particular.

In the domain of foreign policy, the Sixteenth Objective of the Plan states: *“To promote integration among the Gulf Cooperation Council (GCC) countries and to strengthen the Kingdom’s relations with Arab, Islamic and friendly countries”*.

The Seventh Plan also focuses on the impacts of international economic changes on development, e.g. the Kingdom’s accession to the WTO and the increased interaction of the Saudi economy with the global economic order through the globalization process. In this context, the Ninth Objective states the following *“To prepare the national economy to adjust in a more flexible and efficient manner to economic changes and international developments”*.

4.4 KEY ISSUES

This section reviews and analyses the key issues influencing growth in various sectors of the national economy and the long-term objectives of socio-economic development in the Kingdom. Solutions and alternatives have been suggested for addressing these issues based on the studies prepared by the Ministry of Planning about the structure of the national economy and its various sectors. However, the issues presented here represent only part of the key issues addressed in the Seventh Plan document, as other key issues which are directly related to a specific sector are addressed in the relevant chapter for that sector. The related agencies are expected to study the proposed solutions and implement them during the Seventh Plan period.

4.4.1 Water Issues

The Kingdom’s geographic location in a desert or a semi-desert environment and its arid climatic conditions means that water is a basic factor influencing the social and economic development processes. The scarcity of fresh water resources is a key issue for sustainable development, which has become increasingly problematic for the following reasons:

- The imbalance between available water resources and the rising demand for fresh water resources, particularly non-renewable ground water, to meet basic human needs, as well as demand for various agricultural, industrial and social purposes.
- Limited potential for developing renewable ground and surface water resources, the quantities of which depend mainly on rain.
- The substantial costs shouldered by the government for production of water (desalinated water and reclaimed wastewater).

Despite the achievements made by the water sector throughout the development process, there are many inter-related water issues in the field of its management and

development. These issues deserve further consideration and require effective measures to overcome them. The most important issues are:

- The shortage of water data and information necessitates the establishment of a data base through more detailed studies and research in areas not yet studied in detail, and the updating of previous studies in cooperation with research agencies inside and outside the Kingdom. Such studies could be used as a tool for preparation of a National Water Plan, through which a specific strategy could be prepared for the water sector, identifying the current and future supply of and demand for water and how to achieve balance between supply and demand.
- The need to enhance water conservation measures, to review the rules and regulatory mechanisms and to stress the importance of rationalizing water consumption through all information, educational, administrative, organizational and technical media as well as pricing policies.
- The need for effective coordination among water agencies at the national level, due to the complicated interrelations between the water sector and other development sectors, and the need to prepare alternative policies for those sectors with a greatest influence on the water sector. There is an urgent need to reconsider the administrative structure of the water sector so as to unify all agencies responsible for water into a single independent agency.
- It is necessary to determine water use priorities consistent with an appropriate conservation system and to give priority to domestic users in urban and rural areas, water for livestock and water to meet industrial and agricultural demand within the requirements of sustainable development.
- The need to adopt a strategy for the development of water desalination and wastewater treatment technologies that would help achieve maximum economic efficiency for such a new strategy.
- Increased per capita consumption of potable water in major cities and the apparent gap between the high costs of water production and prevailing water prices.

Water Policies

The Seventh Development Plan stresses efficiency improvements in water management and development through a set of policies for meeting future needs by the most efficient and effective means, taking into account the economic, social and environmental aspects of water. The most important policies are:

- Conserving fresh water resources and adopting advanced water use technologies in order to reduce demand for water and energy used.
- Limiting the expansion of uncontrolled water use for agricultural purposes and conserving non-renewable water reserves.
- Intensifying the development of renewable surface and ground water resources and their optimal utilization as they represent the primary water resource in the Kingdom.

- Adopting a strict policy of enforcing the rules and regulatory mechanisms for water conservation.
- Enhancing data on water resources and establishing a comprehensive water database.
- Analyzing, disseminating and utilizing water data for preparation of an updated National Water Plan.
- Full implementation of the Council of Ministers' Resolution # (9), dated 10/1/1420 AH that approves the Ministerial Water Committee's recommendations calling for endorsement of the general framework for rationalization of water consumption and updating the National Water Plan, as well as reviewing the associated regulatory decisions and measures.
- Improving the methods of operation and maintenance of water facilities in order to achieve maximum efficiency.
- Emphasizing the development of Saudi manpower in the water sector through enhanced training and scholarship programs so as to ensure preparation of qualified technical and managerial manpower in the fields of water management, use, and planning.
- Considering environmental aspects when establishing and operating water facilities as well as avoiding the causes of water resources pollution.
- Consolidating private sector participation in the water sector and enhancing its role in improving the production efficiency of the sector.
- Supporting scientific research and technological development in water desalination and treatment.

4.4.2 Education Issues

*** Absorptive Capacity of Higher Education Institutions**

The rapid growth in secondary level graduates makes it imperative for higher education institutions to find appropriate solutions for this issue through sound policies and measures to increase their absorptive capacities.

The most important policies and measures are as follows:

- Expanding the base of higher education both horizontally and vertically.
- Establishing new channels and patterns of higher education such as open university and distance learning.
- Continuing with opening new community colleges in all regions of the Kingdom, increasing their enrollments and supporting these colleges with physical and human resources.
- Improving internal efficiency of the universities and other higher education institutions and reducing the number of years invested for graduation.

- Encouraging the private sector to establish private universities and colleges.
- Merging the regional branches of universities and consolidating them in independent universities.

* **Internal and External Efficiency of the Education and Training Systems**

The significance of this issue stems from its direct impacts on development of human resources and elimination of Saudiization constraints. The previous five-year development plans achieved some progress on this issue. However, the increasing importance of education and training during the coming stage of development requires that utmost efforts be made to improve internal and external efficiency as follows:

A. General Education

Internal Efficiency

The inverse relationship between the rates of repetition and dropout (i.e. education and training wastage) and the level of internal efficiency of the education or training system, made the previous development plans pay particular attention to the internal efficiency of the education and training system in the Kingdom, pursue the development of these efficiency indicators and propose specific policies for their improvement. However, analysis of the present conditions of the Sixth Plan indicated that the rate of internal efficiency of the general education system in the Kingdom amounted to 78.8 percent, 86.1 percent and 81.4 percent for the elementary, intermediate and secondary stages respectively, thus allowing further room for improvement and development during the Seventh Plan.

B. Technical Education and Vocational Training

Internal Efficiency

Available studies refer to the need for reducing the rates of repetition and dropout as well as the average number of years invested for graduation of students, as they lower the rate of internal efficiency. These studies indicate that the main reasons behind the high rates of repetition and dropout in the technical education and vocational training institutions are the multiplicity of disciplines available for students at the time of enrollment and the students' inability to select the disciplines which match their goals and aptitude, as well as the lack of a coordination unit to receive the applications and distribute admitted students to different institutes.

C. Higher Education

- **Internal Efficiency**

Despite some progress made with respect to internal efficiency of higher education during the Sixth Plan period, the number of years spent by students for graduation and the ratio of graduates to enrollment are still below the desired levels. Hence, further efforts should be devoted during the Seventh Plan to improve the situation.

- **External Efficiency**

External efficiency refers to the degree of response by the educational system to labor market requirements through supplying graduates with appropriate qualifications in adequate numbers to fill the jobs needed by various establishments and economic activities. This response is represented by the number of students graduating from each specialization, the quality of knowledge and skills acquired by the graduate and the degree of consistency with the requirements of the labor market.

Despite the substantial efforts exerted to address this issue, higher education institutions in the Kingdom still need to make further efforts and to take practical steps to improve external efficiency and ensure consistency between the number of students graduating from various specializations and the requirements of the labor market for such specializations. On the qualitative side, low external efficiency is evident in the inconsistency between graduates' skills in some specializations and the skills demanded by the labor market. Such a gap is adversely reflected in the productivity of graduates and their competitiveness in the labor market.

Policies

Chapter 11 of this document identifies specific proposals about the policies and programs aimed at improving the internal and external efficiency of education and training systems in the Kingdom. The main policies and programs are as follows:

* **Improving Internal Efficiency of General Education**

This will be achieved by:

- Adopting the system of automatic promotion through the early grades of the elementary level while maintaining the quality and standard of education.
- Conducting further evaluative studies for the subjects with frequent repetition.
- Using illustration aids to help students with limited capabilities.
- Assessing the effectiveness of general education so as to identify the optimal methods which could influence the educational process and its development.

* **Improving Internal Efficiency of Technical Education and Vocational Training**

This will be achieved by:

- Assisting students to select the specialization that matches their desires and aptitudes. This could be achieved through establishment of a coordination unit for receipt of applications and distribution of students to various institutes.

- Improving institutional and training practices and providing an effective training management in order to establish a better training environment.

* **Improving Internal Efficiency of Higher Education**

This will entail implementing a set of policies, including the following:

- Linking the bursary with the performance and progress of students and encouraging able students who complete their studies within (or in less than) the designated period.
- Upgrading academic capabilities of the faculty staff and researchers and improving their performance.
- Abiding by reasonable teaching load factors and providing opportunities for faculty staff to attend specialized academic symposia and conferences.

* **Improving External Efficiency of the Higher Education Institutions**

This will be achieved through a set of policies, including the following:

- Encouraging students to join scientific and technological colleges.
- Linking higher education programs with the requirements of development and the labor market.
- Providing practical training for higher education students in the public and private institutions as part of the graduation requirements.
- Intensifying the efforts of the Chambers of Commerce and Industry regarding requalifying graduates according to the requirements of development and labor market, in coordination with the Ministry of Higher Education, Universities and concerned agencies.
- On-going assessment of performance of the graduates of higher education institutions by the private sector.

4.4.3 Science and Technology Issues

The Sixth Development Plan period witnessed intensive and effective efforts by the Kingdom in building a national science and technology base. Rising demand for scientific, technological and technical services is expected during the Seventh Development Plan consistent with the ambitious planned growth rates of the producing and services sectors and other anticipated changes and developments. Hence, it will become imperative to remove some constraints and to address some key issues in order to realize the intended standard regarding development, assimilation and endogenization of imported technology to ensure harmony with domestic needs. The most significant issues are:

Local Technological Capabilities

Successive development plans have concentrated on building national technological capabilities through the establishment of necessary infrastructure and appropriate institutions, support of research and development activity at government research and

development centers, encouragement of the private sector to establish research and development units to assimilate and develop imported technology, and addressing related constraints. According to available research surveys, research and development activity in national companies and research and development institutions has been declining. This is attributed to two major reasons: first, national industries prefer to obtain foreign technological solutions to providing or adopting domestic solutions; second, there is no clear mechanism for monitoring and disseminating information on the output of research and development centers.

Coordination Between Research and Development Centers

The absence of a clear mechanism for coordination between research and development centers and the producing sectors results in poor linkages and interactions between the producer and the user of national technological solutions, thus constituting a major constraint on the development of the national research base.

Policies

To address these issues, an integrated set of policies for building a national technological base capable of innovation and invention must be implemented. These policies are:

- To support the process of scientific research and technological development and provide the financial, physical and human resources needed to perform relevant tasks effectively to meet the requirements for comprehensive national security and sustainable development, while enhancing awareness of these tasks.
- To develop the capabilities of the national science and technology system, and the capacity of the producing and services sectors in the identification, transfer, endogenization and production of technology needed for steady productivity growth and improving the competitiveness of these sectors.
- To establish a system for transferring technology and associated scientific equipment with due emphasis on technologies that are appropriate to national requirements and development needs.
- To develop an appropriate and effective mechanism for linking the outputs of R & D centers with the needs of the producing sectors and to introduce new production techniques for enhancing competitiveness and reducing average costs.

4.4.4 Information Technology Issues

All public and private agencies concerned with the development and use of information technology must work together to keep abreast with rapid developments in this field. Efforts should be intensified, during the Seventh Plan, to solve two key issues:

National Information System

Government agencies must work to improve the quantity and quality of information, in terms of its accuracy and timeliness.

- **Information Services**

KACST is responsible for supervising the INTERNET and other information networks, and for the protection of patent rights, and for scientific awareness programs aimed at deepening social awareness and understanding of the significance of science and technology. However, due to society's growing needs at a time of accelerated global developments in information technologies and services, it is imperative to improve the quality of information services and to facilitate easy access by users in the public and private sectors.

Policies

Achievement of the intended development of information services will require the adoption of the following policies:

- Integrating efforts in the field of information and establishment of a national science and technology base.
- Updating the existing rules and regulations in the field of information in line with current developments.
- Supporting and encouraging national industries to increase their contribution to information technologies.
- Introducing and expanding information technologies in public and private sectors.
- Preparing and developing national manpower in the field of informatics.
- Disseminating information services and technologies throughout society and enhancing awareness of information technology.

4.4.5 Productivity and Organizational Efficiency of Government Agencies

Economic growth and rising living standards have been accompanied by population growth and a steady increase in the demand for public services of high quality. At the same time, there is a need to rationalize government expenditure and to limit the size of the public administration so that public services must be delivered in a more efficient way. Raising the efficiency of public services will improve the investment climate and have a positive impact on private sector activities.

Policies

- To reconsider the general organizational structure of government agencies through studying the possible dismantling of agencies that are no longer needed, and combining in a single agency those agencies that perform the same or similar tasks.
- To develop clear objectives and indicators for measuring the performance of government agencies in terms of the volume, quality and timing of their outputs (delivered services) rather than measuring inputs of budget units.

- To develop the internal organizational structures of the government units thereby clarifying the limits of their responsibilities and powers, as well as expediting the process of decision making and enforcement.
- To ensure better coordination between the specializations and activities of the various government units.
- To eliminate duplication and contradiction in performance of government tasks, if any.
- To review and simplify administrative procedures in order to remove bureaucratic complications.
- To provide more flexibility and autonomy to management leaders in making decisions on the use of resources available to them.
- To focus on appropriate criteria for selecting administrative leaders.
- To develop precise and specific criteria to evaluate staff performance, thereby promoting higher productivity and improved performance in line with the nature of their tasks.

4.4.6 Development of Non-oil Revenues

The most important option available for diversifying government income flows and to maintain public revenues against the adverse impacts of sharply fluctuating world oil prices is to increase non-oil revenues. The Seventh Plan pays particular attention to this issue in the thirteenth Basic Strategic Principle and in the following general objectives:

- To reduce dependence on the production and export of crude oil as the main source of national income.
- To diversify the sources of national income and to expand the production base of services, industry and agriculture.
- To develop mineral resources and to encourage discovery and utilization thereof.

The development of non-oil revenues will expand and diversify the sources of funding government expenditure thereby helping to maintain the economic stability necessary for a positive investment climate. Thus, the positive impacts of increasing non-oil revenues are not confined to the public sector only, but also extend to the private sector through encouraging domestic and foreign private investment and reducing risks.

Although non-oil revenues have increased over the course of previous development plans, such improvements are not yet sufficient. Because of the multiple and interlinked economic and social dimensions of this issue, careful study is needed to identify the best alternatives available. Hence, the Seventh Plan will adopt the following policies:

- To reconsider the existing tax system with the aim of upgrading it and improving collection efficiency while avoiding any adverse social impact.

- To review the rules and regulations concerning the collection of customs duties with the aim of simplifying them, improving the efficiency of concerned agencies and increasing government customs revenues without affecting its regional and international commitments.
- To adjust the current charges and fees for government services to ensure they are commensurate with their costs, and to improve the efficiency of agencies responsible for collection.
- To review foreign labor recruitment fees in order to support Saudiization programs.
- To move the balance of payments into surplus in the future, while continuing public and private sector efforts to develop non-oil revenues.
- To encourage private investment (both national and foreign) in the exploration and utilization of untapped mineral resources.

CHAPTER FIVE

**THE NATIONAL ECONOMY IN THE
SEVENTH DEVELOPMENT PLAN**

5 THE NATIONAL ECONOMY

5.1 PREFACE

With the inception of the Seventh Development Plan, the Kingdom embarks on a new phase marked by global and regional circumstances that are totally different from those which prevailed at the outset of the Kingdom's comprehensive development planning in 1390 (1970). Against the background of the fast pace of international developments, and sharp fluctuations in world oil markets in recent years, which had their impact on growth rates, the balance of payments, government revenues, and the widening gap between savings and investment, the Seventh Development Plan has been prepared within the framework of a long-term perspective that outlines the main characteristics of the Kingdom's socio-economic development over the next two decades. Thus, the plan highlights some significant issues whose impacts extend far beyond the duration of the five-year plan and identifies the strategy for addressing such issues, with the aim of ensuring sustainable development in the Kingdom.

In the above context, the Seventh Development Plan was prepared in such a way that the staged development objectives and policies of the plan can be achieved within the context of the Kingdom's long-term strategic planning. The General Objectives and Strategic Bases of the Seventh Development Plan, therefore, emphasize fiscal consolidation and measures to improve the balance of payments, as well as strengthening the competitiveness of the Saudi economy. The Plan also focuses on the structural changes needed to diversify the Kingdom's production base and sources of income and government revenues, while strengthening Saudiization and privatization programs, and boosting Saudi and foreign private investment.

The Seventh Plan's General Objectives and Strategic Bases also underline the drive to increase productivity, upgrade the efficiency of the private sector, and improve performance in the Government sector. Provision is also made in the Seventh Plan to maintain adequate standards of priority public services, such as education and health. The Seventh Plan also lays stress on the requirement to upgrade efficiency in the public and private sectors, increase competition and reduce costs, thereby creating an appropriate climate for the Kingdom's accession to the World Trade Organization (WTO) and its ability to face strong world competition.

In the context of maintaining development achievements, the guidelines for economic development policy in the Seventh Plan have been formulated as follows:

- * Adopt firm and consistent measures to reduce the budget deficit and achieve a current account surplus.
- * Achieve stable and steady growth of the national economy, through intensive structural reform of the economic base, increasing investments, and human resources development, with the aim of attaining sustainable development and steady growth rates over the long-term.

- * Intensify efforts in the areas of privatization, Saudiization and economic diversification in order to improve productivity, enhance the economy's competitiveness, boost the private sector's contribution to GDP and replace non-Saudi labor with Saudi manpower.
- * Maintain adequate levels of monetary liquidity, upgrade the efficiency of the banking sector, and increase credit facilities to the private sector, with the aim of boosting investment, while maintaining low inflation and ensuring stability of the Saudi Riyal.

Table 5.1 contains a summary of the major macroeconomic indicators of the Seventh Plan.

Table 5.1
Main Macroeconomic Indicators in the Seventh Plan

	Share in GDP (%)		Average Annual Growth Rate (%) (at constant 1994 prices)
	1419/1420 (1999)	1424/1425 (2004)	
<u>GDP (Constant Prices)</u>	100.0	100.0	3.16
- Crude Oil & Natural Gas	31.0	28.2	1.21
- Non-oil Private Sector*	50.6	55.4	5.04
- Government Services	17.8	16.2	1.21
- Import duties less bank service charges.	0.6	0.2	(16.0)
<u>Expenditure on GDP (at current prices)</u>	100.0	100.0	
- Domestic Final Demand	87.7	84.4	3.42
- Final Consumption	65.0	59.0	2.2
Private Final Consumption	38.8	36.0	2.94
Government Final Consumption	26.2	23.0	1.00
- Gross Fixed Capital Formation	22.7	25.4	6.85
Private Investment	15.3	18.3	8.34
Government Investment	5.7	5.8	4.57
Oil Investment	1.7	1.3	(0.27)
- Goods and Services Export Surplus:	10.0	13.8	1.0
- Exports	41.4	44.3	2.74
- Imports	31.4	30.5	3.30
- Change in stocks:	2.3	1.8	--
<u>Current Account Balance at current prices</u>	(3.0)	6.9	--

* *Includes oil refining and excludes bank service charges.*

Table 5.1 includes a summary of the main macroeconomic indicators of the Seventh Development Plan which include the achievement of the following quantitative objectives:

- (A) Achieve an average annual GDP growth rate of 3.16 percent in constant 1414/15 (1994) prices through sustained and dynamic expansion of the non-oil private sector which is expected to grow at an average annual rate of 5.04 percent.
- (B) Achieve a real annual investment growth rate of 6.85 percent during the plan period, thereby increasing investment's share in GDP from 22.7 percent in the base year 1419/20 (1999) to 25.4 percent by the end of the plan in 1424/25 (2004). The private sector is expected to invest about SR 478.48 billion, which constitutes 71.2 percent of the total investments of the Plan. The share of private investment in GDP will, therefore, increase from 15.3 percent in the base year to 18.3 percent by the end of the plan.
- (C) Improve the current account position in the balance of payments, turning the deficit of -3.0 percent of GDP reported in the plan's base year of 1419/20 (1999) to a surplus of about 6.9 percent of GDP by the end of the Plan period in 1424/25 (2004).

Achievement of the Seventh Plan development objectives requires collaboration between the public and private sectors, as well as the adoption of policies which support the following directions:

- * Enhance production capacities of the various sectors of the national economy, through implementation of feasible investments and selection of suitable and effective technologies.
- * Enable the private sector to utilize the opportunities that emerge as a result of increased integration of the national economy into the global economy, particularly following the Kingdom's accession to WTO.
- * Develop human resources and improve labor market efficiency in order to ensure full employment and optimal allocation of such resources.
- * Rationalize the use of economic resources, particularly critical ones (such as water), in all areas of production and consumption.
- * Mobilize the private sector's own financial resources through expanding the scope of the domestic stock market.

5.2 ECONOMIC POLICIES

Accelerated socio-economic development is closely tied to economic policies, particularly under increasing global trends towards the market economy, liberalization of international trade and the growing role of the private sector. Against this background, a policy-oriented planning approach has been adopted which is supported by a set of advanced macro-economic models with emphasis on the objectives, policies and measures that ensure the realization of overall economic efficiency (in investment, production and institutional terms) in both the public and private sectors, instead of concentrating on

government expenditure. This shift is considered a unique feature of the Seventh Development Plan which targets acceleration of socio-economic development in light of the changes and developments that are taking place at the domestic, regional and international levels. These policies are reviewed below.

5.2.1 Incentives and Regulatory Developments

The Kingdom has a good track record in stimulating the activities of the private sector. Foremost among the Kingdom's policies in this respect has been the direct financial subsidies granted to selected private sector activities, particularly in agriculture, as well as indirect financial support such as soft loans to agricultural and industrial activities and to the construction sector. Furthermore, the private sector has benefited from the infrastructure network developed through substantial state expenditure. Over the past decade, however, many countries have embarked on vigorous policies to improve incentives offered to the private sector and have enhanced their competitiveness in attracting foreign direct investments. Against this background, the incentives offered to stimulate economic activities of the private sector in the Kingdom will be improved substantially during the Seventh Development Plan by benefiting from relevant international experience. Measures in this area will be designed to enhance accelerated growth of the national private sector's activities, while seeking, in the meantime, to boost the Kingdom's competitiveness in attracting foreign investments, which play a significant role in expanding the production base of the national economy, facilitating the transfer of advanced technologies, accelerating economic growth and expanding employment opportunities for citizens. The plan recognizes that success in attracting foreign capital hinges upon such factors as:

- Development of investment laws, particularly the foreign capital investment law, to be competitive at both regional and international levels.
- Preparation of an investment climate that is characterized by economic stability.
- Provision of reasonable tax incentives that are competitive at international level.

As a first step towards improving and developing the investment environment and appropriate incentives, the Kingdom is currently studying a draft investment promotion regulation that will take into account prevailing international conditions and will be internationally competitive in attracting foreign investment.

Among the measures that will be studied during the Seventh Development Plan period, in the context of the government's efforts to improve the investment climate and develop incentive mechanisms are:

- * Establishment of a "one stop shop" system where all administrative procedures required to start up a new business are processed in one place as fast as possible.
- * Simplification of administrative procedures in concerned ministries and agencies to speed up decisions. The aim will be to create a system with a set of clear and easily understood rules that are applied in ways similar to business practices in advanced countries.

- * Customs clearance procedures will be simplified.
- * All laws and regulations affecting foreign and domestic firms will be published.
- * Procedural aspects for settling commercial disputes will be reviewed.

In parallel with efforts to streamline rules and regulations, intensive efforts will be made to disseminate information on various economic, regulatory and procedural aspects related to private economic activity, both domestic and foreign, in the Kingdom. These efforts will be aimed at familiarizing potential investors with these aspects as well as the advantages and unique characteristics of investment in the Kingdom.

5.2.2 Fiscal Policy

The objectives of the Seventh Development Plan's fiscal policy are:

- * To contribute to improving the performance of the national economy and to prepare it to adjust in a more efficient and flexible manner to domestic, regional and international developments.
- * To contribute towards attainment of a high level of employment, and expedite Saudiization programs in both the public and private sectors.
- * To increase non-oil government revenues and to reduce the budget deficit to the lowest possible level.
- * To maintain the cost of living at a moderate level, and to keep inflation at the minimum possible level.
- * To rationalize government expenditure and subsidies (both direct and indirect) and to develop the existing tax system.

Achievement of these objectives requires that the following policies and measures be pursued:

1. Achieve balance between government revenues and expenditures through:
 - Reducing the budget deficit to the lowest possible level over the plan years, through rationalizing and reducing government non-investment expenditure, maximizing government revenue wherever possible, and financing the deficit (if any) through issuing development bonds.
 - Developing an adequate mechanism for attaining long-term fiscal stabilization, in order to avoid the adverse effects of fluctuations in government oil revenues.
2. Use surpluses of government oil revenues to reduce the public debt and to consolidate the Kingdom's foreign reserves.
3. Maintain strict adherence to approved expenditure limits, ensuring that the limits set are not exceeded during the fiscal year. Emergency and essential increases should be funded through transfers from other allocations.

4. Expand application of the various privatization models that have proved successful, and select new areas and modalities that are suitable for future privatization, in line with the objectives, measures and considerations set forth in the Council of Ministers' decree No. 60 dated 1/4/1418.
5. Continue to rationalize prices of public utility services.
6. Gradually reduce subsidies in conformity with the Kingdom's future obligations to WTO. In the meantime, efforts should be made to increase technical assistance provided to productive projects in areas of research, development and guidance.
7. The development funds will continue to play their positive role in providing loans for individuals and companies, provided that the total value of loans be within the limits of repayments, 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 domestic resources in the implementation and operation of projects.

5.2.3 Monetary Policy

The objectives of monetary policy in the Seventh Development Plan are:

- * Maintaining stable prices and ensuring adequate liquidity in line with macroeconomic developments, as well as ensuring an appropriate environment for investment.
- * Continuing to maintain a stable banking system and enhancing its efficiency and competitiveness to enable it to meet the challenges resulting from the Kingdom's accession to WTO.
- * Developing and upgrading the efficiency of financial markets to enable them to perform an effective role in the future privatization process, along with enhancing the efficiency of the private sector's role in the development process.

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

1. Maintaining the purchasing power of the Saudi Riyal and stability of exchange rates in domestic and international markets.
2. Providing local liquidity according to the actual requirements of economic activity within a framework free of inflationary pressures, through controlling the growth of money supply in line with the development of relevant economic variables, while engaging in open market operations (buying and selling government bonds) and adjusting the legal reserve ratio, as key instruments of this policy.
3. Enhancing the efficiency and supervision of the banking system to ensure its soundness and maintain its resources, while promoting its support of the national economy and removing constraints that impede the flow of bank credits to the private sector along with developing the rules and regulations governing bank lending, in addition to encouraging Saudiization in banks and financial institutions.

4. Continue supporting the Credit Risk Center established by SAMA to increase the accuracy and quality of data obtained by commercial banks, and developing information systems related to banking technology in order to enhance the efficiency of commercial banks.
5. Encouraging increased saving and capital formation through the development of new savings channels to mobilize small savings, as well as attractive investment channels to attract national capital currently invested abroad.
6. Developing financial markets and enhancing their efficiency through:
 - Reviewing and developing rules and regulations.
 - Facilitating procedures for share trading operations.
 - Encouraging the creation of independent information centers to compile data on joint stock companies, along with analyzing and disseminating information that will assist investors' decision making.
 - Considering the possibility of trading new financial instruments in addition to shares, such as bonds.
 - Considering the possibility of allowing foreign investors to deal in domestic financial markets under appropriate regulations.

5.2.4 Foreign Trade and Balance of Payments Policies

The Seventh Development Plan adopts a set of harmonious policies which aim primarily at realizing balance in the Kingdom's foreign trade transactions. These are:

- * Continue to develop the institutional framework of foreign trade, to improve the performance efficiency of related public and private institutions, to improve the level of coordination between them and to continue support of the Export Development Center at the Council of the Saudi Chambers of Commerce and Industry.
- * Encourage the private sector to increase its share of foreign trade through intensified incentives and technical assistance that contribute to improving the sector's competitiveness in world markets, particularly in the fields of petrochemicals, refined oil products, and energy – intensive industries.
- * Enhancing trade cooperation with the GCC countries through further harmonization of custom systems and standards and specifications, and expanding joint ventures as a practical step towards a customs union.
- * Expanding the Kingdom's international economic and trade relations with other countries on the basis of mutual interests.
- * Enhancing the competitiveness of national products in the domestic market against similar imported products, through improvement of quality and intensification of efforts to improve efficiency and reduce costs in Saudi business firms.
- * Reduction of current external transfers by intensified Saudiization efforts as well as appropriate channels to absorb the savings of foreign labor in productive investment within the Kingdom.

- * Linking the Kingdom's assistance to developing countries with foreign trade development objectives, by providing such assistance in kind from the commodity surplus available for export, where possible.
- * Encourage private investment of both Saudi and foreign capital in production projects that contribute to developing non-oil exports, while giving priority to national industries and joint ventures which achieve the dual objective of import substitution and development of non-oil exports, along with considering the feasibility of establishing free trade zones at the Kingdom's main ports, and continuing with the transfer of port operations and maintenance to the private sector, in order to improve performance efficiency.
- * Adopting appropriate measures for increasing oil revenues and reducing the adverse impacts of a decline in world oil prices, through:
 - Studying the needs of various world markets and the development of demand patterns and energy legislation therein, ensuring penetration of such markets, promoting more integration of the Saudi oil industry with the world market through feasible refining and marketing projects with influential partners in the major markets to promote the marketing of Saudi oil and oil products, as well as increasing the fleet of national tankers in order to ensure flexibility of marketing and reduced transportation costs.
 - Monitoring the oil market in terms of supply and demand, as well as the development of production and consumption policies in major countries, and ensuring on-going coordination with OPEC and non-OPEC countries in order to realize market stability in the short, medium and long-terms.

5.3 STRUCTURE OF GROSS DOMESTIC PRODUCT (GDP)

Within the strategy of diversifying the economic base and developing an efficient and competitive private sector, the Seventh Development Plan aims at realizing structural changes in the national economy through increasing the non-oil private sector's share of GDP. As shown in Table 5.2, the main structural changes in the composition of GDP by economic activity during the Seventh Plan are as follows:

1. Growth of non-oil sectors at an average annual rate of 4.10 percent, arising from growth in the producing and services sectors of 5.04 percent and 3.44 percent respectively. Accordingly, the share of non-oil sectors in GDP will increase to about 71.6 percent by the end of the plan, compared to about 68.4 percent in the base year 1419/20 (1999).
2. An increase in the producing sectors' share of GDP from 27.4 percent in the base year to 30.0 percent by the end of the plan, through growth of non-oil mining at an annual rate of 8.35 percent, petrochemical industries 8.29 percent, other manufacturing 7.16 percent, construction 6.17 percent, and electricity, gas and water 4.62 percent.
3. An increase in the share of non-government services from 23.2 percent of GDP in the base year to 25.4 percent by the end of the plan, at an annual growth rate of 5.03

- percent. This will be achieved through growth of the trade sector (4.21 percent), transport and telecommunication (3.75 percent), financial services and real estate sector (7.68 percent) and community and personal services (4.17 percent) respectively. As a result, the private non-oil sector's share in GDP will rise from 50.6 percent at the start of the plan to about 55.4 percent by the end of the plan.
4. Growth of the government services sector at an average annual rate of about 1.21 percent during the plan period will lead to a decline in its percentage share in GDP from 17.8 percent in the base year to about 16.3 percent by the end of the plan.
 5. Growth of crude oil and natural gas sector at an average annual rate of 1.21 percent, which is much lower than the growth rate of the GDP, will lead to a decline in its percentage share in GDP from 31.1 percent in the base year to 28.2 percent by the end of the plan.

Table 5.2
Sectoral Composition of GDP in the Seventh Plan
at constant prices of 1414/15 (1994)

	Value Added (SR million)		Share in GDP %		Average Annual Growth Rate %
	1419/20 (1999)	1424/25 (2004)	1419/20 (1999)	1424/25 (2004)	
Non-Oil Sectors	325393	397728	68.4	71.6	4.10
Producing Sectors	130505	166901	27.4	30.0	5.04
Agriculture	34666	40282	7.3	7.2	3.05
Non-Oil Mining	2207	3295	0.5	0.6	8.35
Industry	45313	58206	9.5	10.5	5.14
Oil refining	17146	18064	3.6	3.3	1.05
Petrochemicals	4475	6665	0.9	1.2	8.29
Other Manufacturing	23692	33479	5.0	6.0	7.16
Electricity, Gas and Water	765	959	0.2	0.2	4.62
Construction	47553	64158	10.0	11.6	6.17
Service Sectors	194888	230828	41.0	41.5	3.44
Non-Government Services	110366	141070	23.2	25.4	5.03
Trade	35899	44117	7.5	7.9	4.21
Transport & Communications	32473	39029	6.8	7.0	3.75
Finance & Real-Estate Services	29054	42053	6.1	7.5	7.68
Real-Estate Services	7728	9633	1.6	1.7	4.51
Finance & Business Services	21326	32420	4.5	5.8	8.74
Community & Personal Services	12940	15870	2.7	2.9	4.17
Government Services	84522	89758	17.8	16.3	1.21
Crude Oil and Natural Gas	147791	156934	31.0	28.2	1.21
Import Duties less Imputed Bank Services Charges	2489	1038	0.6	0.2	- 16.0
Total GDP	475673	555701	100.0	100.0	3.16

The expected growth in all economic sectors and its impact on the structural development and diversification of the national economy is linked with the set of objectives, policies and programs for the producing and services sectors. The policies and objectives related to each sector are reviewed below.

THE PRODUCING SECTORS

1. Crude Oil and Gas

The world economy is expected to resume its growth in the early years of the Seventh Development Plan with the crisis-affected economies in Asia, Latin America and the Russian Federation regaining stability and economic growth, albeit at less than the pre-crisis rates. Consequently, world oil prices are expected to regain stability at price levels, though moderate, well above the levels reached in 1418/19 (1998) and early 1419/20 (1999). Given its surplus capacity and the moderate price expectations, OPEC countries are expected to sustain recent trends of growing market share in the world oil market. Natural gas is expected to increase its share in the domestic energy market at the expense of crude oil and intermediate distillate products used as fuels in electricity generation, water desalination and industry. Given current assumptions regarding trends in domestic and world demand, the crude oil and natural gas sector is expected to witness an average annual growth rate of 1.21 percent during the Plan period at constant prices of 1414/15 (1994).

2. Mining and Quarrying

The mining sector is expected to be one of the fastest growing sectors during the Seventh Development Plan. The granting of concessionary permits has already started for prospecting of precious metals in several mining sites, with several metallic mining sites having proven their investment potential. This reflects the effectiveness of steps to streamline the investment code to encourage private investors to invest in minerals manufacturing and exporting. The expected growth of this sector during the plan period (about 8.35 percent per year) represents a promising indicator for utilizing, manufacturing and exporting mineral resources in the future.

3. Oil Refining

Ongoing programs to upgrade refinery production to meet the needs of domestic and global markets will continue during the Seventh Plan. Furthermore, the Seventh Plan will witness accelerated substitution in the domestic market of oil for direct combustion by natural gas and heavy fuel oil. It is expected in the Seventh Plan, that the private sector will intensify its search for investment opportunities in the downstream industry in both the domestic and world markets, in line with the Kingdom's long-term strategic objectives to boost value added of the oil sector. As a result, the oil refining sector is expected to grow at an average annual rate of 1.05 percent during plan period.

4. Agriculture

During the Seventh Plan, the transformation of the agricultural sector towards products which conform to the Kingdom's water resources in order to achieve sustainable long-term

development, will continue. The agricultural sector is expected to grow at an average annual rate of 3.05 percent as projected in the plan. Hence, agricultural subsidies will be rationalized, resulting in further positive developments in the production pattern of this sector which is expected to shift from large scale crop production using substantial volumes of scarce water resources towards high value added crops using modern irrigation methods, such as drop irrigation and greenhouses crops, with due emphasis on the role of research and agricultural extension in raising productivity and quality levels.

5. Petrochemicals

This sector is expected to continue to spearhead the Kingdom's diversification efforts. Several projects for significant expansion of existing capacities and the introduction of new production lines will come on stream in the early years of the Seventh Development Plan. With over three-quarters of sales abroad, the return to faster growth in the global economy will have a significant and positive impact on enhancing production growth in line with growth in world demand. Accordingly, the sector is expected to grow at an average annual rate of 8.29 percent.

6. Other Manufacturing

Together with the downstream oil and petrochemical sectors, the "other manufacturing industries" form the backbone of the industrialization drive in the Kingdom. The diversification already achieved in this sector is impressive, reflected in deepening linkages between Saudi industries. Production of many consumer goods, including agro-related products and building materials, have now largely replaced imports. Several manufacturing products have significant potential for export, particularly to regional markets. Furthermore, adoption of the economic diversification strategy aimed at exporting industrial products and attracting foreign investments is a favorable factor that gives manufacturing industries a unique position in the Seventh Development Plan. This is reflected in the relatively high growth rate target of about 7.16 percent in the Plan.

7. Electricity, Gas and Water

Several factors have contributed to the increase of demand for electricity, gas and water, most significant among which are the increases in production capacities of various sectors of the economy and population growth which resulted in higher numbers of household units. Demand for water remained stable during recent years, albeit at a relatively high level, reflecting the impact of the increase in tariffs in 1415/16 (1995). However, further measures to rationalize water tariffs will be required during the Seventh Development Plan to achieve targets for the conservation of the Kingdom's water resources and to ease pressures on expanding the capacity for water desalination. Moreover, the supply and uses of natural gas will be expanded during the plan. Against this background, the value added of the electricity, gas and water sector is expected to grow at an average annual rate of 4.62 percent during the plan period.

8. Construction

Investments which will take place during the Seventh Development Plan are expected to provide a significant stimulus for growth in the construction sector. According to the Seventh Plan projections, about 12.9 percent of total investment during the plan will be in private buildings, while growth of government investment in non-residential buildings will also stimulate growth of the construction sector. Consequently, this sector is expected to realize an average annual growth rate of 6.17 percent during the plan period.

SERVICES SECTORS

1. Trade

The growth of this sector throughout the course of the Seventh Development Plan is expected to be largely driven by the demand generated by population growth. Sales of foodstuffs and other basic consumer goods are expected to be the fastest growing sub-sectors. Profit margins and investments in the trade sector will increase when the current excess capacity in this sector becomes fully utilized.

Among the factors boosting the role of the trade sector in the Seventh Development Plan are the anticipated expansion and diversification of the non-oil production base and the increased volume of trade in both domestic and foreign markets. This sector is expected to grow at an average rate of 4.21 percent.

2. Transport and Telecommunications

The transport sector generally enjoys sufficient capacity, which reduces the pressure to invest in the construction of new facilities and makes it possible to direct resources towards improvement and maintenance of existing facilities. Furthermore, effective coordination between different modes of transport will lead to optimal utilization of the transport network and will also reduce the need for new investments. The review of the transport sector user charges to cover maintenance costs may lead to relatively low growth in the demand for services of the various transport modes.

In the telecommunications sector, revolutionary technological advances and rapidly increasing demand for the sector's services will justify the need for substantial investments in this sector, using modern technologies. Hence, this sector is expected to grow at an average annual rate of 3.75 percent during the plan period.

3. Real Estate, Financial and Business Services

The finance and real estate services sector is expected to grow at an average annual rate of 7.68 percent during the Seventh Plan period, thus leading to the increase of the sector's share of GDP from 6.1 percent in the base year to 7.5 percent by the end of the plan.

The average annual growth rate of finance, insurance and business services will be about 8.74 percent. This rate is commensurate with the role financial and business services play in meeting the increasing needs of the national economy for finance and the stimulation of

both domestic and foreign investments. These services will also support new privatization initiatives and structural reform of the financial sector, and will benefit from productivity improvements through technological developments in banking services. Real estate services are expected to grow at an average annual rate of 4.51 percent during the Seventh Plan.

4. Community and Personal Services

The value added of the community and personal services sector constitutes around 2.7 percent of GDP. Nevertheless, the sector accounts for a significant proportion of total employment in the Kingdom, reflecting low labor productivity of this sector. The targeted growth rate of this sector during the Seventh Development Plan (4.17 percent per year) is in line with the plan's focus on high value-added activities and the need to reduce reliance on foreign labor in lower-productivity services sectors, while taking into account other factors such as population growth, expansion of tourism and the expected role of the private sector in providing some services to citizens.

5. Government Services

Wages and salaries account for a high proportion of value added in the government services sector, which directly impacts on the volume of final demand for goods and services.

The government services sector is expected to grow at an average annual rate of 1.21 percent, thus conforming with the policy of rationalizing government expenditure and the expected role of the private sector in providing job opportunities for Saudi workers, as well as with the privatization process.

5.3.1 Structure of Expenditure on GDP

The targeted structural changes in the national economy are linked with the pattern of final demand for goods and services expected during the Seventh Development Plan. The plan aims at achieving a change in the structure of expenditure on GDP in favor of total fixed capital formation (investment). As shown in table (5.3) and figure (5.1), the major characteristics and changes of expenditure on GDP during the plan period are as follows:

- 1- Final government and private consumption expenditure will decline from 64.9 percent of GDP in 1419/20 (1999) to 62 percent in 1424/25 (2004), based on its average annual growth rate of about 2.2 percent. Due to the plan's policies of rationalizing public expenditure, government final consumption will grow at an average annual rate of 1.0 percent, thereby leading to a decline of the share of government final consumption in GDP from 25.2 percent in the base year to about 22.7 percent by the end of the plan.
- 2- Private consumption expenditure as a percentage of GDP will fall marginally from 39.7 percent in 1419/20 (1999) to about 39.3 percent in 1424/25 (2004), growing at an average annual rate of 2.94 percent compared to 3.16 percent for GDP as a whole.

Table 5.3
Structure of Expenditure on Gross Domestic Product
in the Seventh Development Plan
at constant prices of 1414/15 (1994)

	SR Billion		Share in GDP %		Average Annual Growth Rate %
	1419/20 (1999)	1424/25 (2004)	1419/20 (1999)	1424/25 (2004)	
Final Domestic Demand	422.22	499.53	88.8	89.9	3.42
Final Consumption	308.90	344.46	64.9	62.0	2.20
Private Consumption	188.90	218.34	39.7	39.3	2.94
Government Consumption	120.00	126.12	25.2	22.7	1.00
Gross Capital Formation	106.32	148.07	22.4	26.7	6.85
Non-Oil Private Sector	71.07	106.07	14.9	19.1	8.34
Government Sector	27.40	34.26	5.8	6.2	4.57
Oil Sector	7.85	7.74	1.7	1.4	-0.27
Change in Stocks	7.00	7.00	1.5	1.3	--
Net Exports of Goods and Services	53.45	56.17	11.2	10.1	--
Exports of Goods and Services	214.58	245.68	45.1	44.2	2.74
Imports of Goods and Services	161.13	189.51	33.9	34.1	3.3
Total GDP	475.67	555.70	100.0	100.0	3.16

- 3- An important feature of the structural change in the pattern of available resources utilization during the Seventh Plan is the increased relative importance of gross capital formation (investment) from 22.4 percent of GDP in the base year to 26.7 percent by the end of the plan, as private gross capital formation is expected to grow at a high average annual rate of about 8.34 percent, as opposed to 4.57 percent and -0.27 percent for investments in the government and oil sectors respectively.

Due to difference in the planned growth rates of government services and the oil sector on the one hand and the private sector on the other hand, the share of the private sector in gross capital formation will increase from 66.8 percent in 1419/20 (1999) to 72.6 percent in 1424/25 (2004), while the share of gross capital formation of the government and oil sectors will decline from 33.2 percent to 28.4 percent during the same period.

- 4- The growth in gross capital formation will be achieved mainly at the expense of slower growth in final consumption expenditure as resources are transferred from consumption towards investment. The ratio of gross capital formation to GDP will increase from 22.4 percent in the base year to 26.7 percent by the end of the plan. In the meantime, the ratio of final consumption to GDP will decline from 64.9 percent in the base year to 62.0 percent by the end of the plan. The net value of exports of goods and services will increase from SR 53.45 billion in the base year to SR 56.17 billion by the end of the plan.

Figure 5.1: Structure of Final Demand in the Seventh Plan

5.3.2 Investment and Capital Stock

Gross capital formation over the course of the Seventh Development Plan is targeted to reach SR 671.73 billion at constant prices of 1414/1415 (1994). The non-oil private sector is expected to implement about 71.2 percent of these investments, or SR 478.48 billion, as shown in table (5.4) and figure (5.2).

In addition, the main features of total planned investments in the Seventh Development Plan will be as follows:

- 1- The non-oil producing sectors are expected to invest SR 222.69 billion over the five years, accounting for about 33.2 percent of total planned investments. These investments will be concentrated in the industrial sector (about 15.6 percent) and electricity, gas and water sector (about 11.8 percent).
- 2- The finance, insurance, real estate and business services sector will account for 11.8 percent of total investments projected for the plan, or 46.6 percent of the projected investment of SR 169.11 billion by the services sectors, which in turn represents 25.2 percent of total investment targeted in the Seventh Development Plan. The plan also anticipates investment of SR. 86.68 billion in private buildings.
- 3- By adding the value of planned investments in the Government services sector of SR. 159.83 billion to the planned investments of the non-oil private sector, total targeted non-oil investments will amount to SR. 638.32 billion or 95 percent of total investment.

Given the current low level of national savings, the Seventh Development Plan emphasize policies aimed at increasing national savings. In this context, the priority given to fiscal consolidation constitutes a main element in the government strategy.

While the planned growth would allow for both a higher savings ratio and higher consumption in absolute terms, the macroeconomic policies of the Seventh Development Plan will lead to higher incomes, thus enabling households to increase their savings at higher rates than the expected growth in consumption, while steadily improving their standard of living.

The macroeconomic strategy of the Seventh Development Plan also gives priority to measures aimed at increasing inflows of foreign direct investment and repatriation of funds held abroad by Saudi nationals, along with the mobilization of domestic savings. These measures will help to provide the resources needed to realize the levels of planned investment. The structural and institutional reforms of the Seventh Development Plan should, therefore, be aimed at encouraging private savings through the diversification of tools for mobilizing savings as well as the development of capital market mechanisms.

Furthermore, investments do not represent the sole instrument adopted by the Seventh Development Plan to realize the planned growth rates. Total factor productivity is expected to increase at an annual rate of 0.7 percent, and this increase will constitute a crucial additional source of planned economic growth. To achieve this growth of factor productivity, the plan gives particular attention to policies and measures which enhance

labor productivity at all levels and in all fields (government and private goods and services) through intensification of training programs and quality improvements in education programs. The plan also pays particular attention to scientific and technological development and aims to make the achievements realized therein available for the various fields of production.

The plan's measures aimed at streamlining the formal regulatory framework for business activity and ensuring a more competitive environment after the Kingdom's entry to WTO, will also promote efficiency and productivity. There is also significant potential to enhance productivity through transfer of advanced technologies and technical and managerial know-how associated with foreign direct investments.

Table 5.4
Structure of Investment in the Seventh Development Plan
at constant prices of 1414/15 (1994)

	Investment	
	Value (SR Billion)	Share in Total %
Non-Oil Sectors	638.32	95.0
Producing Sectors	222.69	33.2
Agriculture	17.5	2.6
Non-Oil Mining	3.51	0.5
Industry	104.82	15.6
Oil refining	4.93	0.7
Petrochemicals	35.00	5.2
Other Manufacturing	64.89	9.7
Electricity, Gas and Water	79.00	11.8
Construction	17.86	2.7
Services Sector	169.11	25.2
Trade	36.24	5.4
Transport & Communications	33.99	5.1
Finance & Real-Estate Services	78.81	11.8
Real-Estate Services	38.81	5.8
Finance & Business Services	40.03	6.0
Community & Personal Services	20.07	3.0
Private Buildings	86.68	12.9
Total Non-Oil Private Sector	478.48	71.2
Government Services	159.83	23.8
Crude Oil and Natural Gas	33.41	5.0
Total Investment	671.73	100.0

Figure 5.2: Structure of Investment in the Seventh Plan

5.4 REVENUES AND FINANCIAL REQUIREMENTS

The forecast elimination of the state budget deficit by the end of the Seventh Plan is possible due to several factors including the favorable developments of world oil prices, the adoption of an integrated set of economic policies aimed at improving overall economic efficiency (in investment, production and institutional terms), as well as the adoption of some measures to increase non-oil revenues - such as restructuring the tariffs of public utilities and services, and rationalizing the tax system while avoiding adverse socio-economic impacts.

To enhance this forecast, the Seventh Plan adopts a fiscal policy for balancing government revenues and expenditures through intensified efforts on two major themes:

- Rationalization of government expenditure: through upgrading government agencies' efficiency, reducing public expenditure in non-development sectors, providing new opportunities for the private sector to effectively participate in financing development projects, taking measures necessary for reducing average production costs of government services with due emphasis on quality and sufficiency of such services, improving productivity of government agencies and ensuring appropriate maintenance of capital assets.
- Development of non-oil revenues: through improved utilization of government-owned economic resources, ensuring the private sector's participation in on-going development projects or those to be privatized, rationalizing the tax system along with improving collection efficiency and restructuring public service charges on an economic basis.

Financial Requirements of Development Agencies

The significance of expenditure on development agencies is attributed to its close linkage with the achievement of the development plan objectives and its favorable impacts on the standard of living and quality of life, while enhancing the role of the private sector in the process of development. Table (5.5) shows the financial requirements of the development agencies in the Seventh Plan. The relative weights of expenditure in each main sector reflect the Plan's emphasis on achieving the positive impacts discussed earlier.

Table 5.5
Financial Requirements in the Seventh Plan

Development Sector	SR Billion
Human Resources Development	276.9
Social and Health Development	95.8
Economic Resources Development	41.7
Infrastructure	73.8
Total Expenditure	488.2

Figure 5.3: Development Expenditures in the Sixth and Seventh Plans

Table 5.6 compares the financial requirements of development agencies in the Sixth and Seventh Development Plans. The main results of this comparison are as follows:

- Planned expenditure on human resources development during the Seventh Development Plan is estimated at SR. 276.9 billion, or 56.7 percent of total expenditure on development agencies, and an increase of 24.6 percent compared to the Sixth Development Plan allocations. This reflects the unique position which human resources development occupies among the Seventh Development Plan themes.
- Planned expenditure on social and health development during the Seventh Development Plan is estimated at SR. 95.8 billion, or 19.6 percent of total expenditure on development agencies, and an increase of 29.1 percent compared to the Sixth Development Plan. This reflects the emphasis of the Seventh Development Plan on improving the citizens' quality of life.
- The expected financial requirements for economic resources development during the Seventh Development Plan are estimated at SR. 41.7 billion, or 8.5 percent of total expenditure on development agencies, compared to the Sixth Development Plan allocation of SR. 41.6 billion. This reflects the Seventh Development Plan's intent on stabilizing this kind of expenditure due to the privatization of service utilities at Jubail and Yanbu Royal Commission and restructuring the electricity sector. This also reflects the plan's intent on increasing the private sector's participation in the development of economic resources and diversification of the national economic base.
- Planned expenditure on infrastructure development (Transport & Communications and Municipal/Housing sectors) during the Seventh Development Plan is estimated at SR. 73.8 billion, or 15.2 percent of total expenditure on development agencies with a minor decline of (-1.6 percent) compared to the Sixth Development Plan. This minor decline is attributed to the privatization of the telecommunications sector. Expenditure on this sector will be concentrated on expansion of infrastructure to meet the needs of a growing population and economy, quality improvements in line with rapid developments in technology, and on operating and maintaining capital assets.

Table 5.6
Financial Requirements of Development Agencies in the
Seventh Development Plan compared with the Sixth Development Plan
(SR Billion)

Sector	Sixth Development Plan allocation 1415/16 – 1419/20		Seventh Development Plan planned expenditure 1420/21 – 1424/25		
	SR Billion	%	SR Billion	%	Change (%)
Human Resources Development	222.2	53.8	276.9	56.7	24.6
Social and Health Development	74.2	18.0	95.8	19.6	29.1
Economic Resources Development	41.6	10.0	41.7	8.5	0.2
Infrastructure	75.0	18.2	73.8	15.2	-1.6
Total Expenditure	413.0	100.0	488.2	100.0	18.2

It is noteworthy that the specialized credit institutions provide easy loans for development purposes, estimated at about SR 29 billion, thereby facilitating efficiency improvements in private sector investment and production and enhancing its ability to contribute to economic and human resources development.

5.5 FOREIGN TRADE AND BALANCE OF PAYMENTS

5.5.1 General Objectives of Foreign Trade and Balance of Payments

Foreign trade and balance of payments' policies are among the most significant economic policies on which the development strategy depends to achieve balance in the Kingdom's external transactions over the medium and long-terms. The objectives of these policies are summarized as follows:

- * Improving the balance of payments' and gradually restoring balance in the current account over the medium term, by continuing to implement the structural reforms aimed at preparing the economy to adjust in a more flexible and efficient manner to regional and international developments, including fluctuations of global oil markets, through vigorous pursuit of economic diversification policies.
- * Maintaining the value of the national currency and boosting the Kingdom's foreign reserves.
- * Increasing the Kingdom's share in the world markets for oil products and petrochemicals commensurate with its share of world crude oil reserves.
- * Increasing the share of non-oil exports in total exports.
- * Enhancing economic and trade relations of the Kingdom with other countries, with particular emphasis on strengthening regional cooperation with GCC countries as well as Arab and Islamic countries.

5.5.2 Balance of Trade in Goods and Services

- 1- The Kingdom's exports of goods and services are expected to grow at an average annual rate of 7.24 percent at current prices during the Seventh Development Plan. Exports of goods and services, as a percentage of GDP, will rise from 41.4 percent at the beginning of the plan to 44.27 percent by the end of the plan, as shown in table (5.7)
- 2- The Kingdom's exports of oil and gas are projected to grow at an average annual rate of 6.11 percent, while non-oil exports will grow at an average annual rate of 10.16 percent. Accordingly, the share of non-oil exports in total exports will increase from 27.4 percent in the base year to 31.4 percent by the end of the plan, while the share of oil exports will decline from 72.6 percent to 68.6 percent. The positive step towards diversification of Saudi exports is reflected in the projected high growth rates of petrochemicals exports and tourism services. With respect to non-oil exports, petrochemicals exports are expected to grow at an average annual rate of 13.01 percent and its share of total exports is expected to

increase from 6.4 percent in the base year to 8.3 percent by the end of the plan. Similarly, tourism services exports are expected to grow at an average annual rate of 8.32 percent, with their share of total exports rising from 8.8 percent in the base year to 9.3 percent by the end of the plan.

Table 5.7
Trade Balance in the Seventh Development Plan
1420/21 – 1424/25 (2000-2004)
at current prices

	SR Billion		Share in GDP %		Average Annual Growth Rate %
	1419/20 (1999)	1424/25 (2004)	1419/20 (1999)	1424/25 (2004)	
Exports of Goods and Services	213.26	302.54	41.4	44.27	7.24
Oil Exports	154.73	207.56	30.0	30.37	6.05
Oil and Gas	119.16	160.32	23.1	23.46	6.11
Refined Oil Products	35.57	47.27	6.9	6.92	5.85
Non-Oil Exports	58.53	94.95	11.4	13.89	10.16
Petrochemicals	13.57	25.0	2.6	3.66	13.01
Non-Oil Mining	--	0.34	--	0.05	--
Tourism	18.80	28.04	3.7	4.1	8.32
Other Exports	26.16	41.56	5.1	6.08	9.7
Imports of Goods and Services	161.89	208.05	31.4	30.44	5.15
Balance of Goods and Services	51.37	94.49	10.0	13.82	--

- 3- The Seventh Plan also projects exports from the non-oil mining sector for the first time; these exports are expected to reach SR 340 million in 1424/25 (2004).
- 4- The value of imports of goods and services is expected to grow at an annual rate of 5.15 percent during the plan, or less than the rate of export growth. As a result, there will be a steady improvement in the balance of trade in goods and services over the plan period, with the surplus expected to grow from SR 51.37 billion in the base year to SR 94.49 billion by the end of the plan, and the ratio of this surplus to GDP growing 10 percent in the base year to 13.82 percent by the end of the plan.
- 5- The ratio of total goods and services exports to total imports will increase from 132 percent in the base year to 145 percent by the end of the plan, thus reflecting the improved ability of exports to finance imports during the plan period.

The plan also expects an improvement in the terms of trade, with export prices expected to grow at an average annual rate of 4.38 percent and import prices at 1.8 percent.

Figure 5.4 shows the trade balance in the Seventh Plan, while Figure 5.5 shows the structure of exports during the plan.

Figure 5.4: Balance of Trade in the Seventh Plan

Figure 5.5: Structure of Exports in the Seventh Plan

CHAPTER SIX
LABOR FORCE

6. LABOR FORCE

6.1 LABOR MARKET DEVELOPMENTS

The pervading circumstances of successive development plans influenced the demand for labor which grew steadily over the first three plans and led to the expansion of foreign labor recruitment. The Fourth Development Plan emphasized the issue of Saudiization and the intensification of efforts to develop national manpower through quantitative and qualitative expansion of education, training and vocational training. The Fifth Development Plan continued the implementation of this policy by emphasizing the matching of educational outputs with the requirements of development and the provision of favorable incentives for the private sector to employ national manpower.

The development and utilization of human resources was one of the central themes of the Sixth Development Plan. Furthermore, the plan's priorities emphasized appropriate policies for addressing human resource development constraints, the replacement of expatriates by Saudis, and encouraging the private sector to provide more job opportunities for Saudi citizens. The Sixth Development Plan period saw many positive developments, including - inter alia - the following important ones:

- Increasing the participation rate of Saudi nationals in the labor market and establishing closer links between the requirements of the labor market and outputs from the education and training systems.
- Encouraging the private sector to employ more Saudis and replace non-Saudis.
- Providing financial resources and information needed to improve the efficiency of labor market services.

Within its central themes, the Seventh Development Plan concentrates on development of human resources and on addressing the key issues related to labor market efficiency and policies in the light of domestic and international developments, particularly the impacts of privatization and the Kingdom's accession to the WTO. Thus, emphasis will be put on:

- Improving the productivity and efficiency of Saudi workers and removing Saudiization constraints in the public and private sectors.
- Increasing the private sector's absorptive capacity to employ the growing number of graduates; instituting a mechanism to enhance the role of the private sector in providing training facilities, developing training programs and supporting pre-service and on-the-job training.
- Establishing a comprehensive and reliable labor market database.
- Supporting the agencies directly involved in the preparation, implementation and monitoring of plans related to the employment of Saudi nationals; and enhancing the links and coordination between these agencies.

6.2 LABOR FORCE DEVELOPMENT ISSUES

Labor force development issues present some of the most important challenges for the Seventh Development Plan and they should be addressed within an integrated strategic framework of objectives and policies.

6.2.1. Employment Issues

Employment issues concern the obstacles impeding Saudiization, improvement of the productivity of Saudi workers, training of Saudi manpower in line with labor market requirements, increasing the share of Saudis in total employment, and improving labor market services.

First: Saudiization in the Private Sector

The process of Saudiization in the private sector is facing many constraints, of which the most important ones are:

- Relatively high costs of national manpower compared to foreign manpower. In this context, research studies indicate that the higher cost of Saudi labor is the main reason for the private sector's weak response in implementing Saudiization initiatives.
- The continuous influx of foreign workers during the Sixth Development Plan whose number increased by 1.5 percent compared to base year levels of 1414/15 (1994). This increase has put further pressure on the ability of Saudi nationals to compete for new jobs or to replace non-Saudis.

Second: Improving the Productivity of National Manpower

Notwithstanding the growing attention paid in previous development plans to raising the productivity of Saudi workers, studies indicate that actual achievements in this regard are still below targeted levels. Hence, it is imperative to adopt more effective policies and initiatives to raise national labor productivity levels in both public and private sectors.

Third: Development of National Manpower

This issue has two dimensions. The first pertains to matching the curricula and specializations offered by the education and training systems with the actual requirements of the labor market in terms of occupational classification and job description. The outputs of the education and training systems are still insufficiently compatible with labor market requirements. There are many specializations where the number of graduates exceeds the actual requirements of the labor market.

The second dimension lies in the weakness of practical training, i.e. the lack of experience of Saudi workers in various production fields due their being attracted to government jobs and the limited extent of their adaptation to work conditions in the private sector.

Accordingly, the Seventh Development Plan emphasizes the adoption of necessary measures to upgrade the qualifications of Saudi manpower and ensure the matching of such qualifications with labor market requirements through theoretical and practical training.

Fourth: Improvement of Labor Market Services

Three government agencies support the efforts of the Ministry of Planning in formulating market policies for the labor market and the improvement of its services, regulating employment of Saudi and non-Saudi manpower, and matching the qualifications of Saudi manpower with available job opportunities. The Ministry of Labor and Social Affairs is responsible for enforcing the provisions of the Labor and Employment Law and providing guidance and employment services for Saudis in the private sector. The Ministry of Civil Service is responsible for employment of Saudis in the government sector and regulating working relations in this sector. The Manpower Council is responsible for setting policies and coordinating the activities of all agencies related to the development and utilization of the labor force.

In this context, the Seventh Development Plan will adopt a set of policies to make employment services more responsive to the requirements of the labor market and to enhance coordination and integration between labor market related agencies. Work is currently under way to establish an integrated labor market database, including appropriate mechanisms for providing and exchanging data, as well as coordination between sources and users of information.

6.2.2 Objectives of Labor Force Development

Objectives of labor force development during the Seventh Development Plan are as follows:

- To provide more job opportunities for Saudi nationals through appointment or replacement in all occupations and economic sectors, particularly in the private sector.
- To rationalize the recruitment of non-Saudi workers and to confine employment in some occupations and sectors to Saudi nationals only.
- To increase job opportunities for women and increase their participation in the labor market in conformity with Islamic Sharia.
- To improve the productivity of the Saudi labor force and upgrade its quality to keep pace with technological development.
- To achieve more matching between the outputs of the education and training systems and the requirements of the labor market.
- To improve labor market services and establish integrated databases that are comprehensive and up to date.
- To continue achieving integration in the field of manpower planning and development.

6.3 Employment during the Seventh Development Plan

6.3.1 Employment Structure

In light of the planned growth rates of GDP by economic activity and average labor productivity, the Seventh Plan is expected to provide 328,600 new job opportunities to meet the labor demand of the development process. Accordingly, total employment will increase from 7,176,300 in the base year 1419/1420 (1999) to 7,504,900 by the end of the plan 1424/25 (2004), as shown in Table 6.1. The main features of the forecast sectoral and occupational structure of employment during the Seventh Plan include the following:

First: Employment Structure by Economic Activity

Table 6.1 shows that employment in the non-oil private sector is expected to increase from 6,161,200 in the base year 1419/20 (1999) to 6,472,200 by the end of the plan 1424/25 (2004). Accordingly, 311,000 new job opportunities will be created in the private sector, or 94.6 percent of all new opportunities forecast during the plan period.

In the production sectors, 81,400 new jobs will be created in construction, 72,000 in the manufacturing sector and 24,400 in agriculture. The forecast employment increase in private sector services is almost equally distributed among various sectors, with the share of the total increase in employment amounting to 12.3 percent for the finance and real estate sector, 11.5 percent for the community and personal services, 10.5 percent for the trade sector, and about 3.3 percent for transport and communications.

In line with planned fiscal and monetary policies and the rationalization of government expenditure, the Seventh Plan aims at providing 16,100 new job opportunities in the government sector, or 4.9 percent of total expected new jobs during the plan period. Thus, the share of government employment is expected to decrease slightly from 12.8 percent of total employment in the base year 1419/20 (1999) to about 12.4 percent by the end of the plan 1424/25 (2004).

Second: Occupational Structure of Employment

Table 6.2 shows that the expected annual growth rates of employment by main occupational categories during the Seventh Plan will range from 1.4 percent in the production, construction and transport workers occupational group to 0.5 percent for services' workers.

In terms of the occupational structure of employment, a slight increase is expected in the share of production, construction and transport workers' employment from 30.5 percent in the base year 1419/20 (1999) to around 31.2 percent of total employment by the end of the plan 1424/25 (2004), against a decline in the share of service workers, while the share of other occupational categories will remain at approximately their base year levels of 1419/20 (1999).

Table 6.1
Employment Structure during the Seventh Development Plan
1420/1421 - 1424/1425 (2000-2004)

Description	Employment (thousand)		Share (%)		Thousand	Change	
	1419/20 (1999)	1424/25 (2004)	1419/20 (1999)	1424/25 (2004)		%	Average Annual Growth %
1- Private non-oil Sector:	6161.2	6472.2	85.9	86.2	311.0	94.6	1.0
1.1 Private Producing Sectors:	2273.3	2460.6	31.7	32.8	187.3	57.0	1.6
- Agriculture	557.9	582.3	7.8	7.8	24.4	7.4	0.9
- Non-oil Mining	13.2	14.7	0.2	0.2	1.5	0.5	2.2
- Manufacturing:	589.0	661.0	8.2	8.8	72.0	21.9	2.3
* Oil Refining	21.5	21.8	0.3	0.3	0.3	0.1	0.3
* Petrochemicals	9.4	10.1	0.1	0.1	0.7	0.2	1.4
* Other Industries	558.1	629.1	7.8	8.4	71.0	21.6	2.4
- Electricity, Gas and Water	93.5	101.5	1.3	1.4	8.0	2.4	1.7
- Construction	1019.7	1101.1	14.2	14.7	81.4	24.8	1.5
1.2: Private Services Sectors:	3887.9	4011.6	54.2	53.5	123.7	37.6	0.6
- Trade	1036.6	1071.2	14.4	14.3	34.6	10.5	0.7
- Transport & Communication	299.2	310.1	4.2	4.1	10.9	3.3	0.7
- Finance and Real Estate	334.9	375.2	4.7	5.0	40.3	12.3	2.3
- Community and Personal services	2217.2	2255.1	30.9	30.0	37.9	11.5	0.3
2- Government Services	916.2	932.3	12.8	12.4	16.1	4.9	0.3
3- Non-Oil Sectors	7077.4	7404.5	98.6	98.7	327.1	99.5	0.9
4- Crude Oil and Natural Gas	98.9	100.4	1.4	1.3	1.5	0.5	0.3
Sectoral Total	7176.3	7504.9	100.0	100.0	328.6	100.0	0.9

Table 6.2
Occupational Structure of Employment in the Seventh Development Plan
1420/1421 - 1424/1425 (2000-2004)

Description	Employment Number (thousand)		Employment Distribution %		Thousand	Change	
	1419/20 (1999)	1424/25 (2004)	1419/20 (1999)	1424/25 (2004)		%	Average Annual Growth Rate %
Professional and Technical	1122.4	1159.9	15.6	15.5	37.5	11.4	0.7
Management and Administration	133.9	142.9	1.9	1.9	9.0	2.7	1.3
Clerical	534.4	558.4	7.4	7.4	24.0	7.3	0.9
Sales Personnel	507.6	528.2	7.1	7.0	20.6	6.3	0.8
Services Personnel	2138.1	2196.6	29.8	29.3	58.5	17.8	0.5
Agricultural and Related	551.0	575.1	7.7	7.7	24.1	7.3	0.9
Production, Construction and Transportation	2188.9	2343.8	30.5	31.2	154.9	47.1	1.4
Total	7176.3	7504.9	100.0	100.0	328.6	100.0	0.9

6.3.2 Saudi Labor Force Supply

The Seventh Development Plan places a very high priority on developing human resources through implementing effective measures and policies aimed at increasing the supply of Saudi labor and improving its quality. The plan pays even greater attention to increasing female participation in the labor force and promoting structural changes in the academic profiles of the Saudi labor force in order to increase the number of the academically qualified in general, and those with higher and technical qualifications in particular, as shown in the following analysis.

First: Labor force by Age Groups

Based on projections of the Saudi population, Table 6.3 shows that the average annual growth rate of the working age population during the Seventh Development Plan is expected to be about 3.9 percent, compared to 2.6 percent for the population below working age. This will imply a structural change in favor of the working-age population (i.e. the labor force source population).

Since the aggregate labor force participation rate is an indicator which tends to change slowly in the short/medium term, and taking into consideration the uniqueness of the Kingdom with respect to female employment, the Seventh Development Plan assumes the aggregate participation rate will increase from 32.8 percent in the base year 1419/20 (1999) to around 34.1 percent of the total working-age population by the end of the plan 1424/25 (2005).

The cumulative increase in the workforce (new entrants to the labor market) during the Seventh Development Plan is estimated to be about 817,300 workers, who will be employed in the new jobs created as a result of economic growth and/or replacement of non-Saudi workers.

Table 6.3
Labor Force Projections in the Seventh Development Plan
1420/1421 - 1424/1425 (2000-2004)

	Description	1419/20 (1999)	1424/25 (2004)	Change Total/%
Population below working age	Number (thousand)	5996.2	6814.8	818.6
	Average annual Growth Rate (%)			2.6
Working-Age Population	Number (thousand)	9662.2	11705.5	2043.3
	Average Annual Growth Rate (%)			3.9
Total Population	Number (thousand)	15658.4	18520.3	2861.9
	Average Annual Growth Rate (%)			3.4
Dependency Ratio (%)		62.1	58.2	3.8
Aggregate Labor Force Participation Rate (%)		32.8	34.1	1.2
Population in Work Force	Number (thousand)	3172.9	3990.2	817.3
	Average Annual Growth Rate (%)			4.7

Second: New Entrants into the Labor Market by Educational Attainment

Table 6.4 shows that around 760,000 graduates from education and training systems are expected to enter the labor market, or 93 percent of the total number of new entrants during the Seventh Development Plan.

With respect to the educational profile of Saudi labor force and its projected development during the Seventh Development Plan, table 6.4 shows the following features:

- The relatively high share of new entrants to the labor market graduating from education and training systems compared to those from other sources is a positive indicator of improvement in the educational and training profile of the Saudi labor force.
- The percentage share of new entrants into the labor market graduating from tertiary education level (graduates of universities, teachers training institutes and intermediate technical colleges) is expected to reach 21 percent, thus indicating at one and the same time an increase in the relative contribution to the total Saudi labor force of those who completed all levels of formal education/training and a decrease in dropout waste.
- The number of graduates of technical education and vocational training entering the labor market during the Seventh Development Plan will reach 78,700, or 9.6 percent of the total number of new entrants during the plan period.

Table 6.4
New Entrants to the Labor Market
(Graduates of Education and Training Systems)
during the Seventh Development Plan
1420/21 - 1424/25 (2000-2004)

	Description	Number (Thousand)	Share %
Tertiary Level	Universities	178.6	21.9
	Teachers Training Institutes	36.7	4.5
	Intermediate Technical Colleges	16.7	2.0
	Sub-Total	232.0	28.4
Secondary Level	Secondary education (general)	213.9	26.2
	Technical education and vocational training	78.7	9.6
	Sub-Total	292.6	35.8
Primary Level	Intermediate	143.1	17.5
	Elementary	92.3	11.3
	Sub-Total	235.4	28.8
Total number of entrants from graduates of education and training systems		760.0	93.0
Other entrants		57.3	7.0
Total number of new entrants		817.3	100.0

6.3.3 Labor Market Balances in the Seventh Development Plan

Labor market balancing in the Seventh Development Plan is concerned with controlling imbalances arising from the excess demand for labor and the inadequacy of the Saudi labor force to meet the labor requirements of the national economy. While non-Saudi employment represents the balance between supply of and demand for labor, jobs currently filled by non-Saudis can be considered as jobs available for Saudis with appropriate qualifications.

The human resource development strategy consistent with the long-term perspective of the Saudi economy requires the maximum possible employment of Saudi nationals. Accordingly, the replacement of non-Saudis by Saudis is a central theme of such a strategy. In this context, the labor balances in the Seventh Development Plan imply a reduction in the excess supply of Saudi nationals expected at the beginning of the plan, through employment in newly created jobs resulting from economic growth or from replacement of non-Saudis.

Table 6.5 shows the occupational balances of the labor force in terms of the number of new entrants into the labor market by main occupational categories and their distribution according to sources of demand. It is noteworthy that the majority of expected job opportunities for new entrants will be for service workers (256,100 jobs), followed by professional and technical (234,600 jobs) and clerical workers (135,800 jobs). Increases in Saudi employment to replace non-Saudis in the same occupational categories represent about 77.2 percent, 84 percent and 82.3 percent of total expected job opportunities respectively. Thus, the expected decline in the number of non-Saudis in these three categories will amount to 506,400 during the plan period.

Regarding other occupational categories – with the exception of the production, construction and transport workers – expected new job opportunities for Saudis will amount to 12,700 in the management and administration category, 35,500 for sales workers and 44,100 for agricultural and related workers. Replacement of non-Saudis represents about 41.7 percent of total expected job opportunities for Saudis in these three categories.

With respect to production, transport and construction workers, the sub-components of this category comprise skilled and semi-skilled labor who attain some level of general and technical education and vocational training. Since output of the technical education and vocational training system represents only about 9.6 percent of the total number of new entrants into the labor market during the Seventh Development Plan (Table 6.4), the expected cumulative increase of Saudi employment in the production, construction and transport workers category during the plan period will be insufficient to meet the demand resulting from economic growth. Hence, it will be necessary to recruit 56,200 additional non-Saudi workers to fill the gap between supply and demand in this occupational category (Table 6.5).

In general, expected job opportunities for new entrants into the labor market through the replacement of non-Saudis will amount to 488,700 jobs, or 12.1 percent of the total number of non-Saudis at the beginning of the plan. It will also lead to a reduction of the demand gap in the labor market balance and to an increase in the relative share of Saudis in total employment from 44.2 percent in the base year 1419/20 (1999) to about 53.2 percent by the end of the plan 1412/24 (2004).

Table 6.5
New Entrants to the Labor Market by
Source of Demand during the Seventh Development Plan
1420/21 - 1424/25 (2000 - 2004)

Description		New Entrants	Sources of Demand (Job opportunities)		
			New Jobs	Replacement Jobs	Total
Professional and Technical	Number (thousand)	234.6	37.6	197.0	234.6
	Distribution according to available job opportunities (%)		16.0	84.0	100.0
Management and Administration	Number (thousand)	12.7	9.1	3.6	12.7
	Distribution according to available job opportunities (%)		71.7	28.3	100.0
Clerical	Number (thousand)	135.8	24.0	111.8	135.8
	Distribution according to available job opportunities (%)		17.7	82.3	100.0
Sales Personnel	Number (thousand)	35.5	20.6	14.9	35.5
	Distribution according to available job opportunities (%)		58.0	42.0	100.0
Services Workers	Number (thousand)	256.1	58.5	197.6	256.1
	Distribution according to available job opportunities (%)		22.8	77.2	100.0
Agriculture and related workers	Number (thousand)	44.1	24.1	20.0	44.1
	Distribution according to available job opportunities (%)		54.6	45.4	100.0
Workers in the producing, construction and transport activities	Number (thousand)	98.5	154.7	- 56.2	98.5
	Distribution according to available job opportunities (%)		157.1	- 57.1	100.0
Total (all occupations)	Number (thousand)	817.3	328.6	488.7	817.3
	Distribution according to available job opportunities (%)		40.2	59.8	100.0

6.4 IMPLEMENTATION POLICIES AND MEASURES

First: Saudiization and Increased Participation of Saudis in the Labor Market

1. Encouraging the private sector to provide job opportunities for Saudi citizens and continuing with Saudiization in the government agencies.
2. Identifying appropriate mechanisms for follow up and implementation of Saudiization plans in different occupations and sectors according to their importance by setting specific priorities for Saudiization of some sectors and occupations in the private sector.

3. Concentrating recruitment of foreign labor on those who are qualified by setting specific criteria to control the number of recruited workers.
4. Continuing to exert intensive efforts to control work permits and residence regulations.
5. Increasing investments in small enterprises and enhancing the role of the Saudi Credit Bank in this context.
6. Implementing directives of the Manpower Council by the government agencies.
7. Enhancing awareness through public media, stressing the religious and social value of work.
8. Making maximum use of the available female labor force and increasing job opportunities for Saudi women in accordance with the teachings of Islam.
9. Reviewing articles of the Labor and Employment Law to ensure their conformity with the Kingdom's development requirements and to attain consistency and integration between the social insurance and the civil retirement systems.

Second: Improving Productivity of National labor

1. Improving the level of labor productivity in the government and private sectors through development of performance and productive efficiency.
2. Reviewing employment in the government sector by redistributing jobs between government agencies according to their needs as well as addressing the problems of employment outside the major cities.
3. Considering the possibility of re-allocating excess employment in the government sector to work in the private sector.

Third: Development of Saudi Manpower and Matching Qualifications with Labor Market Requirements

1. Increasing the absorptive capacity of universities, technical education institutions and vocational training centers in the specializations required by the national economy and guiding admissions policy in the higher education institutions in conformity with labor market requirements.
2. Ensuring private sector participation in regular reviews of the curricula and programs and proposing new educational disciplines which meet the actual needs of the labor market.
3. Raising the efficiency of the continuous education programs and concentrating on illiteracy eradication programs and addressing the problems of dropouts - thereby improving the participation of Saudis in the labor market and raising their productivity.
4. Directing and guiding students by all available means and encouraging them to pursue specializations which match their ambitions and aptitudes.

5. Preparing a comprehensive training strategy as a basis for long-term training - at the level of the Kingdom - covering all fields and levels.
6. Encouraging the private sector to provide specialized training, including pre-service and in-service training.
7. Preparing Saudi nationals who lack regular education or training qualifications for entry into the labor market, through appropriate training programs.
8. Intensifying research activity in the field of manpower development, by the universities and specialized academic institutions.

Fourth: Development of Labor Market Services and Integration between Agencies Involved in Employment and Labor Market

1. Enhancing the role of employment offices to enable them provide guidance and recruitment services for Saudi workers.
2. Improving manpower information systems and establishing a standardized information network for all labor offices in the Kingdom to provide regular labor market information for employers, members of the labor force, students and education and training institutions to enable them choose appropriate careers.
3. Finalizing the process of job description and classification and making available to job seekers information about available jobs and occupations, their requirements and work conditions.
4. Disseminating planning awareness and stressing the importance of manpower planning at the level of the economic unit or firm and at sectoral and macro levels, and standardizing the methodologies, techniques and concepts used therein.
5. The Manpower Council shall follow up and coordinate the efforts exerted by the agencies responsible for planning, development and employment of Saudis, and shall enhance the relations between them to achieve optimal development and utilization of human resources and to address any related problems.