PLANNING, BUDGETING, AND DEVELOPMENT IN JORDAN: AN
EXAMINATION OF HOW THESE POLICY PROCESSES FUNCTION
IN A POOR AND UNCERTAIN ENVIRONMENT

DISSERTATION

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By

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The purpose of this dissertation is to study the planning and budgeting processes in Jordan to determine whether the findings of Caiden and Wildavsky about those processes in other poor countries generally are applicable to Jordan. An attempt is made to answer the research questions by comparing data from national plans, budgets, and expenditures during a fifteen-year period (1970-1984). In Jordan, as in other developing nations, the role of planning and budgeting is highly significant to the success of the country’s hopes for development. This research tries to evaluate the role of planning and budgeting as policy instruments in the process of development in Jordan.

The second focus of the dissertation concerns the possibilities and problems of assessing the impact of governmental policies on development. Specifically, an assessment is made to determine the impact of governmental expenditures on development as evidenced in Jordan's gross national product during the last fifteen years. The following questions are addressed in order to examine the
impact of government action on economic development. First, what are the impact and significance of government expenditures, as a combined measure, on the gross national product in Jordan? Second, which governmental expenditure areas provide the greatest contribution to an increase in the Jordanian GNP?

Data for Jordan are compared with Caiden and Wildavsky's assumptions about planning and budgeting in poor countries, and conclusions are drawn about how planning and budgeting have influenced economic and social development in Jordan.
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CHAPTER I

INTRODUCTION

Since World War II the newly independent countries in what is sometimes called the Third World have faced major problems of development. These poorer countries are confronted not only by economic problems but by problems of changing social and political systems as well. Consequently, it is not surprising that national planning and budgeting for development have assumed key roles as policy instruments in these countries. Planning and budgeting processes in poor countries, however, have only recently attracted the attention of scholars, and few have fully examined these policy processes in Jordan.* The focus of this research is the planning and budgeting processes in Jordan and their influence on national development.

Statement of the Problem

As a new country in the twentieth century, the Hashemite Kingdom of Jordan faces unusually severe challenges. In its present form the nation of Jordan was officially

*An unpublished dissertation written by Fisal F. Murrar, entitled "Planning Budgeting Relationship: Quest for an Integrated Contextual Model" (University of Southern California, Los Angeles, California, 1974), compared the United States' budgeting techniques with those utilized in Jordan.
proclaimed in April of 1950. It incorporates the former kingdom of Transjordan, which had become an independent state in 1946, with the termination of the British mandate, and the portion of the Palestine Hills that remained in Arab hands at the conclusion of the 1948 war with Israel.

The country is a predominantly desert land and is poor in natural resources. All but a small fraction of its 97,000 square kilometers (37,500 square miles) are too arid for agriculture without irrigation, and water is extremely scarce. No deposits of coal or oil large enough for commercial development have been found, nor have any metallic minerals been discovered. The most important mineral resources in the country are phosphate and potash (3, pp. 3-7).

The population of Jordan was originally composed of Bedouins, but, as a consequence of the wars with Israel, the kingdom's population was increased dramatically by an influx of refugees, many of whom had lost everything. The population of Transjordan in 1947 was approximately 400,000, and the resident population of the portion of Palestine later incorporated into Jordan was approximately 450,000. Then, during the 1948 war, about 480,000 persons entered this territory from the remainder of Palestine. They were granted Jordanian nationality and now enjoy all of the rights and duties of citizens, including the right to vote. This expansion in population, comprised of people who were
culturally different from the original inhabitants, occurred in a country that, as previously noted, has only limited land area suited for agriculture and few other natural resources. Few industries other than cottage industries existed in the kingdom at that time, and the established trade and transportation routes had been disrupted as a result of the war. Jordan's annual per capita income of less than $100 was comparable to that of India and Pakistan, two of the poorest nations in Asia. The future of the kingdom during this period indeed seemed bleak (3, pp. 8-12).

The hostility and uncertainty of the political environment further complicated the problems of Jordan. The continuing tensions and wars with Israel necessitated high military expenditures. Conflicts with the neighboring country of Syria and a disruption in 1970 further increased the degree of uncertainty within Jordan and seriously affected its development. In view of these challenges, national planning and budgeting for development were imperative in order to allocate the country's scarce resources in the most effective way possible (2, pp. 10-17).

Purpose of the Study

The purpose of this research is to study the planning and budgeting processes in Jordan to determine whether the findings of Caiden and Wildavsky (1) about these processes
in poor countries generally are applicable to the specific case of Jordan and to attempt to assess the influence of governmental expenditures on national development. In 1974, in their book Planning and Budgeting in Poor Countries (1) Caiden and Wildavsky attempted to explicate these processes in Third World countries. According to these authors, inherent conflicts exist between planners (spenders) and budgeters (controllers). Planning by its nature is oriented toward long-range goals and involves a rational model of decision-making; that is, alternatives are weighed to ascertain which of them best meets the goals set for the country. Budgeting, on the other hand, is concerned with balancing scarce resources and short-term needs. Budgeting decisions are seldom long range in nature because of the uncertainty of the environment. These decisions, therefore, tend to be more incremental in nature, and the persons responsible for budgets see themselves as controllers of national funds. Revenue shortages cause budgeters to be managers of crises, and the worst thing that can happen to a minister of finance is to overspend available funds and then be unable to pay the bills. Conflicts between planners (spenders) and budgeters (controllers) are almost assured, and most often budgeters are dominant in those conflicts. As a result, budgets and expenditures often fail to follow national plans (1, pp. 264-293).
In 1975, in his book *Budgeting: A Comparative Theory of Budgetary Processes* (6), Wildavsky attempted to develop a comparative theory of budgeting by employing two major variables, wealth and predictability, to examine how the budgeting process functions in four different environments, which he classified as follows: a) rich and certain, b) rich and uncertain, c) poor and certain, and d) poor and uncertain. Figure 1 illustrates Wildavsky's model.

Wealth

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<td>Predictability</td>
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<td>Predictability (poor countries)</td>
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Fig. 1--Wildavsky's model of environments and budgeting processes*

According to this model, Jordan would be in the poor and uncertain quadrant (6, pp. 10-19).

Caiden and Wildavsky formulated the following generalizations about how the planning and budgeting processes function in countries classified as poor and uncertain.*

1. Since revenues are unpredictable and may fluctuate greatly, estimates of revenues are kept low and estimates of expenditures are kept high by ministers of finance.

2. The budget is made and remade during the fiscal year because of the fluctuation and uncertainty of revenues.

3. Supplemental budgeting is common because of the inability to accurately forecast costs of essential needs.

4. Payments for services and goods are frequently delayed because of cash-flow problems.

5. Debts are large and floating.

6. Investments are often postponed because of insufficient funds.

7. Criteria for budget approval are mainly political in nature rather than technical, and political maneuvering is widely evident among departments regarding budgets.

*Caiden and Wildavsky studied the budgetary process in the poor countries of Ghana and Uganda in Africa; Argentina, Chile, and Peru in South America; Indonesia, the Philippines, Malaysia, and Thailand in Southeast Asia; and Ceylon and Nepal in South Asia. Unfortunately, they were unable to study Jordan or any other Middle Eastern country because of continuing hostilities in the region.
8. Departments are less careful in preparing their estimates of needs because of the frequent changes in the budget and because of the dominance of politics in the budgeting process.

9. Human resources are scarce, and a lack of management talent greatly affects the budgetary process.

10. Each governmental department and division attempts to obtain earmarked funds and to keep any surplus for itself (1, pp. 66-100).

This study will attempt to determine whether Caiden and Wildavsky's generalizations are applicable to Jordan. It does not replicate Caiden and Wildavsky's study, however, for those researchers relied upon interviews and survey materials. The current investigation examines the planning and budgeting processes in Jordan and attempts to answer the pertinent research questions by comparing data from national plans, budgets, and expenditures during a fifteen-year period (1976-1985). This study also goes a step further than Caiden and Wildavsky's in that it seeks to assess the influence of governmental expenditures on national development.

Significance of the Study

In developing countries, the state plays a major role in development because of the weakness of private enterprise.
But, even in developed countries, during the past fifty years the role of government has increased; and today, in wealthy capitalistic countries such as the United States, government plays a major role in economic and social development. In developing countries, government has become the most important employer of the factors of production and distribution of goods and services, and it has assumed great significance in the process of modernization and development (4, pp. 3-9). Indeed, in poor nations like Jordan individual business enterprises are unable—or unwilling—to initiate coordinated programs of investment and development sufficient to modernize the country. Under these conditions, government represents the only institution capable of providing outlays sufficient for development.

To stimulate development, Third World nations have turned increasingly to national plans. When resources are scarce, planning is essential for deciding how best to proceed in development, and budgeting is essential for allocating those resources. Both planning and budgeting, therefore, are significant policy instruments for development, but they must be mutually supportive. The failure of national planning in many of the poorer countries has been in part caused by conflict between planners and budgeters. Uncertainty and fluctuations of revenues have frequently disrupted the best laid plans of Third World
countries. In Jordan, as in other developing nations, the role of planning and budgeting is highly significant to the success of the countries' hopes for development. Like all developing countries, Jordan faces problems in development with few resources in a highly uncertain environment. Thus, as policy instruments, planning and budgeting will play a major role in the process of development in Jordan (5, pp. 429-434).

Methodology

This dissertation embodies a double focus that requires, to some degree, different methodologies. First, the actors and processes in budgeting and planning and their relationships are studied to determine whether the assumptions of Caiden and Wildavsky (1) are applicable to Jordan. A descriptive approach relying upon legal documents and other published literature such as the Jordanian constitution, statutes, and administrative reports was utilized to identify the actors and their powers. Correspondence with key actors in the planning and budgeting processes, supplemented by telephone interviews, was used to help to provide an understanding of the legal and political relations between the actors as well as the technical operations of the system. Data from national plans, budgets, and expenditure records were compared to seek evidence of tensions and conflicts between spenders and controllers. In addition, the amounts of funds called for
in national plans were compared with the amounts budgeted to ascertain whether budgets have followed development plans. The research also investigated whether actual expenditures were made in accordance with budgets and plans. Through such comparisons, an attempt was made to determine whether Jordan has had the same planning and budgeting experiences as those described by Caiden and Wildavsky (1) in other poor countries.

To assess the impact of governmental expenditures on national development, the second focus of this research, the investigation employed secondary data obtained from the Yearly Statistical Series (1964-1983), special issue, and the Monthly Statistical Bulletin (October, 1985), both published by the Central Bank of Jordan, which contain information on the Jordanian gross national product and on governmental expenditure areas compiled between 1970 and 1984. In this dissertation, an examination of the relationships among four specific governmental expenditure areas was made. These four areas are the following:

1. Transportation and communication services expenditures, which include expenditures for building and developing primary and secondary roads in the kingdom, construction of railroad and port facilities, civil aviation and airports, meteorological services, buses, wireless communication systems, postal services, telecommunications, satellite earth stations, and microwave networks;
2. Economic developmental services expenditures, which include expenditures for agriculture, manufacturing and mining, construction, electricity, and water;

3. Social services expenditures, which include expenditures on primary, secondary, and higher education, libraries, health services (including public health, hospitals, and clinics), research, social development (including community development projects, programs for the handicapped, family and child care, and social centers), manpower programs (including vocational training, nursing, and the like), municipal and rural social services, and housing projects; and

4. Culture and information services expenditures, which include expenditures for cultural activities such as theaters, lectures, national documentation and information centers, Islamic affairs and holy places, historical sites, tourism, television and radio, news agencies, computer centers, and statistical centers.

The purpose of this study is to determine whether a government can promote economic development (as measured by an increase in gross national product) by quantitatively analyzing the following questions. First, what are the impact and significance of governmental expenditures, as a combined measure, on the gross national product in Jordan? Second, which governmental expenditure areas provide the greatest contribution to an increase in the Jordanian GNP?
In order to address each of these issues, six empirical models are examined.

The statistics utilized within each model include the following. To determine the bivariate association of each of the models, independent variables on GNP, the Pearson correlation coefficient \( r \) is employed. In order to identify the amount of variation in GNP explained by the linear combination of independent variables in each model, the coefficient of multiple determination \( R^2 \) is examined and interpreted. Having obtained a given \( R^2 \), the F test is computed to ascertain whether the relationship between this study's set of independent variables and the GNP is not zero in the population (i.e., to test for the statistical significance of its departure from zero). The T test is also employed to identify which independent variable is statistically significant within each model examined. An unstandardized regression coefficient and its associated standard error are displayed, in tabular form, for the independent variables examined in each empirical model. In addition, the Durbin-Watson test is utilized to determine whether the data collected from several time periods (i.e., 1970 through 1984) are autocorrelated. In a further attempt to improve the validity of the significance tests utilized in this study, a lag transformation procedure rescaled each of the independent variables (except year) to identify the model that maximizes the variation explained in the GNP. Each model is diagrammed and examined in Chapter VI.
Procedures for Collection of Data and Materials

Data and materials pertaining to Jordan's national plans, its budgets during a fifteen-year period (1970-1984), actual expenditures, sources of income, and indicators of national growth were used for this research. Most of these data were found in published reports such as the Central Bank's annual reports, the kingdom's national plans, and government budgets. The sources of these materials are described below.

1. All of the annual reports of the Central Bank of Jordan, its Monthly Statistical Bulletins, Jordanian development plans, and other related official materials were acquired from Jordan.

2. Data on expenditures and gross domestic production were obtained from the United Nations' Yearbook of National Accounts Statistics.

3. Data concerning commercial energy consumption were obtained from the Statistical Yearbook published by the United Nations' Department of Public Information in New York.

4. Additional information and materials related to economic and social development in Jordan were obtained from the North Texas State University library and from other libraries through interlibrary loan.
Organization of the Dissertation

This dissertation is divided into four parts. Part One comprises the introduction, presenting a statement of the problem, the methodology to be utilized, and the sources of the literature pertaining to planning and budgeting for modernization in Jordan, and Chapter II, which reviews the literature on development and modernization, the role of planning and budgeting as policy institutions in developing countries, and the assessment of governmental expenditures with regard to development.

Part Two of the dissertation—Chapters III and IV—gives a portrait of Jordan and describes the evolution of planning and budgeting institutions there. Chapter IV also explains planning and budgeting procedures in Jordan, notably the budgeting processes of making departmental estimates and budget preparation, including formal adoption, budget execution, and budget auditing.

Part Three—Chapters V and VI—evaluates the outcomes of the planning and budgeting processes in Jordan and the country's national plans and budgets to determine whether Caiden and Wildavsky's (1) generalizations about planning and budgeting in poor countries are applicable to the Jordanian situation. Chapter VI considers the possibilities and problems of assessing the impact of governmental policies on development. Specifically, an assessment
is made to determine the impact of governmental expenditures on development of the gross national product.

Part Four comprises the conclusion of the study. It compares the findings in Jordan with the research questions raised by Caiden and Wildavsky's (1) assumptions about planning and budgeting in poor countries, and it draws conclusions about how planning and budgeting have influenced economic and social development in Jordan.
CHAPTER BIBLIOGRAPHY


CHAPTER II

PLANNING AND BUDGETING FOR MODERNIZATION:
A LITERATURE REVIEW

Following World War II and the success of the Marshall Plan in reconstructing the nations of Europe, great enthusiasm arose for development in the newly emerging countries of the Third World (12, pp. 1-17). National planning came to be seen as the key instrument to stimulate development. Internal demands for a better life, combined with external demands from donor nations, international banks, and other international organizations providing loans and grants, caused most developing nations to undertake the formulation and implementation of national plans (11, pp. 4-6). In this period optimism was high that planning would lead to development, and the literature during the early post-war era reflected this optimism about national planning (36, pp. 3-20).

Development and Modernization

In time—and after a number of failures—it became evident that development was a much more complicated process than was earlier believed. In fact, it was recognized that the very term "development," although widely used, had
no agreed-upon meaning. Indeed, some scholars called "devel-

opment" probably one of the most depreciated terms in
social science, having been used vastly more than it has
been understood. One of the difficulties of assessing the
impact of governmental action in national planning is the
problem of defining development. Development tended not
to be discussed in total societal terms but, rather, to be
segmented into phases such as economic, social, or politi-
cal development, with the first of these receiving the most
emphasis.

In recent years, the earlier optimistic view that
there is a common road to economic development, as posited
in Rostow's stages of economic growth (32, pp. 234-242),
and that national planning is a policy instrument leading
to development has given way to pessimistic explanations
and prognostications by such writers as K. Raul Prebisch of
the Economic Commission for Latin America and other
economists (6, pp. 6-10). Various scholars have assigned
different meanings to the concept of development. Leading
contemporary political scientist Samuel P. Huntington found
that four conditions invariably were stressed in the po-

tlitical development literature, namely, rationalization,
national integration, democratization, and participation.
Huntington stated that these conditions lead to moderniza-
tion, which, in his view, is not necessarily the same as
political or economic development (23, pp. 390-398).
The much broader concept of modernization has become the goal of national planning in recent years. Modernization today is a concept which reflects changes that permeate all facets of life in a society. The process of modernization, as a concept, is meaningful only when considered in comparative terms, by juxtaposing traditional societies with more modern ones. Apter offers such a comparison.

The modern social order is typified, for example, by its individuals showing initiative and mobility, by its extensive educational opportunities, by its skilled manpower for industry, and by its dynamic social, economic, and political associations in which a high percentage of the population participates. The traditional order, on the other hand, is exemplified by rigidity in the hierarchy in which social, economic, and political life transpires, ascriptive attitudes, a simple and predominantly agricultural economy (4, pp. 43, 57, 58, 59).

Between these two constructs of modern and traditional, a transitional situation develops in which the foundations of the traditional order are subjected to change. As traditional men and women begin to acquire a sense of self-reliance and their orientations are extended beyond the family tent and village, new associations gradually emerge to cope with individual needs in a more complex environment. The transitional situation in which new values, new patterns of life, and new institutions develop is a very complex process that occurs over long periods of time and may even span generations (14, p. 494).
Modernization includes changes within all parts of the social order, including the psychological, sociological, economic, and political environments. Psychological change involves individuals' increasing awareness of their ability to control their own environments and alterations in the human psyche. In Rustow's words,

Modernization denotes rapidly widening control over nature through closer cooperation among men. More specifically, the individual becomes innovative, empathetic, values change, and the personality is altered, roles are varied with a division of labor, and new relationships are established with surrounding institutions (32, p. 3).

Psychological changes apply to individuals, their perceptions, and their behavior, whereas sociological changes affect groups of persons or segments of a society. Sociological changes are linked to the development of educational programs, to altering communication systems, to urban migration, and to the conflicts emerging from diverse interests in society (19, pp. 4-18). Psychological and sociological changes mark the beginning of transition from traditional life. The psyches of individuals undergo a transformation as they develop a sense of innovation and as their values and personalities change. Concomitant with this transformation is the fact that large numbers of people in a society are affected by the availability of education, expanding communications, and migration to urban areas. In sum, these changes cause the assumption
of new roles in one's personal life and create new sources of conflict in society. New demands on a traditional society caused by the new desires and aspirations of its people are difficult to satisfy because the society's capability to respond to the people's demands grows more slowly than the level of the demands themselves (23, pp. 33-55). As Huntington states,

A gap develops between aspirations and expectations, want satisfaction, or the aspiration function and the level of living function. This gap generates social frustration and dissatisfaction. In practice, the extent of the gap provides a reasonable index to political instability (23, p. 34).

The resolution of problems developing from psychological and sociological changes is very much related to and dependent upon a transformation occurring within the economic and political sectors of a society. Economic changes are fundamental to the process of modernization. They include the development of the productive, distributive, and consumptive capacities of the transitional polity. The most elementary way of measuring development is by examining the growth of real per capita income (3, pp. 42-48). Increasing individual income is perhaps the most essential ingredient in economic development. This increase is dependent upon many changes that take place during modernization such as the development of a wage and consumption orientation, the provision by entrepreneurs of the stimulus for the flow of capital, an increase in
agricultural and industrial production, technical training, and the development of ancillary institutions to foster economic integration, such as national planning and budgeting institutions. Economic transformation is caused by many factors, not the least of which are socio-psychological and political changes. Thus, the realization of economic development is dependent upon governmental actions, the visible hand's exercising some degree of control over inflation and recession, economic diversification, the balance of trade, employment, welfare, and planning. Consequently, during the period of transition, the state can be expected to provide impetus for economic development (3, pp. 46-49).

Political changes represent a transformation in the nature of politics. One of the more cogent descriptions of the term "development" is "political development," which means the way of ruling divided societies without undue violence (13, p. 17). A change in the political structure and the political culture of a society accompanies the process of modernization. The problem in the realm of politics becomes one of nation-building. Two principal obstacles are encountered when an attempt is made to construct a viable political system for a society. A universal sense of national identity must emerge, and a way to integrate diverse peoples must be found. Overcoming problems of identity and integration involves "creating coherent
political forces that can make meaningful a people's feeling of association with its polity" (31, p. 16). This particular relationship is nurtured in an atmosphere where extensive participation occurs in the political process and where a common sense of political legitimacy, authority, and efficacy develops. An institutional apparatus accommodating mobilized political forces and an ideological framework to provide congruence for political beliefs and action are necessary for political development.

In summary, the traditional political process begins to give way to a modernized one, adapting to accommodate mobilized, secularized, and political individuals. Almond and Powell conclude that political development is a cumulative process of role differentiation, subsystem autonomy, and secularization (2, pp. 299-300), accompanied by the political system's capabilities to regulate the behavior of the society, to extract resources from its environment, to distribute and redistribute materials and resources, and to respond to the demands of the population while maintaining its own balance (35, pp. 32-33).

According to the theory of modernization and development, government in developing countries represents a significant factor for development. Planning and budgeting as policy instruments are very important in determining the course of modernization. The work of Almond and Powell
(2) provides a useful theoretical framework for the current research since its basic focus is to examine the increase of structural differentiation and cultural secularization in the development of the administrative institutions for planning and budgeting in Jordan.

The national planning process plays a key role in the course of modernization in that it helps to institutionalize a means for wider participation in the goal-setting processes of society and thus lends a degree of legitimacy to decisions for allocating, regulating, and extracting resources. Planning further leads to institutionalization of budgeting and spending processes in society. This change, in turn, stimulates processes for evaluation of governmental programs.

Evaluation of National Planning

National planning is of relatively recent vintage. Before World War II, the Soviet Union was the first country to practice systematic economic development planning, with its first five-year plan being adopted in 1929 (39, p. 4). The impact of the Soviet Union's planning experience on Third World countries was limited, partly because the majority of these countries were still under colonial rule at that time. After World War II, the Soviet planning model spread to the countries of eastern Europe that had come under Soviet influence and to China, thus yielding a
much wider range of experience from which the developing countries could draw (39, pp. 4-5). Furthermore, as these countries became politically independent, the opportunities for communication between them and the Soviet bloc increased (39, pp. 6-7).

The Soviet approach offered a number of attractions for the newly independent states of the Third World. Planning in the Soviet bloc, as in the Third World itself, was seen as a way of bringing about radical social and economic change, although the type of change desired was not the same. Furthermore, the Soviet approach to planning was designed especially for use in countries with a high degree of state control over the economy. Many developing countries regarded such a degree of control as necessary and, frequently, desirable as a means of bringing about expected development (38, pp. 11-33). Consequently, the degree of influence which the Soviet approach has had on planning in individual countries is to some extent dependent on the degree of state control that is considered desirable. Nations with a one-party system of government lend themselves particularly well to the Soviet approach. It is significant, however, that even countries characterized by a multi-party system of government and relatively less state control (such as Jordan) have introduced a system of national economic planning which resembles the Soviet model in many respects (38, pp. 42-50).
In the capitalist countries, at least until the Great Depression of the 1930s, there was little or no national economic planning since these countries relied entirely upon market forces to stimulate the development process. In this sense, capitalist nations had market-planned rather than state-planned economies. But the Great Depression and World War II altered this situation, for fighting the Depression and the war led to extensive governmental participation in the economy (5, pp. 13-20). Subsequently, the experience of planning in Europe and the United States gave Third World nations yet another planning model for development. The events of the Depression and the war years demonstrated to economists and to others concerned with the national economy in these countries that it is possible for a government to influence the rate and direction of growth of a mixed economy (i.e., an economy comprising both private and public sectors) rather than relying entirely on market forces. Moreover, the Depression and the war also provided some useful lessons about techniques of economic planning (7, pp. 251-270).

The wartime experience had another important effect on the rise of economic development planning in the Third World in that it encouraged the British and other colonial governments to introduce planning into their territories during the period leading up to and immediately after
independence. Since about 1950, the World Bank, along with other international organizations, has also been an important agency in starting or accelerating organized national developmental planning in many countries. Based on the Bank's recommendations and studies, many countries and dependent territories have either established or reorganized central planning agencies or have prepared national development plans (39, pp. 10-15).

The spread of development planning has also been stimulated by loans and grants made by western countries, regardless of whether these countries have favored national planning for their own economies. They have accepted planning in recipient countries and, indeed, have often insisted on the formulation of plans before they extended aid to less developed countries (24, pp. 7-32).

This new emphasis on national planning by banks and other capitalistic institutions reflected, in part, a change in the intellectual framework of the west. Keynesian economic thought since the Great Depression legitimized the actions of government in planning the economy. In addition, Simon's model of rational decision-making and his emphasis on the vital role of that function in administration shifted the emphasis of planning and made it acceptable in capitalist societies (39, pp. 32-39).

Planning has always been necessary, of course, but it was difficult to define and often became mixed with
competing economic ideologies. Planning embodies many dimensions. It means to choose between many desirable activities, since not everything can be done at once (34, pp. 38-45). It means to set goals and allocate resources (land, water, minerals, people, wealth, roads, buildings, equipment, etc.) and to make decisions about how to make the best use of those resources. It has to do with the state of the future, including forecasting and predicting what is likely to happen and, more specifically, predicting the outcome of alternative courses of action. The comprehensive-rational model of decision-making described by Simon was able to accommodate all of these ideas and to validate the concept of national planning in western societies as well as in the Third World (24, pp. 148-184).

Much of the literature on developmental planning describes rational decision-making processes, with an emphasis upon inputs, outputs, and cost-benefit analysis (the last of these being an essential factor in the selection of projects to be undertaken). Considerable attention is given to financing developmental projects, and this, of course, involves the problems of budgeting for development (11, pp. 2-3).
Budgeting

The Evolution of Budgeting

Budgeting is also a relatively new policy development. As Caiden has demonstrated, the concepts of budgeting and accountability for expenditures are fairly recent, emerging only with the development of representative government (9, pp. 540-541). Before this development, rulers of feudal monarchies in western Europe were expected to live "on their own" from feudal payments coming from their own estates, with exceptional assistance from other vassals or from non-tax receipts from other feudal dues, sales of land or timber, and borrowing. In a sense, this scenario is not too different from that in many traditional societies today, where there is a lack of clear distinction between public and private funds and public monies are often treated as individual income by rulers with little or no accountability to a representative legislature (8, pp. 40-42).

The newness of public budgeting is also evident from the American experience. Until the mid-1920s, there was no centralized budget system on the federal level in the United States. Each governmental agency sought funding from Congress directly, and various standing Congressional committees recommended their appropriations. There were no formal budget institutions at this time. Beginning with
the enactment of the Budget and Accounting Act of 1921, however, budget preparation became the responsibility of the chief executive, and formal budgeting institutions such as the Bureau of the Budget (later the Office of Management and Budgeting) were created to help the president carry out this responsibility (20, pp. 32-34).

At the state and local levels in the United States, budgeting became a major policy institution only in the reform era during the last decades of the nineteenth century. Prior to this time, there was little perceived need for sophisticated budgeting mechanisms. Gradually, executive budgets were provided for, the chief executives of state and local governments were assigned the responsibility for preparing budgets, and budget agencies were created to assist them with this responsibility (22, pp. 2-10).

Early budgets were viewed as tools for accounting and as means for holding governmental officials accountable for expenditures. Every authorized expenditure was listed separately in a line-item budget to ensure that all expenditures were made in accordance with appropriations. Then, as governments began to perform more complex functions that were more difficult to manage and evaluate, the function of budgets shifted from an emphasis on accounting to one of management. Budgets began to be seen as management tools to assist governmental administrators in promoting the
programs that were most effective and increasing the effectiveness of others. Budgets were organized according to functional programs rather than line items, as previously. Management rather than accountability was the major thrust of such budgets.

By the 1960s, the increasing demands on government in the United States led to increasing competition between various governmental programs, and policy-makers needed assistance in deciding how to allocate scarce resources. The new concept of rational decision-making was now applied to budgeting. New budget techniques such as Planning, Programming, and Budgeting Systems (PPBS) (21, pp. 270-276) and, later, Zero-Based Budgeting methods (ZBB) were introduced so that expenditure alternatives could be analyzed. Budgeting, at this point, was seen as a tool for helping political officials to allocate resources (29, pp. 110-117).

Attempts have been made to apply these new budgeting techniques in the Third World. It was assumed that, since budgeting is such a pervasive activity of all governments, there was a common pattern of budgeting that fits all circumstances. Therefore, the new techniques of budgeting, based upon the rational-comprehensive model of decision-making, would apply in Third World countries as well as in more highly developed nations. In this regard, a study considering the PPB system for Jordan was written by a
Jordanian scholar, Fisal F. Murrar, in 1974 (28). After discussing the budget systems of the United States and Jordan, Murrar concluded that any attempt to transfer advanced models of planning and budgeting systems to less developed countries would encounter a number of obstacles, and he recommended the development of a budgeting model to fit the individual environmental context of the developing nation in question (28, pp. 699-746).

Difficulties in applying advanced budget techniques in developing nations emerged almost immediately—in fact, even in the United States major problems arose during the institution of these types of budget systems. As a result of this failure in transplanting budget techniques to other environments, scholars began to recognize that in reality there was no general theory of budgeting. Yehezhel Dror (17), one of the early critics of attempts to introduce the rational model of decision-making in Third World countries, pointed out that not even the United States—and certainly not Third World countries—has the capability to consider all alternatives and forecast the consequences of each of them. Budgeting or planning techniques resting upon the rational model of decision-making, therefore, cannot be used effectively in developing countries (17, p. 153). Dror also criticized attempts to apply Charles Lindbloom's incremental model of decision-making to the Third World,
pointing out that there is no acceptable past experience on which to base future decisions. Present and past conditions in Third World countries are totally unacceptable to people who are demanding radical development and change. Dror stated that, although the "science of muddling through" may be valid in a relatively stable society such as the United States, incremental changes do not provide a legitimate approach in countries engaged in high-rate directed social change. He called for a new type of decision-making for the Third World which would increase rational content through more application of goals and extensive research for new alternatives, but in which experience and extra-rational processes would also play a significant role (17, pp. 154-156).

Amitai Etzioni later presented still another approach to decision-making, mixed scanning, which included both rational and incremental decision components (18, pp. 385-392). The difficulty in this model is that Etzioni did not demonstrate how it could be applied in the Third World environment.

**Budgeting in the Third World**

During the 1970s, a number of works were published that dealt with budgeting in the Third World. A major study on the subject of budgeting in poor countries (also discussed in Chapter I of this dissertation) was undertaken...
by Caiden and Wildavsky (10), who examined the budget processes in poor countries and the various strategies employed by heads of departments and ministries in those countries (10, pp. 13-30). The researchers first identified the seemingly inevitable conflicts between planners (spenders) and budgeters (controllers). They also characterized the strategies used by ministers and department heads in playing the "budget game" as a) piercing the ceiling, b) padding, c) the imperative to spend, d) under-spending, e) transfers, and f) avoiding cuts and getting large increases. Caiden and Wildavsky (10) pointed out that organizational survival and prestige, as well as the minister's individual status and position, cause all departments to seek more funds. A department's power in the budgeting process depends upon a number of factors, but especially on clientele support and lobbying. In turn, individual ministers' prestige depends in part upon their ability to meet their employees' demands for higher salaries and amenities.

The knowledge that reductions by the minister of finance are probably inevitable lead to much higher initial requests, made in the hope of coming close to obtaining the funds that are actually needed (10, pp. 31-37). Ministries and departments also try to spend all the monies appropriated to them early in order to avoid having funds frozen or taken from them for other purposes. On the other hand,
ministries in poor countries often encounter problems that make it impossible to spend the money appropriated to them. A project can be delayed for any of a number of reasons, including a) lack of skilled workers, b) unavailable material and equipment, c) inability to import commodities, d) no sense of the value of time, and e) inadequate communication networks. As a result, funds are frequently transferred between ministries to even out expenditures, and this often leads to the use of funds intended for capital improvements to pay recurrent expenditures. Such transfers frequently cause investments to be delayed and projects to remain uncompleted (10, pp. 45-65).

Ministries use a variety of strategies in attempting to avoid cuts in their budgets. Sometimes they cry, pointing out the tragedies that will be caused by the lack of funds. Sometimes a minister may resign--or threaten to resign--in order to put pressure on decision-makers. Sometimes ministers or department heads threaten to cut popular programs with the highest priority in the country if additional funds are not provided (10, pp. 65-70). The ingenuity of department heads in the budgeting game is little different from or perhaps even more creative than it is in developed countries. The continuous struggle for funds leads departments that charge for their services or are able to invent fees or taxes to support their programs to
attempt to have these funds earmarked solely for their own use. Finally, many departments independently seek their own funds by hiring consultants to arrange for loans through international organizations.

Caiden and Wildavsky (10) also showed that in poor countries the link between planning and budgeting is very weak. Planning and budgeting generally have been located in different agencies with diverse perspectives and attitudes. Budgets are prepared on an annual basis, but plans are formulated for extended periods as long as ten years (10, pp. 75-85). Planning seeks economic rationality and emphasizes capital investments, but budgeting is responsible to short-term financial and cash conditions as well as to political realities. Planners and budgeters generally have received different training, have different backgrounds and experience, and exhibit different orientations in their work. Planners want to accelerate the pace of development by enlarging expenditures and determining the criteria for allocation. They point to the benefits of planning the expansion of employment, the attraction of foreign aid, and the redistribution of resources. Budgeters, on the other hand, are conservative about expenditures, seeking to cut costs and not to increase debts by borrowing. Most often the minister of finance prevails, and, as a result of the conflict between him and other ministers and department heads, development planning often fails (10, pp. 90-110).
During the 1970s, a number of scholars also began to attempt to provide a conceptual framework for budgeting to serve as a guide for developing countries. Joan Chien Doh, for instance, in a study of developing countries in Southeast Asia and the Pacific region, stated that budgeting systems must fit their ecological setting, especially the cultural, social, and economic conditions in a nation (15, pp. 141-145). She proposed a model composed of value, technical, and strategy components. Budgets are influenced by the human and natural resources available in the environment. The value component attempts to explore the relationships between budgeting and its environment. The technical component is influenced by the skills and general educational level within the society, the availability of data, and the economic and political forces determining the composition of revenues and expenditures. The strategy component is concerned with the question of how the budget can be implemented so as to have a greater chance of success. Doh concluded by pointing out that budgets must be both dynamic and responsive to ecological forces (15, pp. 146-152). She also stated that, owing to the problems of mass poverty and maldistribution of wealth in developing countries, to be relevant budgets must be responsible to the needs of the people.

In 1975, in his book *Budgeting: A Comparative Theory of Budgetary Processes* (41), Wildavsky employed two major
variables, wealth and predictability, in his effort to formulate a comparative budgeting theory. Wildavsky studied the budgeting process in different environments classified as a) rich and certain, b) rich and uncertain, c) poor and certain, and d) poor and uncertain (41, pp. 13-30). He found that incremental budgeting is dominant in rich and certain environments such as that in the United States, Japan, France, and Great Britain. Supplemental budgeting is found in rich and uncertain environments, such as in France during the Third and Fourth Republics and, in the present day, oil states like Saudi Arabia, Kuwait, the United Arab Emirates, Nigeria, and others. Poor and certain environments, as in some American cities, lead to revenue budgeting, where any proposed expenditure beyond essential functions has little possibility or being enacted. When the environment is poor and uncertain, as in most Third World countries, repetitive budgeting is the basic feature of the budgetary process. Because of great fluctuations in revenues, budgets are usually made and remade during the fiscal year, and these conditions seriously hamper the implementation of development plans (41, pp. 31-35).

In another study, Caiden pointed out the need to link budgeting and public finance with environment in order to promote meaningful hypotheses regarding these relationships.
Caiden described four patterns of budgeting that appear to have occurred in different contexts in western history (9, pp. 539-541). First, she examined the pattern of budgeting of the feudal monarchies of western Europe before the end of the thirteenth century. This pattern was one in which resource mobilization from taxation was low, authorities were largely independent of external checks on their financial policies, and administrative control rested upon a mixture of contractual obligations with independent entities and personal surveillance. The second pattern described by Caiden was prevalent during the fourteenth century, when nation-states were emerging in Europe. In this pattern, although taxes were high, the potential of the economy was not reflected in the tax revenue received by the state, accountability was low, and the gap was filled by a largely independent financial administration. The third pattern was observed in the city-states which flourished in Italy and northern Europe in early medieval times. These cities were ruled by councils of citizens who were well aware of the need to keep taxes low. Taxation, therefore, was carried out in the form of direct taxes, but these were imposed irregularly and at low levels (9, p. 542). In this environment, financial officials were audited frequently, and the administration relied on popular control. Caiden's fourth pattern of budgeting was observed in
seventeenth- and eighteenth-century Prussia. This was a pattern of mobilizing autocracy, characterized by high resource mobilization, low accountability, and high administrative control. Tax revenues were no longer diverted into private hands but instead were gathered by an administrative arm of the state. Taxation was kept relatively low because of the availability of outside resources in the form of plunder from invaded countries. Administrative control of finance improved, and external supports were improved through stabilization of the currency and the founding of a central bank. In addition, the introduction of double entry bookkeeping improved the techniques of accounting. External accountability, however, was low, so budgets were presented late and were more fiction than fact (9, p. 543).

From these historical budgeting patterns, Caiden attempted to draw parallels with more recent experiences. She suggested that the second pattern resembles the current budgeting practices in poor countries. Features that are common to the two situations are cash-flow budgeting; splintered or dispersed budgets composed of a number of earmarked funds; lack of budgetary control; fictional budgets; lack of information on the real financial position; a high rate of borrowing, particularly short term and at disadvantageous terms; and low accountability and
administrative control (9, p. 544). Caiden stated that pattern analysis may prove to be a useful tool in ordering observations, promoting self-awareness, and predicting events and strategies in budgeting.

Since the appearance of Wildavsky's book on comparative theory (41), a number of writers have attempted to characterize the budgeting process in poor countries. Premchand described the budgeting structure in poor countries as typically exhibiting excessive budgetary fragmentation, multiplicity of budget categories, emphasis on line-item structure, absence of relationship to the current administrative activities, lack of integration of the financial and physical aspects of transactions, and inadequate connection with the development plan (30, pp. 24-28).

Thompson considered another group of budgetary characteristics in developing nations. Their characteristics were as follows: a) government intervention is supposed to raise living standards by exploiting or transforming existing resources; b) government intervention arises from an autocratic past, a paternalistic tradition, and an unskilled and politically illiterate electorate; c) capital markets are underdeveloped, and productive flexibility is limited; d) defense expenditures are little more than police expenditures, and social services are underdeveloped; e) loans and grants are large, and the administrative system is simple (37, pp. 250-261).
Other writers have emphasized problems of budgets in the Third World. Murphy discussed the fact that budgets usually are not unified, and both capital and current budgets must be considered. The former encompasses expenses for capital structures and equipment essential for achieving economic progress, whereas the latter are composed of functional categories expenditures necessary to maintain government services (27, pp. 357-363). Waterston enumerated three shortcomings of this method of budgeting: a) the difficulty of separating expenditures on capital accounts from those on current accounts (e.g., new construction versus maintenance) or for development versus non-development purposes (e.g., work on a highway as opposed to work on a stadium), b) the ambiguity in determining the total expended on a program or a project and the total expended on a particular activity, and c) the difficulty of determining the costs of individual projects or programs. Still other writers have recited a litany of budgetary problems in poor countries, such as inadequate accounting procedures, long delays in closing accounts, lack of information about how much money was being spent and on what it was being spent, and weaknesses in pre-audit and audit procedures (39, p. 219).

In a 1980 article Caiden (8) assessed ten common assumptions of the budgeting literature addressed to poor
countries. The first assumption is that a common pattern of budgeting exists which fits all circumstances. In answer to this view Caiden stated that the success of budgeting depends not only on its own internal workings but upon the environment in which it operates. The second assumption is that the aim of budgeting is national planning. Caiden recognized the inherent conflictual position between planning and budgeting and pointed out that to use planning as a budgetary goal downgrades an equally important goal, namely, control of expenditures and efficient attainment of expenditure objectives (8, pp. 40-41). The third assumption is that improved budgeting depends on adequate resources. This condition is not generally present in poor countries, and Caiden asked what these countries should do in the meantime while—-it is hoped--the "new international order" is emerging. In Caiden's opinion, to rely upon such an assumption is unrealistic. The fourth assumption is that budget decisions can be separated from policy decisions. Such a dichotomy, Caiden suggested, is simplistic, since budget policy, far from being a technical exercise alone, is born in the basic political conflicts of the budgeting process. The fifth assumption is that coordination is essential. Caiden again pointed out that budgeting is part of the political process, and coordination, like all
such bland words, is empty of content. Assumption six is that comprehensive decisions are superior to partial decisions, and complex solutions are better than simple solutions. Caiden stated that to overstretch the principles of comprehensiveness in this way is to place burdens precisely on the qualities that are in short supply in poor countries, such as information and skilled personnel, without improving actual budgetary decisions (8, pp. 42-43).

Assumption seven is that the prerequisites of budgeting are a matter of technique rather than the product of environmental conditions. Good budgeting, Caiden stated, depends on a number of factors—reliable and adequate information, timely and accurate reporting, careful recordkeeping, the ability to forecast costs and trends, and skilled staff. Often the conditions required for good budgeting, such as reliable information, are related to environmental features. In short, budgeting is more than just technique and will.

The eighth assumption is that politics is not as important as economics. In response to this view, Caiden pointed out that policy decisions, in the last resort, are political decisions. The ninth assumption is that good budgeting is a matter of regulation. Although regulations are frequently proposed to curb corruption in public life, rigid, narrow procedures and regulations all too often are counterproductive. The tenth assumption is that budgeting is
relevant to development. Caiden noted that, although it is assumed that good budgeting practice and development are related to each other, this ignores both the limitations of the budgetary process and the breadth of the development process.

Her consideration of these common assumptions led Caiden to the following conclusions. First, attention should be given to the establishment of a comparative typology of countries which would be useful in framing recommendations about budgeting (8, p. 44). Second, efforts should be made to develop means of budgeting for Third World countries which are not carbon copies of those used in developed countries. Third, an attempt should be made to formulate criteria for budget performance. Fourth, discussion might be organized around major common problems such as inflation, revenue variability, and the like rather than abstract comprehensive categories. Fifth, it is essential to stress the relationships between government budgeting and organizational forms. Finally, Caiden stated that, if practical proposals are to replace unsuccessful recommendations based on unwarranted assumptions, much more investigation of actual budgeting practices will be required (8, pp. 45-46).
Assessing the Performance of Public Organizations

Although the problem of assessing the performance of public sector organizations is fundamental to any society concerned with the accountability and performance of its institutions, it is only in recent years that systematic attempts have been made to measure how well governmental programs meet their goals. With the evolution of rational-model planning and budgeting systems such as PPBS and ZBB, it has become necessary to measure performance to determine whether expenditures lead to the attainment of desired goals. U.S. President Lyndon B. Johnson clearly stated the need for assessing performance in his directive to major civilian agencies to begin using PPBS in 1965. Johnson believed that the new budgeting system would assist government to a) identify national goals with precision and on a continuing basis; b) choose among those goals the ones that are most urgent; c) search for alternative means of reaching those goals most effectively at the least cost; d) gain access to information not only about next year's costs but about the second, third, and subsequent years' cost of programs; and e) measure the performance of programs to ensure a dollar's worth of service for each dollar spent (16, p. 155).

As a result of the new emphasis on assessing or measuring the performance of government programs, the field of
evaluation developed rapidly. The purpose of evaluation research, according to Weiss, is to measure the effects of a program against the goals it sets out to accomplish as a means of contributing to subsequent decision-making about the program and improving future programming (40, p. 4). Much early evaluation research was conducted on domestic programs. The question frequently raised in evaluation research, according to Sharkansky, was "What do we get for the money?" He pointed out, however, that the production of public services is a complex phenomenon that involves the interaction of many variables, and, therefore, it is difficult to determine exactly which of these variables are most significant in assessing a program (33, p. 181).

A recent critique of evaluation research pointed out that there is still no agreed-upon conceptual framework to guide this research. One basic conception of performance underlying much of the literature is the engineering approach, which defines performance as a ratio of resources consumed (inputs) to standard units of work produced. According to this view, the public sector is treated as a production system that transforms inputs into outputs, with outputs representing the goals of society. Measuring performance, thus, focuses on the use of accounting data to determine whether goals are attained, but goal attainment is often difficult to measure. When an organization
has a concrete, identifiable product, goal achievement can be measured with relatively little difficulty in quantitative terms. When an organization provides a service, however, measurement problems arise. Because of this difficulty, most organizations that provide services have had to employ internalized measurement mechanisms—hours of personnel time spent, number of inspections made, number of licenses issued, and the like—which do not indicate the external impact of their efforts. Studies of the performance of such agencies have often relied upon a systems model to measure effectiveness. The system model, according to Johnson and Leven, assumes that the demands placed on public organizations are so dynamic and complex that it is not possible to define a finite number of organizational goals in any meaningful way, and, therefore, the next best thing is to measure variables representing the state of the system (26, pp. 224-245).

Yet, despite increasing attempts to measure domestic governmental performance through these and other techniques in the 1970s and 1980s, pessimism grew concerning the ability to fully assess the impact of governmental programs (16, p. 183). Furthermore, the problems of assessing the success of national plans in developing countries were even more difficult. In 1967, Adelman and Morris wrote a book entitled Society, Politics, and
Economic Development: A Quantitative Approach, which attempted to bridge the gap between theory and practice in economic development by means of a systematic statistical analysis of social, political, and economic characteristics of nations at varying stages of economic development. Adelman and Morris pointed out that efforts to extend growth analyses to include non-economic factors are hampered by the absence of empirical knowledge about the manner in which they operate, and few non-economists, according to the authors, show interest in comparative empirical investigation of the process of development. Factor analysis was used by Adelman and Morris in an attempt to reduce vast amounts of data into basic components and to provide insights into the relative importance of various factors (1, pp. 1-6).

In 1972, however, a staff study of the United Nations Institute for Social Development pointed out some of the problems of relying on the types of statistical techniques used by Adelman and Morris. For one thing, there is no generally agreed-upon theory of economic development applicable to developing nations. Furthermore, development is such a complex phenomenon and involves the interaction of so many variables that it is difficult to determine exactly which variables are significant in assessing national plans. Nor is there any clear and agreed-upon definition of
socioeconomic development—despite its importance as a goal of current international and national policy—and no simple objective criterion of it exists against which to validate measurement devices. As a result, it is necessary to rely on indirect methods and successive approximation in pursuing a quantitative definition of socioeconomic development. The national accounts system, including per capita national income (per capita, gross national product, or gross domestic product), which is often utilized, is not adequate for the analysis and measurement of socioeconomic development as a whole. If social factors, particularly levels of living, are to be considered as part of the objectives of development, another approach to measurement is required that takes into account a country's real health level, its real education level, and so on, not only the amount of money technically classified as being spent on those objectives (25, pp. 3-4).

The U.N. study proposed the creation of a new measurement criterion, a measurement of levels of living, which attempted to assess how well the goals of society were met by considering social and economic indicators instead of governmental expenditures for development alone. The study concluded that the process of development is affected by unlimited internal and external factors which make it difficult to evaluate the impact of public expenditures.
The process of development, involving both economic and social variables, is not a uniform linear progression of a set of variables but, rather, a changing complex of factors that move at different rates in relation to each other and that vary in importance at different levels of development and in different types of countries. Therefore, the statistical techniques designed for a static population and a normal distribution are not entirely appropriate for the quantitative analysis of development data. McGranahan and his associates stated,

Development involves a great many variables that correlate with each other, and the fact that one variable in a set of developmental data can be treated statistically as an independent variable and another as dependent does not demonstrate the existence of such dependence in reality, nor reveal the amount of dependence where dependence can be reasonably assumed to exist (25, p. 5).

Still another problem of measuring the impact of governmental expenditures on socioeconomic development arises from the fact that both the public and the private sectors are involved in the development process. The difficulty is how to identify activities that are likely to respond to the expenditures of government alone. In part, this problem is similar to Morton Grodzen's "marble cake" concept since it is impossible to separate the results of governmental actions from those of private sector actions (33, p. 182). This situation is further complicated by the fact that in developing countries few reliable data are available on
public sector expenditures for development. The conclusion of the U.N. study was that there is no valid universal formula relating individual factors of development to other factors in a causal manner to explain the dynamics of development. Therefore, the researchers declared that there is a major need to build up the science or art of development diagnosis (25, p. 160).

In view of this need, the current study not only traces the evolution of planning and budgeting institutions and operations in Jordan but attempts to assess the effect of governmental expenditures on development.


CHAPTER III

JORDAN: A PROFILE OF A DEVELOPING NATION

The new nation of Jordan faces unusually severe developmental challenges. The most significant factors in Jordan's history have been the wars with its neighbor Israel and the influx of wave after wave of refugees. Although these refugees were Arabs whose language and religion were similar to those of the Jordanians themselves, they had different lifestyles and economic backgrounds, and, as a result, posed many new problems for the kingdom. Almost immediately after gaining its independence from Britain in 1946, Jordan faced a hostile environment and severe strains caused by the economic disruption of war and the mass migration of new peoples into a poor desert country that had few economic resources (1, pp. 21-28). In view of these challenges, national development was imperative and became the country's most significant policy goal.

Historical and Social Background

Jordan, an Arab nation located on the eastern and western banks of the Jordan River, is bounded on the north by Syria, on the east by Iraq, on the south and east by
Saudi Arabia, and on the west by Israel. Although Jordan officially consists of both the east and west banks of the Jordan River, the west bank has been occupied by Israel since 1967 (8, pp. 73-75). With the exception of a sixteen-mile coastline on the Gulf of Aqaba, the nation is landlocked. Only 13 per cent of the total land area is cultivatable, and the scarcity of rainfall, which averages only eight inches per year, restricts rain-fed agriculture. Unlike some of the other desert nations in the region, Jordan has no commercial deposits of coal or oil, and its only significant mineral resources are phosphate, potash, ceramic clay, copper, magnesium, and bromine (8, pp. 77-79).

The original inhabitants of Jordan were largely nomadic tribes concentrated in the desert regions east of the Jordan River, the area formerly known as Transjordan. They were herders of camels, sheep, and goats (10, pp. 1-7). The social structure of these tribes was based upon the extended family, and every extended family traced its lineage to a common ancestor in the larger group, the tribe. Social stratification within these groups was almost absent in that each was a homogeneous unit whose native members were social equals. Distinctions were made between generations, however, and the older generation commanded high respect from the younger. Distinctions were also emphasized between noble and vassal tribes. Each
tribe was governed by a sheikh, chosen by hereditary right, and his council, which represented subtribal groups (9, pp. 3-7).

Today nomads and semi-nomads make up less than 10 percent of the total population of Jordan since the government has introduced programs to help resettle these people into permanent communities. Despite this decrease in the percentage of Bedouin people, they continue to play a vital role in Jordanian politics; they have been very loyal to and a strong bulwark of the king (10, pp. 36-38).

More than a third of the population of Jordan now lives in small agricultural villages. Although many villagers have moved into towns and cities, the influx of Bedouins into the villages has maintained their populations. Most of the people living in villages earn a meager existence working in agriculture on small family plots. In recent years, the income of many of these small farmers has been supplemented with monies sent by relatives working outside Jordan in neighboring Arab oil countries. The social structure of the village is not very different from that of the tribe in that the extended family is still the basic social unit and relationships are highly personal since the size of the village is small enough to permit everyone to know everyone else (10, pp. 4-7).

The village is governed by a headman, or Mukhtar, and a village council. In theory, the Mukhtar is chosen
from the largest and most wealthy subtribal group, with the approval of the local representative of the central government; in reality, the Mukhtar is often appointed by the central government representative without regard for the wishes of the villagers. The council represents the largest kinship groups in the village. Members are not elected but rather, are chosen by the elders of these groups. Officially, the council is vested with administrative, legislative, and judicial authority at the local level, but the ultimate authority is actually superimposed from above and rests in the hands of the subdistrict governmental representative. Villagers, who compose the agricultural class in Jordan, although numerous, are politically weak and are often cynical about the government; as a result, they seldom give accurate information to government officials undertaking surveys or censuses (8, pp. 80-85).

Cities and towns in Jordan are centers of administrative, political, economic, commercial, judicial, religious, military, educational, and recreational activities. The urban population tends to be concentrated in three major cities, the capital of Amman, Zarqa, and Irbid. Institutions introduced in the process of westernization, such as modern factories, hospitals, libraries, places of amusement, and so on, are found in these cities. In contrast, villages and Bedouin tribes do not have even basic
services such as electricity, indoor plumbing, or sewer systems. This gap in services between villages and towns has increased in recent years (11, pp. 33-45).

Rapid economic and social development in urban life has attracted many villagers who hope to find work and a better life to the cities. In addition, many workers from other poor Arab countries such as Egypt and Sudan have also moved into Jordan's cities. Most of the Jordanian cities are still surrounded by Palestinian refugee camps, and the contrast between the poverty of these camps and modern sectors of the cities is very striking (2, pp. 110-119).

In general, the cities are less homogeneous than the villages or the tribes, and this is especially true of Amman. Large numbers of refugees from the west bank live in cities or in camps close to the cities, and many of them brought skills and urban lifestyles with them since the west bank was more advanced economically than the east. Minorities are also concentrated in the cities and used to reside in segregated quarters. The separateness and socio-economic self-reliance of these minority quarters, however, are gradually giving way to increasing interdependence among the various sections. Furthermore, social organization based on families is declining, particularly tribal ties (11, pp. 17-29). Instead, other associations such as unions, guilds, clubs, employment groups, and the like
are emerging and are acquiring more importance in the lives of the people. As a result, much of the traditional social organization has been weakened, especially among the middle and upper classes.

It is in the towns and cities that social classes and division of labor may be observed. The great majority of urban dwellers belong to the working or lower class and make their living as craftsmen, shopkeepers, unskilled laborers, and service workers. At the top of the ladder there is a very small but powerful upper class consisting of a few well-known families, whose members hold key positions in various areas. As a rule, these individuals are leaders in Jordanian society as well as members of political, economic, financial, and industrial elites. In between the upper and lower classes, a middle class is emerging. It encompasses those self-employed merchants and small manufacturers whose income and influence are not great enough to place them among the truly powerful and a more mixed group, including such independent professionals as doctors and lawyers, business managers, technicians, and high government administrative officials such as bureau chiefs and white-collar civil servants (11, pp. 37-40).

The boundaries between classes are not very rigid, and vertical mobility is relatively easy, especially from the lower to the middle class. Important factors that
have contributed to this high mobility are the expansion of educational opportunities and the continuing tendency of the urban upper classes to look down upon manual labor. Consequently, the middle class is recruited primarily from white-collar civil servants and the new groups of college graduates who are entering high-status occupational fields such as medicine and engineering (12, pp. 56-71).

Changes induced by developmental activities in this social environment dominated by religion, the family, and tribal groups are often resisted, making it extremely difficult for government to undertake some of the programs needed for development. The attitudes and perceptions of the various groups in Jordan—i.e., nomads, villagers, urban dwellers, refugees, and minorities—vary widely, and it is difficult to mobilize all of them into the process of national development (10, pp. 23-27).

Economic Environment in Jordan

Severe economic disruption arose in Jordan as a consequence of the first Arab-Israeli war of 1948. Within a few months after this war, Jordan's population increased almost threefold without a corresponding increase in resources. Hundreds of thousands of people who were forced to leave their homes in Palestine became refugees in Jordan as a result of the war (13, pp. 1-7). The country was also faced with the necessity of redirecting its trade routes
and lines of communication, which had formerly moved towards Palestine and the Mediterranean Sea, where there were ports, airports, highways, railroads, and telecommunication and other commercial facilities. After the 1948 war, a large part of Palestine was occupied, a Jewish state was created, Jordan was cut off from these facilities, and it was necessary to develop and redirect trade routes and lines of communication within a short period of time (1, pp. 9-15).

Jordan had a difficult time meeting these economic challenges. Its annual per capita income during this period was probably no more than $100, just a little less than that of Egypt ($120) and a little more than that of India ($60) and Pakistan ($70). At this time about one-half of the labor force was employed in either the military or the civil service. In view of these grim economic conditions, coupled with the continued threat of war, it was impossible for Jordan to raise enough revenue domestically to finance all of the government's needs. Consequently, the kingdom was forced to turn to foreign aid from western countries, notably Britain initially and, later, the United States. Furthermore, in its development process Jordan relied on private enterprise to assist in the financing of projects. The government provided equity capital, augmented by private funds to construct several large projects, and jointly owned government-private enterprises became a means of
encouraging the private sector to participate in economic development. Other policies to encourage private and foreign investments included incentives such as tax holidays, exemption from custom duties, and tariff protection for domestic industries as well as direct governmental assistance programs (11, pp. 22-32). The public sector concentrated its development efforts on creating and strengthening the infrastructure, and many of the public investments were directed toward road construction, port facilities at Aqaba, basic governmental services, and expanding educational facilities. On the other hand, the private sector was encouraged to invest in such enterprises as transportation equipment, machinery, and other commercial activities for development. The private sector grew rapidly during this period. New small industries were created, and private sector investments expanded more than twice as quickly as those in the public sector (11, pp. 44-53).

As late as the 1950s, however, Jordan still was thought to have little economic future. It had few natural resources, few industries, only a handful of hotels for tourists, a serious shortage of adequately paved roads, and low agricultural production relying almost exclusively on limited rainfall. Moreover, the percentage of the Jordanian population that was employed was substantially
lower than in many other countries because the influx of refugees resulted in a high rate of unemployment. The kingdom also had a high population growth rate and a large percentage of children, combined with prevailing attitudes discouraging female employment in most occupations (3, pp. 68-69).

The World Bank mission that visited Jordan in 1955 estimated that the kingdom's gross domestic product in current prices had grown at an average annual rate of about 10 per cent from 1952 to 1954, but the members of the mission did not believe that such a high rate of growth could be sustained in the future. The mission set 4 per cent as an attainable annual growth rate for Jordan's GNP but cautioned that the achievement of such a rate would not be easy (8, pp. 51-53).

In the early 1960s, a five-year plan for economic development (1962-1967) was prepared, but later it was modified and became a seven-year program for economic development (1964-1970). This plan was aimed at effecting a major reduction in Jordan's trade deficit and at reducing reliance on foreign financial assistance. These goals were to be achieved by increasing the GNP and reducing the level of unemployment (15, pp. 340-354).

Under the provisions of the 1964-1970 plan, the Jordanian government emphasized the development and expansion
of the production capacity of agriculture, mines, tourism, and industry in order to move the country as quickly as possible along the path of economic independence and sustained growth. The plan also called for the development of projects supporting economic growth activities. During the first two years of the 1964-1970 plan, industrial income grew at rates higher than those of the 1950s. Education and health services also continued to expand in this period, with the number of students enrolled increasing from 297,000 in the 1961/1962 academic year to 440,000 in 1966/1967, an annual growth rate of 8.2 per cent (4, pp. 20-27).

Jordan's economy grew rapidly in the decade before the 1967 war. Foreign assistance—primarily from the United States—stimulated the growth of the kingdom's GNP from about $140 million in 1954 to more than $575 million in 1967, an annual growth rate of 9 per cent. In fact, the performance of the Jordanian economy ran completely counter to the pessimistic expectations of the World Bank mission and others. The growth rate of the gross domestic product at current market prices from 1954 to 1966 continued to average over 10 per cent per year. Major sections of new farmland in the Jordan River valley were brought under cultivation, new light industries were developed at Aqaba, and tourism increased dramatically
after steps were taken to preserve historical sites and build better roads and resort facilities. Jordan also developed its phosphate deposits for export and made plans to extract potash from the Dead Sea. Before the 1967 war, Jordan had good prospects for continued economic growth (5, pp. 391-416).

The economy, however, suffered a major setback as a result of the war. Jordan not only lost its income production from the west bank area and much of its population along with it, but also was burdened by the arrival of about 300,000 new refugees and displaced persons. Hardly had Jordan begun to recover from the devastation of war when fighting with the Palestinian Liberation Organization in 1970 increased instability and seriously damaged the kingdom's fragile economy (11, pp. 81-82).

By 1972, Jordan's economy again was recovering to the position it lost following the 1967 war. Under a new national plan for 1973-1975, the economy achieved a real growth rate in its gross domestic product of about 6 percent per year in current prices. However, it is difficult to evaluate the results of the 1973-1975 development plan accurately because the national accounts data were based on highly unreliable estimates for both the east and the west banks. Furthermore, the external events that occurred during this period--such as the sharp increase in oil
prices in 1973, the escalation of world inflation, the Lebanese civil war (resulting in a new influx of Lebanese civilians and businessmen into Jordan), the increase in the number of Jordanians taking higher-paying jobs in Arab oil producing countries--make it difficult to assess the real achievements of the 1973-1975 national plan (11, pp. 83-85). During this period, Jordan's defense expenditures continued to increase because of continued tensions in the region and the 1973 war with Israel. Fortunately, the kingdom's economy was not disrupted as severely by this war as by its predecessor because the fighting took place in Syrian territory (3, pp. 167-169).

In the last ten years (1976-1985), additional national plans have been formulated and implemented in Jordan. These plans will be analyzed in more detail later in this dissertation.

The Political-Governmental System in Jordan

Jordan faced the complex and difficult challenges of national development with a government that was little more than a tribal sheikhdom as late as 1946. After World War I, the British installed Abdullah Ibn Hussein as Emir of Transjordan under their tutelage (7, p. 658). In 1946, the country became the independent kingdom of Transjordan. Then, in 1948, when the British mandate ended for Palestine, Abdullah sent the Arab Legion across the Jordan River,
and the war between Jordan and Israel began. The west bank and much of Jerusalem were captured by the Arab Legion and incorporated into the state of Jordan in 1950 (8, pp. 84-85).

King Abdullah Ibn Hussein was assassinated in Jerusalem in July, 1951. His eldest son, Talal Ibn Adullah, was proclaimed his successor, but because of illness he was removed by Parliament in August, 1952. Talal's eldest son, Hussein Ibn Talal, assumed power under a regency until his eighteenth birthday in 1953, when he was crowned king (8, p. 87). The young king took over a government facing serious domestic and foreign problems and with little capacity to govern. There were few governmental institutions to assist with these complex tasks; there was no planning or budgeting institution and no central banking system, the civil service was just being created, and the infrastructure of the country was primitive. Jordan's survival depended in large part on King Hussein's ability to negotiate his way among contending forces inside and outside the country, while he strengthened its political system and governmental institutions (10, pp. 1-4).

The constitution of the country divides the powers and functions of the government into executive, legislative, and judicial categories. The monarchy exercises executive authority with the aid of cabinet ministers,
collectively known as the Council of Ministers. The Council of Ministers consists of the prime minister and other ministers; the former selects the latter with the approval of the king (6, Article 26). All three of the branches of the Jordanian government as well as its administrative institutions are discussed in more detail below.

The Executive

The prime minister is appointed by the king and may be dismissed by him, in which event the Council of Ministers must resign. As the top executive arm of the government, the Council is charged by the constitution with administering all affairs of state, both internal and external, except those statutorily allocated to other agents. Under the provisions of the constitution, the Council is required within a month of its formation to submit a statement of its program and policies to the House of Deputies for approval and is obliged to resign should it fail to obtain a two-thirds majority vote of confidence from this body (6, Articles 24, 35, 36). In his appointments to the Council, King Hussein has generally tried to ensure that all influential groups and a full range of political opinions held in the country are represented and that foreign policy issues are considered (8, pp. 102-104).

As head of state and chief executive, the king also approves and promulgates all legislation. As
commander-in-chief of the armed forces, he alone can declare war, conclude peace, and sign treaties. He appoints the members of the upper house of the legislature and selects its speaker. He can also order elections of members of the lower chamber and may dissolve it at will (6, Articles 30, 31, 32, 33, 34).

The Legislature

The constitution provides for a National Assembly with an upper chamber, the House of Notables (Senate), and a lower chamber, the House of Deputies. The Senate consists of thirty members appointed by the king upon the recommendation of the prime minister and the Minister of the Interior. The senators must be Jordanians over forty years of age and unrelated to the king. They are selected for four-year terms, generally from among ministers and government officials or retired high-ranking figures. The House of Deputies is the representative body elected by the people. It is composed of sixty members, divided equally between the east and west banks. Deputies must be at least thirty years of age with no criminal record or active business interests. They are elected by popular ballot for a term of four years (6, Articles 63, 64, 65, 67, 68).

All legislation must be passed by both houses of the National Assembly and confirmed by the king. It must also
approve the imposition of taxes and the borrowing of money. The National Assembly has power to approve the general budget, and it may reduce any categories of expenditures. The constitution also provides that either house of the Assembly may question the government or any of the ministers on any general matter. The Assembly works through administrative, fiscal, and legislative committees, which report back to their parent houses (7, p. 569).

Three categories of provisional law may be enacted by the Council of Ministers in the executive arm of government. The constitution provides that, when the National Assembly is not sitting or the House of Deputies has been dissolved, the Council of Ministers may make laws concerning matters requiring immediate action so long as it does not contravenes the provisions of the constitution. These laws, however, must be presented to the National Assembly at its next session. Administrative regulations clarifying provisions of laws also may be formulated by the Council of Ministers, subject to the approval of the king (6, Article 60).

As previously noted, the king has the constitutional power to dissolve the National Assembly at will. In 1974, King Hussein dissolved the Assembly, reconvened it, and then dissolved it again in 1976. In 1978, the National Assembly was replaced by a National Consultative Council (NCC),
established by royal decree. The NCC consisted of sixty members appointed by the king to serve for a term of two years. They were to study and consider all legislation in order to advise the king, but they had no authority to pass or reject legislation, nor could they override the king's veto as the National Assembly was empowered to do. In early 1984, the NCC was dissolved, and the National Assembly resumed its functions (7, p. 569).

The Judiciary

The legal system of Jordan has two basic sources: Sharia (Islamic law) and laws of European origin. Under the Court Establishment Law of 1951 and the constitution, the judiciary is declared to be independent of the executive and legislative branches of government. The judicial system is composed of three kinds of courts: civil and criminal, religious, and special courts. The civil and criminal courts adjudicate all civil and criminal cases not expressly reserved for the religious or special courts. Civil jurisdiction is exercised at four levels: the magistrate courts (similar to justice of the peace courts in the United States); the courts of first instance, which are trial courts of general jurisdiction; the courts of appeal; and the court of cassation (the supreme court of the land).
Religious courts are of two types, Islamic Sharia courts and religious courts for non-Muslims, called councils of religious communities. These religious courts seek to resolve disputes over matters considered to be religious in nature, such as marriage and divorce, relationships between members, and inheritance of property (6, Articles 99, 102). Jurisdictional conflicts between any two religious courts or between a religious court and a civil court are heard before a special court appointed by the court of cassation.

Special courts, the third kind of courts in the Jordanian judicial system, include the high tribunal, sometimes also called the supreme council, which has the responsibility of interpreting the constitution or any law at the request of the prime minister. Special courts also hear cases dealing with habeas corpus, mandamus, and petitions for injunctions against public servants charged with irregularities, and these courts may try cabinet ministers who have been charged with offenses (7, pp. 569-570).

Administrative Institutions

When King Hussein was crowned in 1953, Jordan's governmental institutions were incapable of performing the tasks essential to promote the modernization of the country. The administrative arm of government was not
developed or structured to undertake these responsibilities. There were no planning or budgeting institutions, no specialized governmental agencies for development, and no central banking system, and the civil service was just beginning to be developed. Building these administrative institutions was one of the first tasks required for development. The administrative structure that was created consisted of three kinds of institutions: a) governmental agencies within individual ministries that are responsible for implementing the ministries' programs; b) independent departments headed by directors who report to a minister but are not directly within the administrative hierarchy of the ministry (independent departments were created because the nature and scope of their activities require greater freedom than is possessed by normal line departments that are affiliated with individual ministries; the tax department is an example of such an independent department (16, pp. 58-63)); and c) public authorities, which are similar to governmental corporations in the United States (such agencies have boards of directors that supervise them, although they may formally report to a minister; the Jordan Valley Authority is an example of such a public institution).

As programs of development began and administrative agencies were being created in Jordan in the 1950s, it
became obvious that planning, budgeting, and central banking institutions were needed. In 1952, the first of these agencies to undertake national planning, the Jordan Development Board, was organized. Not until 1962 was a Bureau of the Budget created, and a central bank did not come into existence until 1964 (14, pp. 34, 105, 172).

Summary

The story of Jordan is typical of a developing nation. It has been buffeted by internal and external events over which it had little control. Factors such as the massive waves of Palestinian immigrants in 1948-1949 and again after 1967, the loss of the west bank and Jerusalem, the closing of the Suez Canal (which had a devastating impact on phosphorus mining, the single most important economic resource in the country) in 1971, the influx of Lebanese civilians and businessmen during Lebanon's civil war in 1976, the impact of increasing prices and salaries in the neighboring oil countries, and the demands created by the current Iraq-Iran war have all had serious impacts on Jordan. This young country faced such challenges without the resources or governmental institutions found in richer and more modern nations. Jordan's ability to pursue development in the face of these challenges shows that the political elites of the nation have been able to mobilize
resources both inside and outside the country for the process of modernization (11, pp. 243-266).

Now that a portrait of Jordan has been presented, how the kingdom has undertaken its program of development will be examined, with special reference to the issue of whether Jordan experienced the difficulties in planning and budgeting that Caiden and Wildavsky found in other developing nations. An attempt will then be made to assess the impact of government expenditures on national development.


CHAPTER IV

PLANNING AND BUDGETING IN JORDAN: THE EVOLUTION
AND OPERATION OF GOVERNMENTAL AGENCIES

Building the administrative institutions needed for modernization is a complex and difficult task faced by all developing countries. Jordan's experiences in developing planning, budgeting, and central banking institutions is a good illustration of this process. In its early years, Jordan had no planning or budgeting agencies or institutions to assist in the difficult processes of modernization (8, pp. 1-9). This chapter will first focus on the development of planning, budgeting, and central banking agencies in Jordan and then examine how these agencies function.

The Evolution of Planning Institutions in Jordan

The need for planning institutions in Jordan became apparent in the early 1950s. The plight of the economy, discussed earlier in this paper, plus the fact that existing governmental machinery was not functioning satisfactorily, forced the government to look for solutions and to create new administrative institutions. Furthermore, Britain and the World Bank began to pressure the Jordanian government to undertake planning to ensure that their loans and grants
would be utilized effectively. As a result, the first national planning agency in Jordan, the Jordan Development Board (JDB), was created in 1952 (6, pp. 276-280).

**The Jordan Development Board**

Despite the formal establishment of the JDB, the building of a strong central planning agency in Jordan was very difficult. In view of the weaknesses of the JDB, the creation of a stronger agency was recommended by the International Bank for Reconstruction and Development in 1957. At this time the International Bank was studying the possible use of the waters of the Jordan River as a means of promoting development in the region. The bank's report stated that the JDB, as established in 1952, was lacking in both organization and power. The report included a number of suggestions pertaining to the JDB's board of directors, which exercised basic authority over the planning agency. The Bank recommended broad representation on the board and proposed that it be composed as follows:

1. A chairman appointed by the Council of Ministers on a long-term contract;

2. The Undersecretaries of the Ministries of Finance, Agriculture, Economy, and Public Works;

3. A representative of the Municipal Equipment and Development Fund; and
4. Possibly one or two prominent individuals drawn from private life and appointed for a definite term (15, pp. 35-37).

The recommendations of the Bank were followed to a large degree in the changes made in the JDB in 1957. Indeed, if anything, the government went beyond the Bank's recommendations to strengthen the JDB by making the planning agency responsible to the prime ministry and designating the prime minister as its president (7, pp. 64-65). The membership of the reconstructed JDB, in addition to the prime minister, consisted of representatives of the Ministries of National Economy, Finance, Public Works, and Agriculture, and five non-government members appointed by the Council of Ministers. The JDB was also to have an appointed vice-president and a secretary general (7, p. 66).

The JDB was reorganized again in 1962, in order to include the governor of the Central Bank and the director general of the Agricultural Credit Corporation, two newly created institutions. Whereas the JDB's 1957 charter contained merely a statement that the agency's membership must include representatives from the kingdom's various ministries, the 1962 reconstituted charter provided specifically that the undersecretaries of certain ministries should automatically serve as members of the JDB (16, pp. 7-9). As might be expected, the ministries represented
were those most actively engaged in or interested in development. The number of private representatives was reduced from five to three in order to increase the number of ministries represented on the JDB. These non-government members were appointed for a term of five years by royal decree, based upon the recommendation of the cabinet. The reduction of private representatives reflects, in part, cultural conditions and the tradition in Jordan that private citizens normally do not serve in administrative bodies of the government.

Although private agencies and individuals may seek to influence governmental action, it is not expected that they will have time to devote to or will maintain an enduring interest in the ongoing operations of government agencies (16, pp. 9-11). Moreover, the bulk of the work in the field of development was seen as being the technical task of the government, and, therefore, there was no reason to seek input from the citizenry in general. Unlike planning in developed countries where citizens play a major role in shaping the goals and projects to be developed and governmental administrative personnel perform predominantly technical roles, Jordan's experience reflects conditions usually found in developing countries, where the initiative of private citizens is quite limited (23, pp. 2-24).

The organizational arrangement within the JDB was to consist of three directorates: 1) a research, planning,
and financing division; b) a directorate responsible for projects and evaluation; and c) a finance and accounts section (Figure 2). Approximately one hundred employees worked for the agency, about forty of whom were specialists in economics and other related disciplines such as planning, engineering, agriculture, science, and other technical fields. The remainder were administrative and support personnel, plus secretarial and clerical workers (17, pp. 3-7).

The great significance attached to this development agency can be seen from the fact that it was granted greater powers than those permitted to ordinary ministerial spending divisions. It was allowed to formulate its own regulations covering personnel and spending procedures and to prepare its own budget for submission to the Council of Ministers. Unlike other governmental agencies, it was not required to go through the national civil service system to employ, promote, or terminate employees, and it was not bound by the salary scale of the civil service system. The fact that the prime minister was to be the president of the JDB reflected the government's desire to give the agency a position of power. In reality, however, direction of operations in the JDB rested with the secretary general because the prime minister was so occupied with many other matters. Nevertheless, the designation of the
**prime minister as the official head of the JDB gave this agency national prestige and influence among government agencies and ministries (16, pp. 20-24).**

The primary goal of the JDB was, of course, the preparation of national plans. This is reflected in the agency's statement describing its overall planning function.

Preparation of a comprehensive economic program aiming at the development of Jordan's economic resources for raising the living standard of its people. This program shall include the projects, which the Board deems necessary to be implemented
in specific time phases, determines their relative priority, prepares their estimated costs, and indicates the results expected thereof, and the means of financing them (16, pp. 25-27).

The JDB's activities, however, extended beyond the mere preparation of national plans. It was responsible for reviewing the implementation of programs carried out by various ministries throughout the government, and it was to submit reports and make recommendations related to short-run economic and financial policy. The JDB was also given responsibility for seeking and obtaining funds from foreign sources and for carrying out studies pertaining to projects to be financed through foreign grants or loans, in cooperation with the Minister of Finance. It was to study and prepare loan applications and grant proposals and to serve as an advisory body to other governmental agencies seeking foreign assistance. The JDB's authority ran well beyond research in this area in that it had the right to enter into foreign loan agreements in its own name, backed with the guarantee of the government upon approval of the Council of Ministers and the parliament. The JDB, in fact, negotiated foreign loans and grants (7, pp. 73-77).

With regard to the implementation of projects, the JDB was also given great powers under the provisions of the act creating it. It could either entrust the implementation
of a project to another ministry or perform the implementation processes itself (5, pp. 356-358). In general, the JDB did not directly implement programs; instead, it most often relied upon regular functional departments to perform these duties. In a number of instances, it entered into a contractual arrangement with other ministries and established special accounts from which funds could be drawn upon performance of tasks called for in the agreement. At other times, by means of its special powers, the JDB recommended the creation of special agencies for the implementation of a particular project. One example of the creation of such a special entity was the agency established to develop the Ghor Canal project. In effect, the JDB negotiated with the United States for aid to finance this project and then turned the task of actually building the canal to the East Ghor Canal Authority, a special agency created specifically for this purpose (16, pp. 10-13).

As the previous paragraphs indicate, the JDB had a wide range of responsibilities that included not only planning but also obtaining financing and implementing programs. The fact that the JDB was performing operational activities other than planning, however, raised questions about the proper role of planning agencies generally. The administrative literature is filled with arguments on the subject. The major question raised is how much power
should be given to a planning agency. If it is only empowered to be a staff agency making plans, those plans may never be implemented since the planning agency can be ignored by powerful operating agencies. The situation of a planning agency advocating an elaborate five- or ten-year plan but insulated from and ignored by the operating leadership of the country is one which may be found in many developing nations. On the other hand, if the planning agency is given the power and responsibility for implementing programs, it may be overwhelmed by these new responsibilities or its powers may intrude upon and hinder the operations of normal functional ministries (7, p. 78).

To a large extent, the JDB appears to have avoided both of these administrative maladies. In fact, its overall record was unusually successful. Its operations were particularly effective during the early 1960s, when it reached a position of such eminence within the government as to be considered one of the very important, if not the most important of its agencies. The JDB attained this position because its proposals were carried directly into the high policy-determining ranks by the prime minister. In addition, the agency derived its strength from the fact that it was the central body for the negotiation of external assistance as well as the primary supervisor of grants after they were awarded. As a result of this
responsibility, the JDB could exercise influence throughout the government. Its role in accounting for the use of expenditures also increased its influence over the agencies actually implementing projects under the auspices of the national plan. Moreover, the JDB possessed a staff of excellent quality which had a continuous opportunity to work in close relationship with the administrative experts provided through various grants.

The National Planning Council

Despite the successes of the JDB, problems arose in financing development projects and in general government which led to modifications and the replacement of the JDB by the National Planning Council (NPC) in 1971. The law creating the NPC provided for a board similar to the JDB in that the prime minister continued as the president. The membership of the NPC, however, differed from that of its predecessor. The Minister of Finance and the Minister of National Economy replaced the undersecretaries of four ministries who had served on the JDB. In addition, the governor of the central bank and the general director of the Royal Scientific Society were added to the agency, but the director general of the Agricultural Credit Corporation was dropped to create a place for the chairmen of the Chambers of Commerce and Industry. The vice president and secretary general of the NPC continued to be appointed
members of the board, as previously. Two other members were also to be appointed by the cabinet, one of whom was to be a member of the Trade Union Council. No provisions were made for the appointment of citizens from the private sector (19, pp. 502-506).

Basically, the NPC had the same functions as the JDB which it replaced. It continued to be responsible for preparing national plans and for negotiating for and administering foreign loans and grants, and it was actually given greater responsibility for formulating, executing, and monitoring the progress of the national plans. Nevertheless, a number of changes were made in the operation of the NPC. One significant difference between the NPC and its predecessor was the establishment of a steering committee composed of important national figures from outside the agency. The function of this committee was to monitor the implementation of programs in the development plan, to point out problems, and to make recommendations (12, pp. 30-40). Committees from various sectors of the economy were also created to advise the agency. Both of these changes permitted greater input into the planning process from the citizenry at large. Procedures for implementing projects were also changed slightly in that each operating ministry was now required to appoint a project manager to be responsible for seeing that the implementation process was a
success (19, pp. 502-503). Most of these changes affected the administrative and technical aspects of planning rather than the policy sphere.

The NPC, like the JDB, performed a vital budgeting role. Jordan's budget is divided into two virtually separate components, a current operating budget and a capital budget, with the former including all receipts and expenditures not incorporated in the latter. The NPC had little direct influence in preparing the current operating budget but played a major, if not the dominant, role in preparing the capital budget. Capital budgets ordinarily involve large expenditures and call for financial commitments covering periods of several years rather than commitments made on an annual basis as in a current budget. Funds for capital budgets are typically obtained from loans or aid from international institutions, and the process of making a capital budget is entirely different from the process of preparing an annual operating budget. Capital budget preparation consists, first, of composing a "wish list" of needed capital items and then of setting priorities for projects that reasonably can be covered by expected revenues. Planning agencies often are given the responsibility for assembling the "wish list" of capital projects and for setting priorities concerning which projects will be funded first. The Minister of Finance's
role in this process consists mainly of reviewing the possibilities for generating the revenues necessary to meet proposed expenditures. Setting priorities as to what will be funded is carried out primarily by the planning agency. Both the NPC and the JDB played a major role in budgeting in this way (19, pp. 516-518). It should be noted that the impact of capital expenditures obviously affects annual operating expenditures since the construction of new facilities must be manned and carried out by the various departments of government.

Jordan's eighteen years of experience with planning under the JDB strengthened the capabilities of the NPC. The new agency was able to obtain and utilize more information about the Jordanian economy and society as a result of the earlier accumulation of data. Thus, it was able to forecast societal trends and changes more accurately. Planners began to consider more comprehensive planning concepts, including such matters as unemployment, income distribution, deficits and inflation, and a host of socio-political problems resulting from modernization. Furthermore, more experienced planners began to recognize the impact of political influences upon the formulation and implementation of development plans. During its period of operation, the NPC prepared three national plans, those for 1972-1975, 1976-1980, and 1981-1985. These plans will be analyzed in detail later in the dissertation.
The National Planning Ministry

In 1984, another reorganization of the national planning agencies in Jordan took place. The NPC was dissolved, and the planning function was placed in the National Planning Ministry. Under this administrative arrangement, a Minister of Planning appointed by the prime minister headed the planning department, and this minister became a member of the Council of Ministers, the executive arm of the government. In a sense, this advanced the prestige of the planning agency and provided it with certain advantages. The Minister of Planning stood on the same footing as other ministers, whereas the position of secretary general of an independent agency such as the NPC did not have ministerial status. A full-time Minister of Planning could devote all of his efforts to planning and representing the interests of his agency in the cabinet and the legislature, where he could present the concerns of planning to the highest level of political authority (24, p. 187). It would seem that such a change should strengthen the agency, but this was not necessarily the case. By moving into a ministry, the planning agency lost some of the sources of influence and power that it had previously possessed. No longer was the planning agency seen as the prime minister's agency; now it was just one of the many ministries competing for the prime minister's favor, and, as a result, other
spending departments could more easily ignore, outvote, and even challenge the programs and authority of the Planning Ministry. Planning, of course, concerns the entire government structure, not just one ministry, but ministries are not usually prepared to grant another minister of equal rank authority over what they consider to be their domain or turf (24, pp. 487-488). To a degree the planning agency also lost its favored position in the budgeting process by now having to compete for funds with other departments. It is too early to evaluate the performance of the new National Planning Ministry, although it may be observed that a "revolving door" pattern seems to be developing for planning ministers, as evidenced by the fact that, since 1984, there have already been two Ministers of Planning.

The Evolution of Budgeting Institutions in Jordan

Although the state of Transjordan, the predecessor of the present state of Jordan, came into existence in 1927, there were no formal budget institutions in the kingdom until 1962. Consequently, little information has survived about the budgeting process in these early years, but it is known that the task of preparing what was called "the budget" was undertaken by an Undersecretary of Finance, a career civil servant who worked part time on this activity with the assistance of one clerical helper.
Not until the 1950s was a more formal budgeting process implemented. During this decade, the national budget began to show amounts of revenues and expenditures, each of which was to a large degree independently administered (21, pp. 293-296). Departments and agencies in this period submitted their requests for funds to the office of the Undersecretary of Finance, who was responsible for preparing and, with no assistance from specialists or budget analysts, completing the budget. The few available accounts of these proceedings show that small incremental increases were normally added when revenues were sufficient to accommodate rising costs of government. Numerous problems occurred in this system such as long delays in closing accounts, unrealistic budget estimates, improper classification of receipts and expenditures, and the absence of an appreciation in general of the budgetary process as a tool of planning and management.

By 1960, the need for improvement in the Jordanian fiscal system became imperative, and a Royal Fiscal Commission to make recommendations for financial reforms in the kingdom's tax system and budgetary procedures was appointed by the prime minister. Its membership consisted of an unusually distinguished group of Jordanians, ably assisted by consultants from the Ford Foundation (11, pp. 150-160).
The Commission's report was most critical of budget administration in Jordan. It described the purposes of a national budget and made recommendations for a complete restructuring of the budget system. The recommendations of the report drew heavily upon budgeting institutions and processes in the British and American systems. For example, a new agency, similar to the Bureau of the Budget in the United States, was recommended to assist the Minister of Finance in budget preparation (11, pp. 161-170).

These recommendations were immediately acted upon by the government, and a Department of the Budget (DOB) was added to the Ministry of Finance in 1962. The DOB was responsible for developing budget policies and for formulating and executing Jordan's annual budget. The Royal Fiscal Commission's recommendation that the DOB should seek technical assistance to initiate administrative changes was followed, and consultant services were provided by the United States Agency for International Development (AID). A number of personnel were also sent to training programs at the American University of Beirut, and some were even sent to study in the United States (19, pp. 585-589).

The Commission found Jordan's tax system, which was still in a very undeveloped stage, to be seriously deficient and recommended improvements in the tax structure.
Among these recommendations were proposals to increase property taxes on urban lands and buildings and on irrigated rural lands. The Commission also proposed the elimination of personal property tax on farm animals, to be replaced by an import duty on these animals. Finally, the report included recommendations on tax enforcement and proposed reforms in the penalty system for failure to pay taxes (20, pp. 3-7).

These recommendations, too, were quickly adopted by the government in a new law enacted by parliament in 1963. In addition, a new income tax was proposed and approved by parliament in 1965. Under the new tax act, lower-income groups were given exemptions on salaries and wages while tax rates for higher-income groups were increased (9, pp. 3-6).

A number of reforms in tax enforcement were also adopted. An investigative unit was established, similar to the investigative agency within the United States Internal Revenue Service. Another purpose of this unit was to investigate wrongful acts of government employees. A special tax court was established as a means of speeding the judicial process and reducing the backlog of cases (13, pp. 3-15).

As a result of these reforms, the budgetary process in Jordan, which had been confined to a two-man operation
in the Ministry of Finance prior to 1962, became the task of a major staff agency helping the prime minister to formulate a sound budget policy in line with the economic, financial, and administrative conditions of the country. Modern budget procedures were introduced into a country which had previously had no experience with budgetary controls. One negative result of greater financial and budgetary controls, however, has been the possibility of increased conflicts between planners (spenders) and budgeters (controllers). This issue will be examined in detail later in this study.

The Creation of the Central Bank of Jordan

Of the other policy institutions involved in planning and controlling the Jordanian economy, one of the most important was the kingdom's central bank. Until 1964, Jordan did not have a central bank, but, in that year, the Central Bank of Jordan (CBJ) was created, replacing the Jordan Currency Board that had operated since 1950. The Currency Board did not fully act as a central bank; its functions had been confined to maintaining sterling assets as backing for local currency, and it had no role in controlling the money supply and credit or in supervising banks (3, pp. 90-120).

The CBJ was created to perform all of the tasks of a central bank. It was authorized to a) issue and regulate
currency; b) manage reserves and control foreign exchange; c) act as banker to the government and, in this capacity, manage government revenues and expenditures and carry out all treasury functions for the government; and d) license and regulate all banks and other credit institutions. The CBJ's powers over currency permitted it to control interest rates and the supply of money, both of which obviously influenced the development process. Its control of foreign exchange to a large degree determined the amounts and kinds of goods imported, as well as the type of investments made. The CBJ's control of banks also shaped the nature and scope of investments as well as affecting the economic cycle generally. In short, the CBJ affected almost all economic policies as a result of its significant role in managing financial matters (2, pp. 7-36).

The Planning and Budgeting Processes in Jordan

This section of the discussion deals with how Jordan's planning and budgeting agencies operate. Its purpose is to identify the steps in the processes of planning and budgeting, the roles and functions of the participants, and the strategies implemented by the various planning and budgeting agencies.
Planning Processes

Planning processes in Jordan in a sense attempt to follow the rational decision-making model, although in reality national plans are often influenced by what the international institutions that are putting up the money for development want. The beginning point in planning is the identification of societal problems. Problems are construed to be the differences between the conditions that are perceived to exist, as contrasted with the conditions that the values of society indicate should exist. From this review of societal problems, goal statements are formulated and problems analyzed. The problems are categorized according to various economic and social sectors—for example, economic problems are subdivided into problems of such sectors as agriculture, industry, mining, and the like (19, pp. 520-524). Each economic sector is then subdivided into major programs and activities, and the programs are analyzed to identify needed projects. Problems of the agricultural sector may involve programs for production in irrigated and dry lands, marketing of agricultural products, agricultural research, soil conservation, and reforestation; and under each of these agricultural programs a number of projects may be needed to solve the previously identified problems. This process also requires the seeking out and analyzing of alternative ways of dealing with problems (8, pp. 2-9).
Next, priorities must be set since, of course, all of the needed projects cannot be undertaken. In theory, priority-setting may be carried out by planners since the analyses they conduct should indicate which projects are the best and most effective to undertake for development (23, pp. 34-36). In reality, however, the setting of priorities which determines who gets what, when, and where is a political process, jointly shared by planners and politicians. The executive and the parliament have the last word on national priorities because they must formally adopt the final version of the national plan.

Although the national plan must be formalized by political officials, the fact that planning agencies play the major role in obtaining funds from international sources and that these agencies have the major responsibility for formulating the capital improvement or development budget gives them great power in preparing the latter. As stated earlier, the capital budget is almost completely separate from the annual or recurrent budget. The process of making the capital budget consists mainly of setting priorities for projects that can reasonably be covered by revenues for a fixed period of time. Planning agencies in Jordan are given the responsibility for determining the list of capital projects and for setting priorities as to which of those projects will be funded first. In addition,
planning agencies have great influence over the funds earmarked for development (8, pp. 28-32).

As has already been noted, planning agencies in Jordan were given control of the implementation of development projects; they may entrust the implementation of projects to other ministries or perform the task themselves (19, pp. 528-531). In either case, planning agencies have the authority to contract for the necessary work to be performed. Generally, projects have been implemented by regular functional departments under a contractual relationship with the planning agency.

The final step in the planning process is follow-up and evaluation. Under the auspices of the NPC and its predecessor, the JDB, the planning agency could supervise and evaluate programs because it had contractual arrangements with other departments and control over the monies earmarked for capital improvements (19, pp. 532-538). Since Jordan's planning agency has now been reorganized as a separate ministry, however, it is not yet clear whether it will be able to retain these powers.

**Budgeting Processes**

A government's budget is a financial plan describing the programs and activities that the government proposes to undertake and the sources of revenue to pay for them. Since most government policies involve outlays or receipts,
the budget reflects the sum of government activities (8, pp. 9-18). The process of formulating a budget also involves every part of the government and the participation of many different actors. There are a number of phases or steps in the budgeting process, which are usually listed in a budget calendar showing who is to perform the various functions and when each activity must be completed (24, pp. 201-217). The following paragraphs identify Jordanian budgetary institutions, process steps, participants, and participants' roles, functions, and strategies.

As noted earlier, Jordan had only a very primitive budgeting system prior to 1962, but in that year a new Department of the Budget (DOB) was established as a major staff agency for the Minister of Finance. Directed by an undersecretary, the DOB was given the responsibility for preparing the general budget and appraising all programs, projects, and activities that require budgetary allocations. While the DOB appraises all programs financed by government funds, the national planning agency is given authority over projects financed wholly or in part by foreign resources. This administrative arrangement results at times in divergent actions by those desiring to push ahead with development spending (i.e., planners) and those attempting to control the financial aspects of government (i.e., budgeters) (10, pp. 30-42).
Since budgets are dependent upon the state of the economy, the DOB must consult with all agencies responsible for activities affecting the state of the economy. To facilitate this task, a consultative council for budgetary matters composed of the Minister of Finance, the Minister of the National Economy, the governor of the CBJ, the director general of the General Accounting Bureau, and the Minister of Planning was created to consider the financial and economic situation of the country and to forecast future economic conditions for the purpose of budget preparation. To a degree, this council also attempts to coordinate the activities of the planning agency and the DOB.

The general budget in Jordan provides an overview of all revenues and expenditures. Revenues are divided into domestic and external categories. Domestic revenues are derived from direct and indirect taxes and from non-tax resources. External revenues are composed of financial aid and loans from foreign countries (19, pp. 596-599). Expenditures are divided into the categories of recurrent civil expenditures, defense and public security, capital expenditures for ordinary projects, and expenditures for development projects.

Preparation of the budget involves decision-making regarding future revenues and expenditures. Both of these
components must be forecast as a preliminary stage to the formal budgetary process. It would be unrealistic to attempt to determine the total magnitude of expenditures without considering the availability of revenue, and, similarly, the amount of revenue to be raised is influenced by the assessment of needed expenditures as well as the amount of deficit financing to be considered and its consequences. As a result, the preliminary phase of budgeting begins with estimates of the yield of existing taxes and non-tax revenues and the cost of maintaining existing expenditure programs (20, pp. 10-20). Both of these estimates take into account the country's economic and demographic forecasts. Econometric models of the economy are sometimes prepared to forecast what the future of the economy will be under various conditions and the implications of these forecasts for governmental revenues and expenditures. One of the problems of a developing nation like Jordan, however, is that the availability of highly trained personnel capable of using such sophisticated techniques is severely limited.

It is the duty of each ministry or department to prepare estimates of needs according to the guidelines issued by the DOB. Conferences are held with all of the administrative units responsible for budgeting within their departments to inform them of the budget guidelines. Within
each individual ministry or department, the minister or director is responsible for consolidating budget estimates from the sub-units into a proposed budget for the ministry or department as a whole. After these budget estimates are submitted to the DOB, intensive discussions regarding them take place between each ministry or department head and the DOB. Under the direction of the Minister of Finance, the DOB then prepares a draft of the complete executive budget for submission to the cabinet (19, pp. 609-614).

Although in theory this process is a technical and administrative one, in reality it is political in nature since it determines who gets what. Agencies in Jordan, as in all countries, use a number of strategies in order to protect their programs. They often press for larger expenditures while the budget office is urging restraint. One common tactic is to inflate departmental requests in order to leave room for expected cutbacks. In some instances, this leads to highly unrealistic requests followed by arbitrary reductions that negate careful consideration of departmental needs. Another maneuver is the so-called "camel's nose under the tent" or "foot in the door" strategy, which involves starting a program or a project on a small scale in the expectation that the growing stream of future expenditures required will be authorized to prevent
its wasteful or unpopular termination. Yet another frequently used tactic is for ministries and departments, when they are called upon to reduce expenditures, to suggest the elimination of highly popular or essential programs in order to divert attention from more vulnerable programs. Finally, it does not hurt an agency to have influence with the ultimate decision-maker concerning the budget, the Minister of Finance, and often other ministers and department heads with such a relationship will appeal "over the head" of the DOB (8, pp. 19-23).

After a draft budget is prepared, under constitutional mandate the prime minister must present the budget to the National Assembly before the first of November of each year. Rarely in the budgetary history of Jordan, however, has the executive succeeded in complying with this requirement, and the National Assembly has frequently criticized the executive for his delay. When the budget is not presented on time, the government continues to operate under Article 13 of the constitution, which gives it the right to continue spending at the same level as in the previous budget (4, Article 13).

Upon placing the budget before the Chamber of Deputies, the prime minister requests that the speaker of the Chamber call a special session to consider it. At this session, the Minister of Finance presents his state of the nation
and budget address, explaining the government's fiscal policy and the budget's content. The Minister of Finance also clarifies the economic and financial situation of the country and defends the actions taken in the budget. The draft budget is then referred to the Finance Committee for consideration. The Finance Committee is authorized to call on all ministers, undersecretaries, department heads, and other bureaucrats, including the director of the budget office, to discuss their budget requests. Upon completion of the Committee's consideration, recommendations are made to the entire Chamber of Deputies, which has the final authority in enacting the budget (19, pp. 621-622).

One of the problems facing all developing nations is that their legislatures are new and inexperienced bodies. Not all legislators fully understand the complexities of modern budgeting or its relation to the economy generally. Furthermore, in traditional societies legislatures do not function like their counterparts in more modern societies, and, as a result, budget discussions are not as open as formal procedures would indicate. Debates over the budget in Jordan are frequently unrelated to the budget itself and instead deal with problems of corruption and unpopular programs or personnel. In addition, according to the provisions of the constitution, when debating the general budget or provisional laws related thereto, the National
Assembly may reduce the expenditures allocated to various programs and departments, but it cannot increase expenditures either by amendment or by submitting a separate proposal. This, in effect, restricts the power of individual members of the legislature to represent the constituencies or departments they may favor (18, pp. 296-298).

After the budget passes the Chamber of Deputies, it is sent to the other house of the legislature, the Chamber of Notables, where the same procedures are followed. The budget is then presented to the king for his approval (18, pp. 299-305).

From the view of the Minister of Finance, budget execution involves constant evaluation of both revenues and expenditures to ensure that adequate funds will be available. Should revenues not meet the estimates forecast, expenditures will have to be reduced or postponed, or, if expenditures exceed estimates, they will have to be cut to stay within the available funds. Ministers of finance in countries like Jordan, where the economic and political environment is uncertain, are constantly faced with the problem of inadequate funds and, therefore, see themselves as controllers, keeping the necessary balance in fiscal matters.

On the expenditure side, budget implementation has the legal purpose of ensuring that the expenditures of
agencies are consistent with appropriations in the annual budget law (14, pp. 11-13). Although ultimately each agency is authorized to spend funds called for in the budget, a number of agencies control fund disbursement. After appropriations are made by the legislature, the DOB is given the responsibility of seeing that funds are expended by the various agencies and departments according to the budget law (14, pp. 13-16). In this way, the DOB performs a pre-audit function. Normally, annual appropriations are divided into quarterly payments, and agencies are allowed to withdraw only those funds released for each three-month period. The quarterly payment system is used to prevent agencies from spending their yearly appropriations in a short time and then having to request supplementary appropriations. Such control over appropriations permits the Minister of Finance to monitor expenditures against national income and to reduce them, if necessary. The actual expenditures of agencies, therefore, are not the same as the amounts appropriated in the budget since an almost continuous recurrent budgeting process is carried out by the Minister of Finance (19, pp. 628-632).

Agencies implementing programs often find it necessary to transfer funds from one account to another in order to complete a project without running out of money. In order to transfer funds, agencies must first obtain the approval
of the DOB. In addition, the approval of the Council of Ministers is necessary to transfer funds from capital or personnel accounts. Funds cannot be transferred between programs without a legislative decree permitting a budget change (18, pp. 305-307).

At other times, agencies must seek supplementary funds to complete the programs they have undertaken. Such advances and supplementary funds require a recommendation by the DOB and the Minister of Finance to the Council of Ministers, who must finally approve the request (19, pp. 631-632).

In Jordan, operating departments and agencies are severely restricted in their operational and financial affairs by rules and regulations. In part, this is due to the fears of the Minister of Finance, the DOB, and others of inefficiency and waste at the executive level. As a result, almost every transaction must be approved by numerous officials before they are finally authorized. Excessive "red tape" reflects the fact that officials attempt to use financial controls as instruments of coordination and feel that they must retain this power to maintain accountability. Oftentimes excessive red tape and supervision delay the preparation, authorization, and implementation of programs.

Countries differ greatly in the degree to which commitments are subject to control by the budget office or
other central agencies. In some countries, detailed control is exercised by requiring spending departments to obtain explicit approval before undertaking the programs authorized by the budget or entering into commitments pertaining to those programs. Usually such prior approval does not involve a reexamination of the merits of the expenditures but only a verification that they have been authorized and that proper procedures have been observed. In other countries, spending departments may make commitments for programs in their budgets without specific prior approval and are themselves responsible for observing legal requirements. Obviously, prior approval systems tend to be cumbersome and hinder the operation of departments, but they may be expedient when financial discipline is weak.

Weakness in the accounting process is also a major problem of administration in developing countries. In fact, in Jordan an attempt has been made by the Accounting Department in the Ministry of Finance, which is responsible for recording, bookkeeping, and reporting the government's financial position, to institute a system of accrual accounting which would deduct expenses from appropriations at the time commitments are made for expenditures rather than at the time of actual payment. Yet, although the obligation and accrual system has officially
been in effect since 1963, problems remain, and some agencies and departments still do not understand or follow the system. In part, inability to initiate reforms in the financial system is due to the lack of skilled manpower in developing countries. Although the most sophisticated top administrators are well aware of these modern techniques, the shortage of skilled middle- and lower-level administrators throughout the government severely hinders the implementation of complex new systems. The weakness of the accounting and controlling systems leads to detailed rules and regulations requiring numerous signatures and routines for supervising the actions of agencies. All of this red tape obstructs effective administration.

The rigidity and complexity of the accounting and supervisory system in Jordan leads to a delay in closing the fiscal year's accounts, and this, in turn, makes data on actual expenditures unavailable during the budget preparation cycle. Moreover, the accounting system does not provide agency managers with needed information to evaluate programs or to prepare new budgets. One can conclude that attempts to maintain accountability lead to centralization and excessive supervision. The latter problem is exacerbated by the fact that agencies and departments are supervised by more than one entity--the Minister of Finance, the DOB, and the Audit Bureau all
duplicate central supervision over agencies. This forces departments and agencies to seek approval on every detail and item for dispensing funds rather than concentrating on ameliorating the financial system, and such rigidity actually damages the system rather than improving it (19, pp. 633-636).

The auditing process in Jordan is carried out by the Audit Bureau, an arm of the legislature originally created in 1931. According to Article 119 of the constitution of 1952, the functions of the Audit Bureau are to audit the state's revenues and expenditures and to submit to the Chamber of Deputies, at the beginning of every session, a general audit report on the operations of the government. The Audit Bureau publishes an extensive annual report, considering revenues and both recurrent and development expenditures. Recently it has been proposed that the Bureau should also audit all corporations in which the government owns over 45 per cent of the stock (22, p. 5). The chief of the Bureau, who is appointed by royal decree on the cabinet's recommendation, cannot be removed from office, transferred, or retired without the approval of the Chamber of Deputies. The chief of the Bureau has the same authority as a minister with regard to the administration of his agency.

Debates on the Bureau's annual reports are considered by the National Assembly, and in theory this makes the
executive and the bureaucracy responsible to the country's representatives. In line with the Bureau's position as an arm of the legislature, it has been proposed that the Chamber of Deputies rather than the cabinet should be the last resort in solving disagreements between the Bureau and any other ministry or department.

Summary

As this chapter has shown, the development of planning and budgeting institutions in Jordan has been a complex task. The process of modernization requires the building of administrative institutions in order for development plans and projects to be formulated. Adequate financial resources are also essential in the process of modernization, but in poor countries like Jordan domestic revenues are very limited and are dependent on international markets, which are subject to great fluctuations. Foreign aid and loans must be relied upon, and reliance upon such resources causes further uncertainty. Instability, therefore, plagues the political and economic environment of Jordan (18, pp. 307-308).

The demands for modernization in Jordan, as in the other developing countries studied by Caiden and Wildavsky (1), far exceed the nation's ability and resources to meet these needs. The uncertainty of revenue sources, compounded by the lack of accurate economic data, makes it
difficult, if not impossible, to accurately forecast revenues or expenditures (1, pp. 45-50). As a result of these problems and fluctuations in revenues, finance ministers in Jordan frequently must restrict agencies from spending according to the budget or plan currently in force. Recurrent budgeting to reflect the actual income of the country almost becomes standard operating practice, and this, coupled with the prevailing restrictive rules and regulations on administrative actions, leads to dysfunctional results.

National needs in Jordan far exceed the kingdom's ability and resources. Tensions and conflicts, therefore, are inevitable between those pressing for improvements under the provisions of the national plan and those responsible for the financial stability of the country. Evidence of this conflict is seen in the fact that actual expenditures for projects under the national plan and the annual budget usually differ considerably from the amounts originally called for in the plan (18, pp. 309-311).

The administrative arrangement separating capital budgeting and budgeting for annual expenditures further aggravates the conflicts between planners and controllers. Planners are given the responsibility of planning for development, preparing capital budgets, and seeking funds from foreign sources, while controllers and budgeters are
held responsible for ensuring financial stability. The goals of these agencies and the attitudes of their administrators, therefore, are pitted against each other. Administrative agencies in this environment are led to use the various counterproductive strategies discussed by Caiden and Wildavsky (1) to secure funds and to protect themselves.

Nevertheless, despite these problems in planning and budgeting, Jordan has made progress in modernization. In the next chapter the "products" of the kingdom's administrative agencies--that is, Jordan's national plans and budgets--will be examined.
CHAPTER BIBLIOGRAPHY


CHAPTER V

NATIONAL PLANS AND BUDGETS IN JORDAN

Although Third World countries were pressured by the World Bank and by western nations such as Great Britain to undertake national plans in the post-World War II era, little was known about developmental planning, and few guidelines were available for these countries to follow. Much of the planning experience of Communist nations was unacceptable to the non-Communist bloc and to many unaligned Third World nations. Planning experience in the developing capitalist societies, on the other hand, had been largely limited to land use planning in cities and to planning by national banks and governments to maintain economic stability. Neither of these approaches dealt fully with the complex problems of developmental planning in poor countries, and to a large degree such countries had to evolve approaches and techniques suited to their own conditions (11, pp. 1-18).

The difficulty faced by the Third World in this task was further complicated by the fact that the terms "planning" and "plans" were used in so many different ways and there was little agreement as to what they meant. Many of the uses of the term "planning" are so broad that the
elements of planning are difficult to identify and cannot be easily distinguished from related activities such as policy-making or implementation. This confusion led Wil davsky, in frustration, to say, "If planning is everything, maybe it's nothing" (21, pp. 161-162).

In their calls for national planning, Third World leaders often stressed various planning concepts. Planning was described as a means of giving direction to the country, a means of setting goals for development, or a means of making decisions about how best to use scarce resources (12, pp. 2-8).

National plans were expected to deal with the balancing of domestic revenues and expenditures while work was being done to increase revenues through improved taxation, stimulation of the economy, and attraction of foreign grants and loans. Plans were to serve as guides for implementation of governmental programs and to provide a strategy of action for government planning. In short, planning was seen in a sense as the solution to all of the country's problems (5, pp. 1-19).

This chapter examines the national plans of Jordan and the budgets enacted to implement their programs. Special emphasis is given to plans and budgets during the last ten years (1976-1985). A comparison is made between each national plan and its corresponding budgets to
determine whether the generalizations formulated about poor countries by Caiden and Wildavsky (6) are applicable to Jordan.

Government Planning for Development in Jordan

Jordan has been described by some as "plan happy," since, seemingly, the government has been constantly making plans. Beginning with the first plans drafted with the aid of the British in 1953 and the World Bank in 1955, Jordan has undertaken at least five national plans. It was not until 1962, however, that Jordan published its first official five-year developmental plan for 1962-1967. The kingdom's first national planning efforts in 1962 were seriously hindered by lack of data and inability to forecast future events. Less than two years after the publication of the plan, the Jordan Development Board decided to revise it, and a completely new plan for 1964-1970 was issued. This plan was based on more reliable national account estimates that had been collected since about 1961. This seven-year plan was the first to make use of such national account data and, consequently, the first to present forecasts for the plan period. The 1967 war, however, disrupted this planning effort (14, pp. 144-160). For almost five years after the war, economic development in Jordan was not carried on in a systematic manner. In
1973, an attempt was made to resume national planning, and a three-year plan was announced, despite the fact that another war was being fought between Arab and Israeli forces. The war, plus a number of other circumstances, again hindered the planning process. Since 1976, Jordan has undertaken two five-year national plans, the plan for 1976-1980 and the plan for 1981-1985 (13, pp. 60-68).

Despite the weaknesses in earlier plans, all of Jordan's plans have in one way or another dealt with four basic questions. a) What must be done in order to improve the living standard of the people and strengthen the country, or, in other words, what are the nation's goals and what projects should be undertaken to attain them? b) What results can be expected from the actions or projects in the plan? Since resources are scarce, the plan attempts to ensure that they are used in the most productive manner possible. This involves a comparison of forecasts of expected revenues and expenditures for the various programs and projects considered. c) How should the actions called for in the plan be carried out? Should they be implemented by governmental or by private agencies or in cooperative endeavors by both of these sectors? d) How are desired projects and programs to be financed? Since, ultimately, what is accomplished under a plan depends upon what can be financed, it is essential that
national plans consider domestic and foreign resources as well as the role of the private sector in undertaking planning projects. It is at this point that planning and budgeting merge (5, pp. 107-130).

Early Development Plans (1948-1970)

Conditions in Jordan at the Beginning of the Plan Period

Jordan experienced dramatic changes from 1948 to 1967. After the 1948 war, the kingdom annexed the west bank of the Jordan River and had to absorb a large number of refugees, which substantially changed the composition of the nation's population and placed increased demands on the country as a whole. The transportation and communication infrastructure had to be completely redirected as a result of the war, and other public facilities for electricity, water, sewage, education, health, and irrigation were woefully inadequate and had yet to be built. Phosphate deposits and the potash brines of the Dead Sea were largely undeveloped. Industry was primitive, and a large proportion of the people was unemployed. Agriculture, which was the main source of employment in the kingdom, was almost all unirrigated and therefore subject to very wide annual fluctuations in rainfall (14, pp. 347-349). In light of these conditions, national planning was believed to be imperative by Jordan's leaders.
Goals of Early Plans

The early plans of 1962 and 1964 emphasized projects to reduce unemployment. Improvements in agriculture were given the highest priority. The seven-year plan for 1964-1970 called for an expenditure of 27 per cent of total public and private outlays to be made for agriculture, including water development projects. The completion of the East Ghor canal (work on which had begun in 1957) and the undertaking of a more ambitious irrigation scheme, the Grand Yarmouk project, were the most important of these. The East Ghor and Yarmouk projects were expected to give a significant stimulus to agriculture through the expansion of irrigated areas and to provide hydroelectric power for industrial purposes (14, pp. 373-374). In addition to these major undertakings, the development plans called for measures to combat soil erosion, the expansion of fruit orchards, and the improvement of the network of roads and marketing facilities for agriculture.

Mining was also given great consideration in the 1964-1970 plan. The plan called for further expansion of the phosphate industry and initiation of potash production from the Dead Sea. Exports of these mineral resources were seen as a means of increasing Jordan's GNP and improving its foreign trade balance. The seven-year plan for 1964-1970 also gave high priority to the development of transportation. Its goal in this area was to build roads and
rail connections essential for transporting phosphate and anticipated potash exports via the port of Aqaba. This port, which is Jordan's only outlet to the sea, was crucial to the kingdom's industrial development. Building of the port facility, therefore, was given great consideration. The 1964-1970 plan also emphasized the improvement of the administrative capabilities of the country. A national banking system and improvements in the governmental budgeting system were two major projects proposed for this purpose. Finally, the plan stressed advancement in the level of education in Jordan and the provision of increased educational opportunities. A number of vocational and teacher training institutes were to be established. In all, the plan forecast an average increase in real GNP of 6.1 per cent per year between 1964 and 1970 while reducing the unemployment rate by about 1 per cent annually as well as improving Jordan's balance of trade (14, pp. 380-381).

Implementation of the Plans

The national plan for 1964-1970 emphasized its programs were to be implemented through both public and private enterprise. Private investments in many industrial and mining ventures were encouraged and were expected to provide 50 per cent of the domestic investment. One-half of the total investment called for in the plan was to come from foreign loans and grants.
Accomplishments of the Plans

During the years of these early planning efforts, Jordan's economy was developing rapidly. The extension of irrigation and the introduction of modern farming methods stimulated the growth of agricultural production. Despite this growth in production, however, Jordan continued to have to import food because of increases in its population. In addition, relatively low farm incomes provoked continuing migration from rural to urban areas. Industry, including mining and electrical production, expanded quickly, exceeding the growth of the economy as a whole, but there were a number of serious constraints on industrial growth. The smallness of the domestic market and the inability of Jordan's industries to compete in the international arena were compounded by a very limited supply of skilled technical and managerial personnel (14, pp. 383-384). Furthermore, in the 1950s, Jordan's infrastructure was seriously underdeveloped, even by Middle Eastern standards. Many improvements were made before the June war in 1967 to develop transportation, communication, and other essential public facilities. Another source of growth in this period was the tourist industry, which developed especially rapidly between 1960 and 1966, when Jerusalem and the west bank were under Jordan's control.
The goal of economic growth at a rate of over 6 per cent annually was exceeded in the first three years of the 1964-1970 plan. According to the United States Agency for International Development, Jordan's GNP increased by 16.9 per cent in 1964 and by 12.4 per cent in 1965, but by only 2.8 per cent in 1966. The growth rate in 1964 and 1965 far exceeded planners' expectations, primarily as a result of unusually favorable weather conditions in these years, although non-agricultural sectors of the economy also showed substantial gains. The decline in the GNP in 1966 was due mainly to poor weather conditions, which seriously affected agriculture, but growth of industrial production, including mining, also declined. Although no data on employment are available for these years, it can be assumed that the rapid growth of Jordan's economy in 1964 and 1965 helped to reduce levels of unemployment and underemployment. (14, pp. 350-356).

The goal of reducing deficits in the kingdom's balance of trade, however, was not achieved. Phosphate exports surpassed the goals for the plan and the increase in remittances from Jordanians working in Arab oil countries increased the income balance of the nation, but the rising volume of imports of consumer goods increased the trade deficit in 1964-1966 by 17 per cent over the 1961-1963 level (14, pp. 384-387).
In the latter half of the 1964-1970 plan period, the 1967 war disrupted Jordan's development efforts. The kingdom's economy was seriously hurt, not only by the loss of the west bank and income from its tourist trade but by actual destruction and damage to many public and private buildings and facilities on the east bank of the Jordan River. Military expenditures increased from 22.8 million Jordanian dinars (JD) in 1966 to 28.6 million in 1967 and to 39.4 million in 1968. Demands on the national budget were drastically increased by the influx of new refugees from the west bank. The rise of the Fedayeen groups (the Palestinian Liberation Organization) among these refugees created instability and further complicated Jordan's problems. Continued hostilities along the Jordan River seriously retarded efforts to improve agriculture in the region. All of these factors had a deleterious effect on governmental finances. Evidence of the impact of the war on governmental revenues can be seen from the revenue losses during the last seven months of 1967. Domestic revenues were 32 per cent lower in these months than during the corresponding period in 1966. This reflects, in part, the loss of the west bank and, to a lesser extent, a decline in economic activity on the east bank. By 1968, domestic revenues from the east bank were JD 26.3 million, compared to 26.7 million in 1965-1966. The
uncertainty of the environment made it impossible for Jordan to pursue its development programs in this period (14, pp. 388-392).

The Three-Year Development Plan for 1973-1975

Conditions in Jordan at the Beginning of the Plan Period

From 1967 until 1973, little systematic development occurred in Jordan because the nation's attention was focused on military mobilization and defense. Major developmental programs that had been planned such as the Khaled Ibn El-Waleed Dam, electrification projects, the Jerusalem airport, and projects for developing potash resources all had to be curtailed or abandoned. The annual growth rate of the GNP decreased significantly to only 3.8 per cent. During the period from 1967 to 1971, a real decline took place in all economic sectors, and at the same time the government had to meet the basic food and shelter needs of the influx of 150,000 displaced persons from the west bank and the Gaza strip (16, pp. 81-96). As a result of the closure of the Suez Canal during the 1967 war, communication routes to Jordan again had to be changed, and Jordan's emerging phosphate trade with Europe was lost. Private investments declined, and the creation of new industries and the expansion of existing ones were limited. Jordan's industry lost half of its
national market as a result of the war. Unemployment increased, and many skilled and professional workers emigrated for higher wages outside Jordan. These conditions also seriously affected the kingdom's financial institutions. Fear led to the hoarding of hard currency, taking additional money out of circulation. Deficits in the balance of trade grew rapidly. The government's budget increasingly relied on foreign financial assistance; foreign assistance increased from 25.4 per cent of total public revenues in 1966 to 50.4 per cent in 1971. Thus, the June war, the occupation of the west bank, and subsequent events put the country face to face with economic paralysis (16, pp. 98-120).

In the late 1960s and early 1970s, other factors also affected Jordan's economy adversely. The confluence of several international factors led to worldwide inflation whose effects became very serious in the early 1970s, causing a significant increase in the prices of commodities purchased by Jordan. In addition, Jordan suffered from drought and frost in late 1972 and early 1973, damaging agricultural production which, in turn, led to a decrease in agricultural exports and the importation of food to offset local shortages. Jordan's foreign trade was seriously disrupted because of problems in diplomatic relations with its neighbors in 1971 and 1972 (15, pp. 40-46).
In 1972, in support of the Fedayeen, Egypt broke off diplomatic relations with Jordan from April to September (15, pp. 56-70). Then, as a result of Jordan's support of Pakistan in its war with India, the kingdom lost the large Indian phosphate market. Iraq and Syria closed their borders to Jordan in 1971 to protest actions taken by the Jordanian army against the Fedayeen. This closure of borders seriously damaged Jordan's marketing of agricultural products, especially citrus fruits and vegetables, and it disrupted the transportation of phosphate exports via Syria to Turkey, Lebanon, and Yugoslavia (16, pp. 243-245). One can well understand the statement of the Jordanian prime minister in February, 1972, that the country's economic problems stemmed in large measure from the fact that "other Arab countries have imposed a land and air siege and cut off aid" (1, pp. 1-2).

**Goals of the Plan**

In the face of these challenges, Jordan undertook a development plan in 1973, despite the continuing no-war/no-peace dilemma in which it found itself. The three-year development plan for 1973-1975 was aimed at revitalizing economic activity in the kingdom and resuming the development momentum disrupted by the wars. The goals of the plan were basically the same as those of its predecessor. Increasing employment, promoting agriculture, expanding
industry and mining, and improving public facilities and services were all given priority, and it was hoped that the plan would increase the GDP by 8 per cent annually, from an estimated JD 217 million in 1972 to JD 273.5 million in 1975 (9, pp. 2-20).

The plan forecast improvements in each of Jordan's economic sectors. For agriculture, income was projected to increase during the plan period by 6.47 per cent annually. Expanded irrigated land utilization in the Jordan valley, the southern Ghor, and the highland areas, augmented by improved marketing methods, was expected to contribute to this agricultural growth. Forecasts of industry and mining projected an annual growth rate of 14 per cent. Production and marketing of phosphate, use of underutilized production capacity, and creation of new industrial and mining projects were the major factors relied upon to bring about this increase. Construction was expected to increase at an annual rate of 11.2 per cent, based upon an expected increase in the volume of investment in irrigation, roads, railroads, government and residential buildings, and construction projects. Electrical production was also expected to increase by 16.6 per cent annually, a growth rate adequate to meet increased demands for electrical power. Services such as transport, trade, banking and finance, communication, public
administration, and defense were projected to increase at an average rate of 6.9 per cent annually. All of this projected growth was expected to create 70,000 new jobs and to help reduce the unemployment rate below the official level of 8 per cent recorded at the beginning of the plan period (19, pp. 20-23).

The three-year plan was not limited to a group of projects to be executed; it also adopted a number of proposals calling for the development and improvement of the institutional framework essential for the modernization of society. Several new government ministries and public institutions were to be created or strengthened such as the Industrial Development Bank, the Regional Commission for the Jordan River, the Ministry of Transport, the Housing Corporation, the Central Bank of Jordan, the Royal Scientific Society, the Municipal and Village Loan Fund, the National Resources Authority, the Youth Organization, the Ministry of Tourism, the Television Corporation, the External Trade Corporation, the Housing Bank, and the Office for Regulating Insurance (19, pp. 14-19). In all, the 1973-1975 plan called for 168 major projects to be implemented or improved.

Implementation of the Plan

During the latter part of 1972 and the first half of 1973, the government of Jordan adopted a set of
strategies and regulations for implementation of the development plan. Paramount among these measures were the plan follow-up directives dealing with the implementation and supervision of projects. A national steering committee, sectoral committees, an administrative development committee, a committee for updating laws and regulations, and a finance committee were formed to direct the implementation of the plan. Steps were also taken to appoint project managers, who were to prepare implementation strategies and be responsible for individual projects. Provisions were also made for an evaluation of the plan's implementation to be conducted at the end of the plan period.

Under the provisions of the plan, the private sector was expected to assume an increasing role in the development effort. It was forecast that the private sector would provide 44.4 per cent of the plan's total investment. In addition, however, to encourage the public sector's participation in these development efforts, it was suggested that the growth rate of consumption should be held at a low level in order to promote savings that could be directed toward development projects. Accordingly, the plan assumed that private consumption expenditures would increase at an annual rate of 6.8 per cent, compared with an annual growth rate of 7.2 per cent in the disposable income of the private sector. The plan also called for
the adoption of a fiscal and monetary policy consistent with its objectives (19, pp. 41-46).

The public sector's investment of JD 96.6 million, or 55.6 per cent of the plan's total investment, was to be raised from several sources. The plan called for increasing domestic public revenues through improvement in the collection of taxes, fees, and other public revenues. New tax increases were also proposed on some items such as inheritances and capital gains. In addition, increases in foreign aid and loans were expected to reach JD 53 million, and technical assistance was to raise another JD 16.5 million.

The National Budget during the Plan Period

Jordan's 1973 budget coincided with the initial phase of the new development plan and, in effect, was a fiscal interpretation of the first year of the plan. Public revenues were estimated at JD 159.2 million, of which JD 44.2 million was to come from domestic revenues. Foreign receipts in the form of budget supports from other Arab countries were estimated at JD 40 million. Economic and technical assistance and loans from other friendly foreign nations were estimated at JD 27.43 million. On the other side of the budget, expenditures were estimated at JD 71.6 million for recurring expenses and JD 52.17 million for capital expenditures, with an estimated deficit of JD 12.14
million. Table I presents the items in the Jordanian annual budgets for 1973, 1974, and 1975, juxtaposed with actual revenues and expenditures during these years.

**TABLE I**

SUMMARY OF JORDAN'S ANNUAL BUDGETS AND ACTUAL GOVERNMENT EXPENDITURES AND REVENUES DURING THE PERIOD OF THE 1973-1975 DEVELOPMENT PLAN
(IN MILLIONS OF JD)*

<table>
<thead>
<tr>
<th>Item</th>
<th>1973</th>
<th>1974</th>
<th>1975</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Planned</td>
<td>Actual</td>
<td>Planned</td>
</tr>
<tr>
<td>Expenditures</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Current expenditures</td>
<td>71.60</td>
<td>76.20</td>
<td>93.03</td>
</tr>
<tr>
<td>Capital expenditures</td>
<td>87.59</td>
<td>38.50</td>
<td>27.59</td>
</tr>
<tr>
<td>Total public expenditures</td>
<td>159.19</td>
<td>114.70</td>
<td>120.62</td>
</tr>
<tr>
<td>Revenues</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Domestic revenues</td>
<td>44.20</td>
<td>46.01</td>
<td>56.65</td>
</tr>
<tr>
<td>Budget support†</td>
<td>40.00</td>
<td>44.70</td>
<td>51.40</td>
</tr>
<tr>
<td>External loans and technical assistance</td>
<td>74.99</td>
<td>13.00</td>
<td>45.02</td>
</tr>
<tr>
<td>Loans repaid to central government</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total public revenues</td>
<td>159.19</td>
<td>114.70</td>
<td>120.62</td>
</tr>
</tbody>
</table>


†Budget support from oil-producing Arab countries.
Estimated and actual revenues and expenditures in poor countries, as noted earlier in this discussion, often differ. A comparison of Jordan's estimated and actual revenues and expenditures for 1973, 1974, and 1975 reveals great differences between the two, demonstrating the uncertainty under which budgets were prepared in the kingdom during this period.

**Unforeseen Developments Affecting the Economy**

The year that the 1973-1975 plan went into effect was characterized by far-reaching international economic developments. Increases in the price of phosphate coincided with increased production and capabilities at the port of Aqaba, giving a dramatic boost to Jordan's industrial sector. In addition, in 1972, the government had reduced import tariffs on a number of goods and totally exempted others. As a result of these factors, Jordan's foreign trade grew rapidly during this period (16, pp. 240-248).

In October, 1973, however, the Yom Kippur war broke out between the Arabs and Israelis. Even though the war was not in Jordanian territory, Jordan participated by sending troops to Syria. During these hostilities transport via Syria and Lebanon was again disrupted, and Jordan's foreign activities were slowed. Other changes also occurred during the development plan period that could not
have been foreseen when the plan was drawn up, including the oil price revolution, the acceleration of world inflation, the increase in aid available to Jordan from the Arab oil countries, the enhanced employment prospects for Jordanians in these oil-rich Arab nations, and the boom in world phosphate prices (16, pp. 264-268). Given the uncertainty of the environment and the weaknesses of national account data, it was not possible to accurately project what would happen to Jordan's economy during the plan period.

**Accomplishments of the Plan**

According to Central Bank of Jordan reports, the 1973-1975 plan had a major impact on Jordanian society, although some of the plan's goals were not achieved. The GDP did not grow as rapidly as forecast, in part because of a sharp drop in agricultural income due to unfavorable weather conditions. On the other hand, the goals of the plan were basically fulfilled in the industrial and mining sectors, despite difficulties in marketing and shipping the increased output of phosphate. The industrial production index rose from 139.1 in 1972 to 180 in 1975, and this large increase more than offset the decline in agricultural production. Similarly, in other sectors of the economy a high percentage of success was reported. Table II shows
the performance of the kingdom's various economic sectors for the three-year period, as reported by the Central Bank of Jordan.

TABLE II

SECTORAL ECONOMIC GROWTH RATES IN JORDAN, 1973, 1974, AND 1975 (IN MILLIONS OF JD IN CURRENT PRICES)*

<table>
<thead>
<tr>
<th>Sector</th>
<th>1973</th>
<th>1974</th>
<th>1975</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td>18</td>
<td>38</td>
<td>26.0</td>
</tr>
<tr>
<td>Manufacturing and mining</td>
<td>23</td>
<td>44</td>
<td>46.8</td>
</tr>
<tr>
<td>Construction</td>
<td>15</td>
<td>17</td>
<td>16.1</td>
</tr>
<tr>
<td>Electricity and water</td>
<td>3</td>
<td>4</td>
<td>3.1</td>
</tr>
<tr>
<td>Transport and communication</td>
<td>18</td>
<td>21</td>
<td>24.9</td>
</tr>
<tr>
<td>Wholesale and retail/trade</td>
<td>36</td>
<td>41</td>
<td>46.3</td>
</tr>
<tr>
<td>Financial institutions</td>
<td>3</td>
<td>4</td>
<td>5.0</td>
</tr>
<tr>
<td>Ownership of dwellings</td>
<td>12</td>
<td>14</td>
<td>17.0</td>
</tr>
<tr>
<td>Public administration and defense</td>
<td>41</td>
<td>45</td>
<td>65.2</td>
</tr>
<tr>
<td>Public services</td>
<td>20</td>
<td>24</td>
<td>41.0</td>
</tr>
</tbody>
</table>


The plan also met some of its important cultural objectives, according to a UNESCO report by Hani Al-Amed (3). Confidence in the Jordanian economy increased, as did the conviction that a social transformation was needed to enable the kingdom to become more capable of adapting to change and development. Essential governmental institutions were developed or strengthened. A number of cooperatives were established, and voluntary groups representing
various sectors of the economy emerged. There was greater participation by the general public in cultural life. Youth programs, popular heritage clubs, exhibitions of various kinds of arts and music, and archeological interest groups developed during this period, and educational opportunities expanded greatly as a result of the establishment of new schools and colleges. Libraries were built, and television, radio, and newspapers flourished. In addition, more Jordanians were exposed to Arab and western culture, and the nation entered into a number of cultural agreements with other countries (3, p. 17).

The Five-Year Plan for 1976-1980

**Conditions in Jordan at the Beginning of the Plan Period**

When the five-year plan for 1976-1980 was prepared in 1975, Jordan's economic and diplomatic position was vastly changed from the time of preparing the 1973-1975 plan. This was the first plan formulated in a period of relative peace. The tensions between Arabs and Israelis were greatly reduced compared to the situation in 1973. Jordan enjoyed harmony with its Arab neighbors, and there was stability within the kingdom. In 1975, the earlier preoccupation with unemployment had given way to worries about manpower bottlenecks. Jordan's economy had experienced a sustained boom after the Arab-Israeli war in 1973 and as a result of the dramatic rise in the price of petroleum. This rapid economic
growth was due, in part, to the seemingly ever-increasing fortunes of Jordan's neighbors in petroleum. Jordanian citizens worked in all of these oil-producing countries, and remittances from this group added to the kingdom's economy. Arabs from oil-rich countries also invested in housing and businesses in Jordan and provided added income through tourism. Furthermore, significant monetary transfers were made by other Arab governments to the Jordanian government, both as direct budgeting support and as loans or grants for Jordan's ambitious development program. Finally, the civil war in Lebanon caused many businesses to move to Jordan and enhanced the kingdom's opportunity to expand its foreign earnings. These developments inevitably had a substantial influence on shaping the five-year plan in 1975, now called the first five-year plan.

**Goals of the Plan**

The 1976-1980 plan began with a statement of long-term economic and social development objectives for the kingdom. These general objectives, similar to those in earlier plans, called for the following:

1. Achievement of structural changes in the Jordanian economy through developing the commodity-producing sectors, increasing their share in the GDP, strengthening the movement toward a self-sustained economy, and expanding the economy's productive capacity;
2. Realization of high growth rates in the GNP in real terms with a view to raising per capita income levels and narrowing the gap between income levels in Jordan and in developed countries;

3. Achievement of a better and more equitable distribution of national income;

4. Achievement of the highest possible level of employment, development of manpower capabilities, and increase of productivity;

5. Major reduction in the trade deficit, expansion and diversification of exports, and strengthening the balance of payments components related to factor income from abroad;

6. Development of domestic revenues as the main source of public revenues, enabling them to cover recurring government expenditures and provide an increasing proportion of public capital expenditures; and

7. Distribution of economic activities, public services, and ensuing gains on a more equitable basis among the various regions of the kingdom (17, pp. 26-27).

As in earlier plans, the five-year plan for 1976-1980 considered the needs of various economic sectors and proposed improvements and the projected growth for each of them. Agriculture was projected to grow by 40 per cent relative to 1975, or at an annual rate of 7 per cent during the plan period. This was to be achieved through improving
agricultural methods and production in rain-fed and irrigated areas, extending irrigation in the Jordan valley and the southern Ghor region, and augmenting livestock. Since water is the key element for successful agriculture in Jordan, the plan called for the preparation of a comprehensive water plan, the establishment of a national council to coordinate the use of water by various sectors and bodies, and increased hydrological studies of both ground and surface water. Furthermore, the plan proposed the introduction of new technology and methods in irrigation as well as the construction of additional dams and canals in order to increase the amount of irrigated acreage in the kingdom. Manufacturing and mining were expected to grow at an annual rate averaging 26.2 per cent during the plan period. This growth was to be achieved by the expansion of mineral production and agricultural industries (17, pp. 32-33).

A number of other measures were proposed to help stimulate growth. The plan modified the Encouragement of Investment Law to provide greater incentives for private and foreign investments for the undertaking of industrial export projects. The plan provided for the establishment of cooperatives, and it increased mineral explorations. It also provided for the expansion of petroleum refineries.

The scope of the industrial investment expected during the plan period was quite large. This was a "big
project" plan that called for investments in various areas of production as follows: mining and manufacturing--JD 24 million; expansion of phosphate production--JD 8 million; expansion of cement production--JD 39 million; expansion of petroleum refineries--JD 61 million; expansion of chemical fertilizer--JD 5 million; and development of copper production and textiles--JD 3 million (17, p. 189).

Other economic sectors were also expected to increase rapidly. Electrical power generation, transmission, and distribution were expected to grow 120 per cent in the plan period, or at an annual rate of 17.1 per cent. Much of the increased generation capacity was to come from new thermal power generation facilities. In addition, the national distribution grid in Jordan was to be linked with the electrical grid in other Arab countries, thus facilitating cooperative power exchanges throughout the Arab world (17, pp. 117-166). Electrification of the entire country was a part of the goal for the expansion of electrical production. Finally, construction was projected to increase by 22 per cent during the plan period, and the service sector by 51 per cent (Table III).

Private investments in development projects were expected to increase during the 1976-1980 plan period, and the central government was to direct an increasing proportion of its financial resources toward investment
TABLE III

SECTORAL ECONOMIC GROWTH RATES IN JORDAN
DURING THE 1976-1980 PLAN PERIOD
(IN PERCENTAGES)*

<table>
<thead>
<tr>
<th>Sector</th>
<th>Average Annual Growth Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Production Sectors</strong></td>
<td></td>
</tr>
<tr>
<td>Agriculture</td>
<td>7.0</td>
</tr>
<tr>
<td>Mining and manufacturing</td>
<td>26.2</td>
</tr>
<tr>
<td>Construction</td>
<td>4.1</td>
</tr>
<tr>
<td>Electricity and water supply</td>
<td>17.1</td>
</tr>
<tr>
<td>Total production sectors</td>
<td>21.1</td>
</tr>
<tr>
<td><strong>Service Sectors</strong></td>
<td></td>
</tr>
<tr>
<td>Transport and communication</td>
<td>10.6</td>
</tr>
<tr>
<td>Trade</td>
<td>7.2</td>
</tr>
<tr>
<td>Financial institutions</td>
<td>17.1</td>
</tr>
<tr>
<td>Ownership of dwellings</td>
<td>12.0</td>
</tr>
<tr>
<td>Public administration and defense</td>
<td>7.0</td>
</tr>
<tr>
<td>Other services</td>
<td>8.5</td>
</tr>
<tr>
<td>Total service sectors</td>
<td>8.6</td>
</tr>
<tr>
<td><strong>GNP at Market Prices</strong></td>
<td>11.5</td>
</tr>
</tbody>
</table>


in social overhead projects. Other Arab countries as well as friendly non-Arab nations were expected to continue to aid in Jordan's economic development. Financial support from Arab nations was expected to provide JD 61 million a year during the period. The total value of loans, including foreign private investments and capital transfers to the private sector, was forecast to amount to JD 334 million during the five years (17, pp. 38-41).

The 1976-1980 plan placed more emphasis than did its predecessors on social goals and the need to achieve
fundamental changes in society. The necessity for compulsory education at the elementary and preparatory (junior high) levels was recognized, and improvements and changes in secondary education were proposed in order to better serve the kingdom's needs for technical and vocational manpower. A major goal was to expand vocational secondary education so as to increase the enrollment in vocational classes by 30 per cent by 1980. Jordan's manpower problem was evident in the number of new technical and vocational schools that were to be built during the plan period. Adult and functional literary programs were stressed as well. Services aimed at maintaining and improving the health of the populace were stressed in the 1976-1980 plan. More hospitals were to be built, and remote regions were to be provided with better medical services. Expanded family planning services were also proposed.

The labor union movement, which represented about 20 per cent of Jordan's total labor force, was recognized as vital to the nation, and the plan called for the establishment of a social security fund as a means of guaranteeing security for all workers. In order to alleviate the problems of rural to urban migration, services and conditions in villages and rural areas were to be improved. The need to extend public facilities such as electricity and telephone and postal services to these areas was stressed.
Overcrowding in some urban areas, coupled with the growth of social problems, was also recognized in the plan. The shortage of kindergartens and day care nurseries and its negative effect on children and on the industrial productivity of working women were noted. The plan called for comprehensive changes to help women in organizing and improving themselves and their families (17, pp. 42-43).

The plan also stressed the importance of increasing citizen participation in the development process. It called for informing the public about the plan and its goals through the media and extending effective participation in plan implementation to all sectors of the population. Domestic television was to be strengthened, especially the broadcast of news and documentary programs. Strategies and programs for change were spelled out to enhance public awareness of the plan throughout the kingdom (3, pp. 17-22).

**Implementation of the Plan**

Increasing investments in Jordan's various economic sectors was considered to be the most important means of achieving the goals of the plan. Investments during the plan period were estimated at JD 765 million, of which JD 382 million was to come from the public sector and JD 383 million from the private sector. Table IV lists five-year plan investments by sectors (17, p. 38).
TABLE IV
1976-1980 FIVE-YEAR PLAN INVESTMENTS BY SECTOR*

<table>
<thead>
<tr>
<th>Sector</th>
<th>Investment (JD Million)</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economic Sectors</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agriculture</td>
<td>40.0</td>
<td>5.2</td>
</tr>
<tr>
<td>Mining and manufacturing</td>
<td>229.1</td>
<td>29.9</td>
</tr>
<tr>
<td>Water</td>
<td>97.4</td>
<td>12.7</td>
</tr>
<tr>
<td>Tourism and antiquities</td>
<td>24.4</td>
<td>3.2</td>
</tr>
<tr>
<td>Electricity</td>
<td>42.8</td>
<td>5.6</td>
</tr>
<tr>
<td>Transportation</td>
<td>119.9</td>
<td>15.7</td>
</tr>
<tr>
<td>Communication and information</td>
<td>23.0</td>
<td>3.0</td>
</tr>
<tr>
<td>Trade</td>
<td>3.8</td>
<td>0.5</td>
</tr>
<tr>
<td>Total economic sectors</td>
<td>580.4</td>
<td>75.8</td>
</tr>
<tr>
<td>Social Sectors</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education and youth welfare</td>
<td>34.6</td>
<td>4.6</td>
</tr>
<tr>
<td>Health</td>
<td>9.0</td>
<td>1.2</td>
</tr>
<tr>
<td>Social welfare</td>
<td>1.0</td>
<td>0.1</td>
</tr>
<tr>
<td>Labor and vocational training</td>
<td>3.8</td>
<td>0.5</td>
</tr>
<tr>
<td>Housing and government building</td>
<td>86.8</td>
<td>11.5</td>
</tr>
<tr>
<td>Municipal and rural affairs</td>
<td>38.8</td>
<td>5.1</td>
</tr>
<tr>
<td>Al-Awqaft†</td>
<td>5.5</td>
<td>0.7</td>
</tr>
<tr>
<td>Statistics</td>
<td>1.0</td>
<td>0.1</td>
</tr>
<tr>
<td>Royal Scientific Society</td>
<td>4.9</td>
<td>0.6</td>
</tr>
<tr>
<td>Total social sectors</td>
<td>184.6</td>
<td>24.2</td>
</tr>
<tr>
<td>Total</td>
<td>765.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>


†The Jordanian ministry that supervises social and religious matters.

The implementation of the plan also recognized the need for a competent government system equipped with technical and managerial skills. To improve the civil service, the plan called for a number of administrative changes,
namely, the enactment of a new civil service law which was to provide greater incentives for government employees, the adoption of the principle of administrative decentralization to ensure more effective and efficient administrative actions, the creation of a special water commission similar to the Jordan Valley Authority to administer the development of the Aqaba basin, and the setting up of a comprehensive system for the storage and retrieval of financial, managerial, and technical information relating to the various development projects in order to improve the implementation process (17, pp. 29-31).

Financing the Plan

According to the 1976-1980 plan, public sector investments for capital expenditures were to amount to JD 382 million during the plan period and were to be financed predominantly by foreign loans and domestic borrowing. Domestic revenues to finance current or recurring expenditures were to be increased at a higher rate than the expenditures themselves in order to ensure the availability of adequate funds. The increase in domestic revenues was to come from a mining royalty on phosphate exports and an increase in the income tax.

The national budgets for 1976-1980 showed dramatic growth in governmental revenues and expenditures. Total revenues of the central government were forecast to increase
from JD 193.71 million in 1976 to JD 514.23 million in 1980, and domestic revenues from taxes were expected to grow from JD 89.07 million in 1976 to JD 168.03 million in 1980. Budget support from Jordan's Arab neighbors was expected to increase from JD 66.22 million in 1976 to JD 203.33 million in 1980, and external loans and technical assistance were to increase from zero in 1976 to JD 5 million in 1980. Table V presents the various revenue sources in each of the five years of the plan period.

On the expenditure side, governmental expenditures for both recurring expenses and capital investments were also to increase dramatically. Capital expenditures by the government were to increase from JD 76.59 million in 1976 to JD 227.93 million in 1980, while recurring civil expenditures were to increase from JD 82.79 million in 1976 to JD 164.60 million in 1980, excluding defense and public security. Table V shows expenditures during the plan period.

Actual revenues during the plan period were less than projected and expenditures exceeded the amounts planned in the budget during each of the five years, as shown in Table VI. On the revenue side, this shortfall was caused, in part, by the fact that the growth of the kingdom's economy did not produce as much additional revenue as expected. On the expenditure side, actual expenditures
### TABLE V

**SUMMARY OF JORDAN'S PROJECTED NATIONAL BUDGET DURING THE 1976-1980 PLAN PERIOD (IN MILLIONS OF JD)***

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Revenues</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tax revenues</td>
<td>89.07</td>
<td>117.74</td>
<td>123.28</td>
<td>151.10</td>
<td>174.67</td>
</tr>
<tr>
<td>Indirect taxes</td>
<td>77.64</td>
<td>101.75</td>
<td>101.23</td>
<td>123.29</td>
<td>139.80</td>
</tr>
<tr>
<td>Direct taxes</td>
<td>11.43</td>
<td>15.99</td>
<td>22.05</td>
<td>27.81</td>
<td>34.87</td>
</tr>
<tr>
<td>Non-tax revenues</td>
<td>18.52</td>
<td>24.51</td>
<td>35.21</td>
<td>36.80</td>
<td>51.48</td>
</tr>
<tr>
<td><strong>Total domestic revenues</strong></td>
<td>107.59</td>
<td>142.25</td>
<td>158.49</td>
<td>187.90</td>
<td>226.15</td>
</tr>
<tr>
<td>Budget support</td>
<td>66.23</td>
<td>122.20</td>
<td>81.70</td>
<td>210.30</td>
<td>202.83</td>
</tr>
<tr>
<td>Economic and technical assistance</td>
<td>0.01</td>
<td>......</td>
<td>......</td>
<td>......</td>
<td>2.00</td>
</tr>
<tr>
<td>External loans</td>
<td>19.89</td>
<td>58.51</td>
<td>90.69</td>
<td>37.62</td>
<td>71.57</td>
</tr>
<tr>
<td>Expected loans and assistance</td>
<td>......</td>
<td>......</td>
<td>......</td>
<td>4.47</td>
<td></td>
</tr>
<tr>
<td><strong>Total external revenues</strong></td>
<td>81.12</td>
<td>180.71</td>
<td>172.39</td>
<td>247.92</td>
<td>280.87</td>
</tr>
<tr>
<td><strong>Total public revenues</strong></td>
<td>193.71</td>
<td>322.96</td>
<td>330.88</td>
<td>435.82</td>
<td>507.02</td>
</tr>
<tr>
<td><strong>Expenditures</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Defense and public security</td>
<td>103.10</td>
<td>94.50</td>
<td>102.35</td>
<td>132.33</td>
<td>137.03</td>
</tr>
<tr>
<td>Recurring civil expenditures</td>
<td>82.79</td>
<td>101.09</td>
<td>110.54</td>
<td>189.00</td>
<td>199.02</td>
</tr>
<tr>
<td>Capital expenditures (ordinary and development)</td>
<td>76.59</td>
<td>142.25</td>
<td>148.62</td>
<td>194.33</td>
<td>227.09</td>
</tr>
<tr>
<td><strong>Total public expenditures</strong></td>
<td>262.48</td>
<td>337.84</td>
<td>361.51</td>
<td>515.66</td>
<td>563.14</td>
</tr>
<tr>
<td>Surplus or deficit</td>
<td>-68.77</td>
<td>-14.88</td>
<td>-30.63</td>
<td>-79.84</td>
<td>-56.12</td>
</tr>
</tbody>
</table>


Tended to exceed the amounts planned, as shown in Table VI, for every year of the plan period. For instance, the total expenditures budgeted in 1976 amounted to JD 222.92 million, but actual expenditures totaled JD 262.5 million. Larger expenditures than budgeted coupled with lower revenues than
<table>
<thead>
<tr>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Budgeted</td>
<td>Actual</td>
<td>Budgeted</td>
<td>Actual</td>
<td>Budgeted</td>
</tr>
<tr>
<td><strong>Revenues</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Domestic revenues</td>
<td>110.60</td>
<td>107.60</td>
<td>137.30</td>
<td>145.44</td>
<td>158.81</td>
</tr>
<tr>
<td>Budget support</td>
<td>46.90</td>
<td>66.20</td>
<td>87.00</td>
<td>120.46</td>
<td>103.00</td>
</tr>
<tr>
<td>External loans and</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>technical assistance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Loans repaid to</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>central government</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total public revenues</td>
<td>191.11</td>
<td>206.68</td>
<td>249.30</td>
<td>286.40</td>
<td>371.81</td>
</tr>
<tr>
<td><strong>Expenditures</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Current expenditures</td>
<td>144.53</td>
<td>185.90</td>
<td>178.90</td>
<td>201.98</td>
<td>201.52</td>
</tr>
<tr>
<td>Capital expenditures</td>
<td>78.39</td>
<td>76.60</td>
<td>153.70</td>
<td>134.98</td>
<td>85.29</td>
</tr>
<tr>
<td>Total public expenditures</td>
<td>222.92</td>
<td>262.50</td>
<td>332.60</td>
<td>336.96</td>
<td>286.81</td>
</tr>
</tbody>
</table>

budgeted obviously meant that budget deficits increased in every year of the plan period. At the same time, foreign debt continued to increase, from JD 108 million in 1975 to JD 350 million in 1980 (17, pp. 5-10).

**Evaluation of the Plan**

The five-year plan for 1976-1980 achieved a real annual growth of the GDP of 8.5 per cent, as compared to the targeted rate of 11.9 per cent. The GDP increased from JD 269.4 million in 1975 to JD 705 million in 1980, and per capita income in current prices increased from JD 185 in 1975 to JD 453 in 1980. Table VII shows the growth of all economic sectors from 1975 to 1980. Agricultural income in current prices increased from JD 26 million in 1975 to JD 60 million in 1980, or at an annual rate of 18.2 per cent. In real terms, however, the annual rate of increase was 5.7 per cent, compared to the targeted rate of 7 per cent. The income of the industrial sector increased in current prices from JD 46.8 million in 1975 to JD 154 million in 1980, or at an annual rate of 27 per cent. In real terms, the annual rate of increase was 13.6 per cent, compared to the targeted rate of 26.1 per cent. Despite its tremendous expansion, the industrial sector failed to achieve the levels anticipated in the plan (7, pp. 3-25).

The relative share of various economic sectors in Jordan's GDP is shown in Table VIII. It should be noted
TABLE VII

SECTORAL ECONOMIC GROWTH RATES IN JORDAN
FOR THE YEARS 1975-1980 (IN JD MILLIONS)*

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td>26.0</td>
<td>37.3</td>
<td>41.7</td>
<td>58.7</td>
<td>43.9</td>
<td>50.0</td>
</tr>
<tr>
<td>Manufacturing and mining</td>
<td>46.8</td>
<td>72.5</td>
<td>85.0</td>
<td>84.3</td>
<td>102.0</td>
<td>154.0</td>
</tr>
<tr>
<td>Electricity and water</td>
<td>3.1</td>
<td>3.6</td>
<td>4.1</td>
<td>5.2</td>
<td>6.5</td>
<td>8.0</td>
</tr>
<tr>
<td>Construction</td>
<td>16.1</td>
<td>23.3</td>
<td>27.0</td>
<td>35.0</td>
<td>43.0</td>
<td>52.0</td>
</tr>
<tr>
<td>Trade</td>
<td>46.3</td>
<td>64.9</td>
<td>66.3</td>
<td>87.5</td>
<td>115.0</td>
<td>138.0</td>
</tr>
<tr>
<td>Transportation and communication</td>
<td>24.9</td>
<td>32.5</td>
<td>35.9</td>
<td>67.3</td>
<td>76.0</td>
<td>91.0</td>
</tr>
<tr>
<td>Public administration and defense</td>
<td>65.2</td>
<td>81.7</td>
<td>84.4</td>
<td>95.0</td>
<td>105.0</td>
<td>122.0</td>
</tr>
<tr>
<td>Other services</td>
<td>41.0</td>
<td>42.7</td>
<td>58.9</td>
<td>62.3</td>
<td>70.4</td>
<td>80.0</td>
</tr>
<tr>
<td>Gross domestic product</td>
<td>269.4</td>
<td>358.5</td>
<td>403.3</td>
<td>495.3</td>
<td>561.8</td>
<td>705.0</td>
</tr>
</tbody>
</table>


that the industrial sector increased from 17.4 per cent of the GDP in 1975 to 21.8 per cent in 1980, and construction grew from 6 per cent to 7.4 per cent while the service sector declined from 65.9 per cent to 61.2 per cent and agriculture decreased from 9.6 per cent to 8.5 per cent. The commodity-producing sector realized a higher rate of growth than did the service sector, thus increasing its relative importance from 34.1 per cent of the GDP in 1975 to 38.8 per cent in 1980. Nevertheless, the
commodity-producing sector remained below the 1980 level of 44.1 per cent targeted in the plan (18, p. 5).

**TABLE VIII**

RELATIVE SHARE OF VARIOUS ECONOMIC SECTORS IN JORDAN'S GDP, 1975 AND 1980 (IN PERCENTAGES)*

<table>
<thead>
<tr>
<th>Sector</th>
<th>1975</th>
<th>1980</th>
<th>Planned</th>
<th>Actual</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td>9.6</td>
<td>8.3</td>
<td>8.5</td>
<td></td>
</tr>
<tr>
<td>Manufacturing and mining</td>
<td>17.4</td>
<td>28.3</td>
<td>21.8</td>
<td></td>
</tr>
<tr>
<td>Construction</td>
<td>6.0</td>
<td>5.3</td>
<td>7.4</td>
<td></td>
</tr>
<tr>
<td>Electricity and water</td>
<td>1.1</td>
<td>2.2</td>
<td>1.1</td>
<td></td>
</tr>
<tr>
<td>Commodity-producing sectors</td>
<td>34.1</td>
<td>44.1</td>
<td>38.8</td>
<td></td>
</tr>
<tr>
<td>Services sector</td>
<td>65.9</td>
<td>55.9</td>
<td>61.2</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>


Total investments of JD 1,222 million in current prices (or the equivalent of JD 843.7 million at 1975 prices) during the five-year period exceeded the JD 763 million anticipated in the plan. The plan had assumed that capital expenditures would be distributed equally between the public and private sectors, but private sector investments exceeded the expenditures of the plan and amounted to 59 per cent of total investments. The only sectors where actual investments did not meet or exceed targeted goals in current prices were in irrigation, information and
culture, water, health, vocational training, and government building. Investments in constant prices for both the infrastructure and social development sectors, however, exceeded plan estimates by 26.2 per cent and 58 per cent, respectively (7, pp. 50-65).

Significant progress was made in the social sector to meet the basic human needs of citizens in the fields of health, education, water, housing, electricity, and village roads during the plan period. Current expenditures of the central government in the social sector rose from JD 19.9 million in 1975 to JD 53.1 million in 1980, or at an annual rate of 21.7 per cent. Gains were made in providing health care for the people; Jordan's infant mortality ratio in 1980 was twenty-three per thousand, one of the lowest in the Arab world, and average life expectancy increased to fifty-eight years during the plan period, compared with forty-six years in 1961. Other evidence of improvements in the health sector can be seen in statistics regarding numbers of doctors and hospitals. The number of doctors per thousand citizens increased from 0.4 in 1975 to 1.0 in 1980, the number of hospital beds per thousand citizens increased from 1.5 in 1975 to 1.7 in 1980, the number of village clinics increased from 189 in 1975 to 283 in 1980, and the number of maternity and child clinics increased from 39 in 1975 to 75 in 1980 (18, pp. 11-12).
Improvements were also recorded in education during the 1976-1980 plan period. Primary education was extended to cover all the villages of the kingdom, and the total number of students increased at every level from the 1975/1976 to the 1979/1980 academic year—from 397,598 to 607,001 in the compulsory cycle, from 45,568 to 90,053 in the secondary cycle, and from 11,873 to 27,526 in colleges and universities (18, p. 12).

During the five-year plan period about 37,000 new residential buildings were constructed, adding approximately 6.8 million square meters to the kingdom's housing stock. The Housing Corporation and the Jordan Valley Authority built another 522 housing units for limited and low-income groups and had 3,488 more units under construction at the end of the plan period. The Housing Bank Loan program also helped many individuals to borrow funds for obtaining housing or upgrading slum housing.

Public utilities facilities (water, sewage, electricity, and telephone) were greatly expanded during the plan period. The network of water facilities served 80 per cent of the population, and water consumption for industrial and domestic purposes increased from 38 million cubic meters in 1970 to 60 million cubic meters in 1980. The proportion of the population served by electricity increased from 39 per cent in 1975 to about 65 per cent.
in 1980, and the per capita consumption of electricity rose from 209 kilowatt hours (KWH) in 1975 to 478 KWH in 1980. Rural electrification programs continued to serve more and more of Jordanian villages. Telephone service also increased significantly during the plan period. Automated and manual exchanges provided service to 458 of 1,018 villages and cities (18, pp. 11-13). In sum, significant changes occurred in Jordan during the 1976-1980 plan period, and the country and the region experienced relatively stable and peaceful times.

The Five-Year Plan for 1981-1985

Conditions in Jordan at the Beginning of the Plan Period

Despite the significant progress Jordan had made under the first five-year plan for 1976-1980, basic social and economic problems persisted and new difficulties emerged as a result of changes in both the external and internal environment. Population problems became increasingly troublesome as the high rate of population growth both from natural increases and migration from the west bank and the Gaza strip continued. Consequently, the proportion of the population under fifteen years of age grew from 45 per cent in 1961 to 53 per cent in 1979. Much of this population growth was concentrated in urban areas, especially in the city of Amman. Rising urban demands for
various governmental services created additional burdens on government. Inability to provide adequate water and sewage services, educational and other basic infrastructure facilities, and services led to a deterioration of the standard of living in Jordan's cities. Rapid urbanization caused changes in the social structure, which, in turn, created new problems.

Providing adequate housing for the growing urban population was a massive and difficult task. The extensive demand for decent housing, notwithstanding the fact that government had channeled a large portion of investments into the housing sector during the first five-year plan, caused land values and construction costs to continue to escalate and, thus, to complicate urban problems. Spill-over from the cities into the countryside took over limited cultivatable lands which Jordan desperately needed. Sewage from urban areas often was not adequately treated because treatment facilities lagged behind demands of urban expansion. As a result, untreated sewage often flowed into dam basins or underground aquifers, polluting essential water resources. Insecticides in agriculture were used in manners harmful to the environment because prevailing legislation did not provide a proper institutional framework for the management of environmental affairs (18, pp. 14-20).
Transformation of the labor force also presented major problems. A shift in sectoral distribution of labor from agriculture to the industrial and service sectors reflected continuing urbanization in the kingdom. In addition, an estimated 30,000 Jordanians were working outside the country in oil-producing Arab nations, and this created a manpower shortage in the domestic economy, particularly in the agricultural and construction sectors, which led to the importation of unskilled and semi-skilled workers from abroad (18, pp. 21-22). Furthermore, the booming demand for administrative and technical personnel also drained skilled talent from government employment, making the problems of development even more difficult. These problems were accentuated by the so-called "brain drain" of professional and managerial talent moving to the developed countries. Female participation in the labor force continued to be quite low, and women accounted for only about 14 percent of all workers.

Meeting educational needs for the increasing population of youths in Jordan was complicated by the traditional aspirations of society for professional careers in such fields as medicine, law, and engineering. Traditional academic education continued to receive more care and attention than vocational education, despite the fact that the labor market could not absorb all of the physicians,
lawyers, engineers, and other academically trained professionals, while there was an acute shortage of technically and vocationally trained personnel (18, pp. 23-24).

Another challenge facing Jordan as the second five-year plan was being formulated in 1980 was the rapidly increasing world price of petroleum, combined with growing domestic demands for energy. Jordan, although surrounded by countries with oil resources, was still almost entirely dependent on imported crude oil for electric power and fuel. Petroleum imports constituted an increasing burden on the kingdom's national economy, costing the nation approximately 12 per cent of its GNP in 1980. Yet, despite these external and internal challenges in 1980, as the second five-year plan was being prepared, Jordan found itself in a relatively prosperous and peaceful environment in comparison to earlier periods of its history.

**Goals of the Plan**

The introduction to the second five-year plan for 1981-1985, like those of its predecessors, began with an overall statement of development concepts and objectives. The aim of the plan was to maintain the momentum in socioeconomic areas that had been achieved under the previous plans. This, too, was to be a high investment, "big project" plan, envisaging a continuation of the rapid pace of changing in the national economic structure in
favor of the commodity-producing sectors. At the same time, additional efforts were made to deal with social issues and to satisfy basic human needs. Many objectives concerning various aspects of the economy, infrastructure improvements, improvements of governmental machinery, and the building of modern institutions were basically restatements of objectives in previous plans. A somewhat different emphasis in the 1981-1985 plan, however, was the stress placed on citizen participation in the development plan and the widening of the base of decision-making in the development process. The second five-year plan clearly stated,

Meeting the requirements of comprehensive development requires citizen participation in socioeconomic and political activities, together with the assumption by the individual of a positive role in his work and a share in the goals and benefits of development. It also requires overall development of social work on the basis of new concepts which include the reorganization of society, a deepening of the active participation of all segments of society, and a significant expansion of the role of women in productive economic work (18, p. 28).

None of the earlier plans had focused so strongly upon the need for citizen participation (18, pp. 25-26). Emphasis was also given to strengthening the role of local governments through which citizens could more effectively participate in the plan. This strategy of strengthening local governments even called for the development of self-financing sources for municipal and village councils. The
need to reduce dependence on imported energy was noted in the plan for the first time, and the need for measures to protect the environment and guard against the depletion of natural resources was stressed (13, pp. 54-58).

The overall goal for the 1981-1985 plan was to increase the GDP during the plan period at an annual rate of 11 per cent. Projected growth rates in the various economic sectors are shown in Table IX. The greatest growth was expected in manufacturing and mining and in electrical power generation, transmission, and distribution. Investments in manufacturing and mining during the plan period were projected to amount to JD 758.8 million, or 22.99 per cent of total investment for development, while investment in electrical facilities was expected to reach JD 163.4 million. Both of these are capital intensive industries (Table X). The plan also projected the growing importance of mining and manufacturing to the economy, and this area was forecast to increase in relative importance from 21.8 per cent of the GDP in 1980 to 29 per cent in 1985 (Table XI). The plan sought to change the structure of the national economy in favor of the commodity-producing sectors by raising their contribution to the GDP from 38.8 per cent in 1980 to 46 per cent in 1985. Service sectors were expected to decline during this period from 61.2 per cent of the GDP to 54 per cent. Income from agriculture
TABLE IX
SECTORAL ECONOMIC GROWTH RATES IN JORDAN
DURING THE 1981-1985 PLAN PERIOD
(IN PERCENTAGES)*

<table>
<thead>
<tr>
<th>Sector</th>
<th>Average Annual Growth Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Production Sectors</strong></td>
<td></td>
</tr>
<tr>
<td>Agriculture</td>
<td>7.5</td>
</tr>
<tr>
<td>Manufacturing and mining</td>
<td>17.8</td>
</tr>
<tr>
<td>Electricity and water</td>
<td>18.7</td>
</tr>
<tr>
<td>Construction</td>
<td>12.6</td>
</tr>
<tr>
<td>Total production sectors</td>
<td>14.9</td>
</tr>
<tr>
<td><strong>Service Sectors</strong></td>
<td></td>
</tr>
<tr>
<td>Trade (internal and external)</td>
<td>10.0</td>
</tr>
<tr>
<td>Transportation and communication</td>
<td>11.1</td>
</tr>
<tr>
<td>Public administration and defense</td>
<td>3.5</td>
</tr>
<tr>
<td>Other services</td>
<td>9.0</td>
</tr>
</tbody>
</table>


was expected to increase at an annual rate of 7.5 per cent as a result of extending irrigated areas in the Jordan Valley and southern Ghor and improving agricultural production in rain-fed and unirrigated areas in order to increase productivity and livestock. Nevertheless, agriculture was expected to decline in its relative importance to the GDP from 8.5 per cent in 1980 to 7.2 per cent in 1985 (13, pp. 62-66).

The most essential resource in a desert country is water, and the second five-year plan, like all of its predecessors, sought to improve Jordan's water resources. The national water project that had been undertaken during
**TABLE X**

**SUMMARY OF ECONOMIC SECTORAL INVESTMENTS IN JORDAN DURING THE 1981-1985 PLAN PERIOD***

<table>
<thead>
<tr>
<th>Sector</th>
<th>Investment (JD Millions)</th>
<th>Relative Importance (Percentage)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Production Sectors and Tourism</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agriculture and cooperatives</td>
<td>234.5</td>
<td>7.11</td>
</tr>
<tr>
<td>Water and irrigation</td>
<td>521.7</td>
<td>15.81</td>
</tr>
<tr>
<td>Manufacturing and mining</td>
<td>758.8</td>
<td>22.99</td>
</tr>
<tr>
<td>Electricity and energy</td>
<td>163.4</td>
<td>4.95</td>
</tr>
<tr>
<td>Tourism and antiquities</td>
<td>65.7</td>
<td>1.99</td>
</tr>
<tr>
<td><strong>Total production sectors and tourism</strong></td>
<td>1,744.1</td>
<td>52.85</td>
</tr>
<tr>
<td><strong>Service Sectors</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trade/supply</td>
<td>37.0</td>
<td>1.12</td>
</tr>
<tr>
<td>Transportation</td>
<td>545.5</td>
<td>16.53</td>
</tr>
<tr>
<td>Communication</td>
<td>106.8</td>
<td>3.24</td>
</tr>
<tr>
<td>Education, culture, and information</td>
<td>244.0</td>
<td>7.40</td>
</tr>
<tr>
<td>Health</td>
<td>100.7</td>
<td>3.05</td>
</tr>
<tr>
<td>Labor and social development</td>
<td>24.4</td>
<td>0.74</td>
</tr>
<tr>
<td>Housing and government buildings</td>
<td>308.1</td>
<td>9.34</td>
</tr>
<tr>
<td>Municipal and rural affairs</td>
<td>175.6</td>
<td>5.32</td>
</tr>
<tr>
<td>Al-Awqaf</td>
<td>6.4</td>
<td>0.19</td>
</tr>
<tr>
<td>Science, technology, and statistics</td>
<td>7.4</td>
<td>0.22</td>
</tr>
<tr>
<td><strong>Total service sectors</strong></td>
<td>1,555.9</td>
<td>47.15</td>
</tr>
<tr>
<td><strong>Total Investments</strong></td>
<td>3,300.0</td>
<td>100.00</td>
</tr>
</tbody>
</table>

TABLE XI

RELATIVE IMPORTANCE OF ECONOMIC SECTORS TO
THE JORDANIAN GDP, 1980 AND 1985
(IN PERCENTAGES)*

<table>
<thead>
<tr>
<th>Sector</th>
<th>1980</th>
<th>1985</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Production Sectors</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agriculture</td>
<td>8.5</td>
<td>7.2</td>
</tr>
<tr>
<td>Manufacturing and mining</td>
<td>21.8</td>
<td>29.3</td>
</tr>
<tr>
<td>Electricity and water</td>
<td>1.1</td>
<td>1.6</td>
</tr>
<tr>
<td>Construction</td>
<td>7.4</td>
<td>7.9</td>
</tr>
<tr>
<td>Total production sectors</td>
<td>38.8</td>
<td>46.0</td>
</tr>
<tr>
<td><strong>Service Sectors</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trade (internal and external)</td>
<td>19.6</td>
<td>18.6</td>
</tr>
<tr>
<td>Transportation and communication</td>
<td>12.9</td>
<td>12.9</td>
</tr>
<tr>
<td>Public administration and defense</td>
<td>17.3</td>
<td>12.2</td>
</tr>
<tr>
<td>Other services</td>
<td>11.4</td>
<td>10.3</td>
</tr>
<tr>
<td>Total service sectors</td>
<td>61.2</td>
<td>54.0</td>
</tr>
<tr>
<td><strong>Total Gross Domestic Product</strong></td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>


The 1976-1980 plan period forecast that water consumption in the kingdom would increase from 434 million cubic meters in 1980 to 795 million in 1985. To meet this demand, the second five-year plan called for an expenditure of JD 521.7 million, the second largest structural investment after manufacturing and mining. Forty different water, sewage, and irrigation projects were proposed during the five-year period, the largest of these being for the construction of dams and channels for irrigation. The second phase of
the Jordan Valley irrigation project alone was to cost an estimated JD 200 million. The plan also called for the establishment of a national water authority to take over the responsibility of defining priorities for long-range domestic, industrial, and agricultural water use and for protection of water from pollution and salinity. The enactment of environmental laws to protect ground and surface water from pollution was called for, and a water resource bank to assist in the development of stock ponds and ground water wells was also to be established (7, pp. 3-19).

The 1981-1986 plan also called for additional improvements in Jordan's basic infrastructure. Expansion of electrification and water systems throughout the kingdom; additional roads and city streets; construction of public building; additions of fire trucks, rescue vehicles, and ambulances; expansion of the postal service; modernization and improvements of solid waste disposal; upgrading of the Amman Airport; construction of additional housing units; and expansion and improvements in the educational system were some of the infrastructure areas dealt with in the plan.

A number of programs and projects were proposed under the second five-year plan to advance the social and cultural condition of the nation. Total investment in the health sector during the 1976-1980 plan was JD 2 million,
whereas the 1981-1985 plan called for a huge increase of expenditures in this sector, totaling JD 100.7 million. Much of this sum was to be spent on the development and improvement of health programs and medical services capable of providing comprehensive care for the whole kingdom. The largest expenditures were allocated for the construction and upgrading of Jordan's hospitals and for the provision of medical centers throughout the kingdom.

Social development and welfare also received increased emphasis under the second-five year plan. The total projected expenditures for social development and welfare during the plan period were to increase from JD 1 million to JD 15 million. Much of this sum was earmarked for providing basic services and upgrading overall conditions of life in the country. Programs for family and child care were emphasized. The plan pointed out that Jordanian women, particularly in rural areas, were facing a number of problems such as illiteracy, lack of awareness of the proper methods of child rearing and the benefits of home economics, a low level of productive skills, and a shortage of effective women's organizations capable of developing their members' abilities to solve such problems. The plan also called for the expansion of nurseries, child care centers, and child welfare programs.

The 1981-1985 plan forecast that JD 224 million would be spent for education, compared to only JD 34.6 million in
the 1976-1980 plan (18, pp. 236-240). The second five-year plan continued to call for expanding vocational and technical education and new technical colleges, and community colleges were to be built throughout the kingdom.

Telecommunication and postal services were projected to receive a total of JD 106.8 million, compared with JD 20 million under the previous plan. Modern information media, including radio, television, and newspapers, were to receive a projected JD 7.8 million, up from 2.9 million under the first five-year plan (18, pp. 230-235).

Implementation of the Plan

The implementation of the second five-year plan, like that of its predecessors, was to depend heavily upon private initiative, and the plan stressed the importance of maintaining a favorable investment climate and adequate incentives for encouraging the private sector's participation in the development process.

The role of public administration in the formulation and implementation of the development plan, thus, was not simply to be one of extending public services and maintaining infrastructure utilities but, rather, one of providing the appropriate entrepreneurial climate for both the public and private sectors in the field of managing socio-economic development. Public administration, however, was to play a major role in the implementation of the plan.
as well. The large public investments called for in the plan required a high level of efficiency and administrative skills. As a result of general dissatisfaction with the effectiveness of public administration, a royal commission was called for in the plan to oversee its implementation. The commission was charged with the responsibility of studying the requirements of administration and institutional development and of proposing the methods and measures required to ensure effective and efficient implementation of various projects and programs. The commission was to develop methods of financial and administrative controls, to determine evaluation techniques, to establish guidelines governing productivity, and to recommend actions needed to implement the plan (18, pp. 49-50).

The National Budget for the Plan Period

Jordan's total budget (capital plus current) during the five-year plan period was expected to increase from JD 1,995.7 million in 1980 to JD 4,523 million in 1985. The capital budget for this period was to increase from JD 753.3 million to JD 2,233 million, and the current or recurring budget was expected to grow from JD 1,242.4 million to JD 2,290 million in the same period. Funds for the capital budget were to be obtained from foreign loans and technical assistance, support from the oil-producing Arab countries, and domestic borrowing. The current
budget was to be financed primarily by domestic revenues or loans. Domestic revenues were expected to rise at an annual rate of 20 per cent, while current expenditures were to be limited to not more than 12.5 per cent during the first three years of the plan and to 10 per cent for the last two years. Increased revenues were expected as a result of more effective fiscal policies, such as a revision and increase in the income tax as well as increases in other taxes (18, p. 58). Table XII shows the sources of funds for financing Jordan's central government during the period from 1981 to 1985.

Unforeseen Developments Affecting the Economy

Jordan's experience during the 1980s demonstrates the vulnerability of its planning and budgeting processes to changes in world economic conditions. In 1980, when the 1981-1985 plan was being prepared, optimism about the future was high. Since 1975, the kingdom had enjoyed financial liquidity because of generous support from the oil-rich Arab countries. This financial assistance, coupled with foreign aid from western countries, made it possible for Jordan to undertake the high investment, "big project" strategy of development. In 1980, when oil prices in international markets reached a high of $45 per barrel, it seemed that the economic prosperity of Jordan's Arab donors would continue indefinitely. In 1981, however, an oil
TABLE XII
SOURCES OF CENTRAL GOVERNMENT FUNDS IN JORDAN
IN CURRENT PRICES, 1981-1985 (IN MILLIONS OF JD)*

<table>
<thead>
<tr>
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<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Domestic revenues</td>
<td>260</td>
<td>323</td>
<td>387</td>
<td>464</td>
<td>557</td>
<td>1,991</td>
</tr>
<tr>
<td>2. Budget support</td>
<td>244</td>
<td>244</td>
<td>244</td>
<td>244</td>
<td>244</td>
<td>1,220</td>
</tr>
<tr>
<td>3. Current revenues</td>
<td>504</td>
<td>567</td>
<td>631</td>
<td>708</td>
<td>801</td>
<td>3,211</td>
</tr>
<tr>
<td>4. Current expenditures</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Security and defense</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Total current expenditures</td>
<td>363</td>
<td>408</td>
<td>459</td>
<td>505</td>
<td>555</td>
<td>2,290</td>
</tr>
<tr>
<td>7. Surplus in current account</td>
<td>141</td>
<td>159</td>
<td>172</td>
<td>203</td>
<td>246</td>
<td>921</td>
</tr>
<tr>
<td>8. Foreign loans and</td>
<td>107</td>
<td>151</td>
<td>215</td>
<td>293</td>
<td>396</td>
<td>1,162</td>
</tr>
<tr>
<td>technical assistance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Government bonds</td>
<td>27</td>
<td>33</td>
<td>38</td>
<td>30</td>
<td>22</td>
<td>150</td>
</tr>
<tr>
<td>10. Borrowing from the</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>banking system</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Total revenues (7 to 10)</td>
<td>275</td>
<td>343</td>
<td>425</td>
<td>526</td>
<td>664</td>
<td>2,233</td>
</tr>
</tbody>
</table>


glut began to force the price of oil downward, and thereafter prices continued to drop dramatically. Economic conditions worsened in most industrialized countries in 1981, many fell into recession, and world trade decreased. Conditions in developing countries were likewise adversely affected, and the rate of growth of the real GNP in these
countries dropped. Oil prices and exports declined in 1981, and, as a result, oil exporting countries had less revenue to share with poor neighbors like Jordan (7, pp. 1-6).

A second major change in the Middle East, the Iraq-Iran war, also diverted funds that might have been invested in Jordan by the oil-rich Arab countries. In addition, financial decline in the Arab oil states caused them to reduce the budget support upon which Jordan had come to depend so heavily since the mid-1970s. Furthermore, many of the Jordanians who had worked for the Arab oil states found themselves unemployed as a result of the slowdown, which served to decrease Jordan's national income while increasing demands for governmental revenues for the unemployed workers. Finally, in addition to these regional economic problems, Jordan suffered from a severe drought during the 1980s that seriously damaged its agricultural output (8, pp. 7-8).

Achievements of the Plan

The impact of the environmental changes described above did not seriously affect Jordan's economy until 1982, the second year of the 1981-1985 plan, because the developmental momentum which Jordan had experienced from 1976 to 1980 continued in 1981. In that year the GDP achieved a growth rate of 20 per cent at market prices, equivalent to
8 per cent in constant prices. Unfavorable weather conditions, however, caused agricultural income to increase at a much lower rate than in 1980. By 1982, the economic slowdown that was affecting most other nations had begun to make itself felt in Jordan as well, and the kingdom suffered a recession. The growth rate of the GDP at constant prices declined in almost every year of the plan period, falling from 9 per cent in 1981 to 4.6 per cent in 1982 and to 0.5 per cent in 1983, and rising to only 2.7 per cent in 1984.

The slowdown was felt in all of the sectors of Jordan's economy. Agriculture in 1982 grew by 11.2 per cent, compared with 18.7 per cent in 1981. Ample rainfall in 1983 increased agricultural production to 18.3 per cent, but in 1984 drought and late rainfall again caused the growth of this sector to decline, this time to 5.3 per cent. Industrial income growth slowed drastically during the recession from 23.2 per cent in 1981 to 16.9 per cent in 1983 and to 10.5 per cent in 1984. Table XIII shows the economic growth rate for the kingdom's economic sectors from 1980 to 1984. It should be noted that every sector declined between 1980 and 1984 (10, pp. 6-7).

Due to the decrease in Arab assistance and the availability of fewer foreign development loans from western nations, Jordan's external revenue in 1982 fell short of
### TABLE XIII
SECTORAL ECONOMIC GROWTH RATES IN JORDAN
IN CURRENT PRICES, 1980-1984 (IN PERCENTAGES)*

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture, forestry, and fishing</td>
<td>48.2</td>
<td>18.6</td>
<td>9.4</td>
<td>25.8</td>
<td>5.3</td>
</tr>
<tr>
<td>Mining and quarrying</td>
<td>45.1</td>
<td>8.3</td>
<td>5.1</td>
<td>-16.5</td>
<td>6.1</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>35.2</td>
<td>29.8</td>
<td>12.0</td>
<td>-4.5</td>
<td>9.3</td>
</tr>
<tr>
<td>Electricity and water supply</td>
<td>69.3</td>
<td>22.8</td>
<td>20.5</td>
<td>11.9</td>
<td>13.1</td>
</tr>
<tr>
<td>Construction</td>
<td>38.3</td>
<td>13.4</td>
<td>10.2</td>
<td>4.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Wholesale and retail trade, restaurants, and hotels</td>
<td>34.7</td>
<td>18.1</td>
<td>7.2</td>
<td>8.1</td>
<td>5.7</td>
</tr>
<tr>
<td>Transport and communications</td>
<td>26.7</td>
<td>28.9</td>
<td>20.3</td>
<td>10.7</td>
<td>11.2</td>
</tr>
<tr>
<td>Financing, real estate, and business services</td>
<td>16.2</td>
<td>5.0</td>
<td>16.2</td>
<td>5.0</td>
<td>9.9</td>
</tr>
<tr>
<td>Community, social, and personal services</td>
<td>24.2</td>
<td>28.2</td>
<td>29.3</td>
<td>10.1</td>
<td>10.3</td>
</tr>
<tr>
<td>Imputed bank service charges</td>
<td>29.6</td>
<td>23.8</td>
<td>32.3</td>
<td>29.1</td>
<td>12.6</td>
</tr>
<tr>
<td>Producers of government services</td>
<td>31.8</td>
<td>12.3</td>
<td>14.3</td>
<td>6.2</td>
<td>3.9</td>
</tr>
<tr>
<td>Non-profit institutions</td>
<td>24.1</td>
<td>13.7</td>
<td>15.2</td>
<td>11.0</td>
<td>-1.0</td>
</tr>
<tr>
<td>Domestic services of households</td>
<td>50.0</td>
<td>60.0</td>
<td>4.2</td>
<td>40.0</td>
<td>14.3</td>
</tr>
<tr>
<td><strong>Gross Domestic Product at Factor Cost</strong></td>
<td>32.9</td>
<td>17.4</td>
<td>12.4</td>
<td>5.5</td>
<td>6.7</td>
</tr>
</tbody>
</table>


the amounts budgeted for that year by JD 111.39 million.
Actual government expenditures in 1982 were JD 94.2 million less than the amount called for in the budget, and capital expenditures were JD 120.5 million less than budgeted.
Table XIV shows both budgeted and actual expenditures for
TABLE XIV
SUMMARY OF BUDGETED AND ACTUAL GOVERNMENT REVENUES AND EXPENDITURES IN JORDAN DURING THE FIRST FOUR YEARS OF THE 1981-1985 PLAN PERIOD (IN MILLIONS OF JD)*

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Revenues</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Domestic revenues</td>
<td>260.00</td>
<td>309.20</td>
<td>323.00</td>
<td>360.22</td>
<td>387.00</td>
<td>403.48</td>
<td>464.00</td>
<td>437.7</td>
</tr>
<tr>
<td>Budget support</td>
<td>244.00</td>
<td>206.31</td>
<td>244.00</td>
<td>184.50</td>
<td>244.00</td>
<td>196.60</td>
<td>244.00</td>
<td>124.0</td>
</tr>
<tr>
<td>External loans and technical assistance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Loans repaid to central government</td>
<td></td>
<td></td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>Loan ...</td>
<td>107.00</td>
<td>75.73</td>
<td>151.00</td>
<td>61.49</td>
<td>215.00</td>
<td>80.59</td>
<td>193.00</td>
<td>128.5</td>
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<tr>
<td>Total public revenues</td>
<td>611.00</td>
<td>598.47</td>
<td>718.00</td>
<td>606.61</td>
<td>846.00</td>
<td>681.28</td>
<td>1001.00</td>
<td>705.2</td>
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<tr>
<td><strong>Expenditures</strong></td>
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<td></td>
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<td></td>
<td></td>
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<tr>
<td>Current expenditures</td>
<td>363.00</td>
<td>391.47</td>
<td>408.00</td>
<td>433.77</td>
<td>459.00</td>
<td>448.02</td>
<td>505.00</td>
<td>486.7</td>
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<td>Capital expenditures</td>
<td>275.00</td>
<td>255.63</td>
<td>343.00</td>
<td>222.51</td>
<td>425.00</td>
<td>261.70</td>
<td>526.00</td>
<td>259.3</td>
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<tr>
<td>Total expenditures</td>
<td>638.00</td>
<td>647.10</td>
<td>751.00</td>
<td>656.28</td>
<td>884.00</td>
<td>709.72</td>
<td>1031.00</td>
<td>746.1</td>
</tr>
</tbody>
</table>

the first four years of the plan period. During the latter
two years, 1983 and 1984, Jordan was forced to adapt to the
slower rate of economic growth. In real terms, after in-
flation was considered, the growth rate of the kingdom's
GDP hit its lowest level since 1972, recording increases--
as previously noted--of only 0.5 per cent in 1983 and 2.7
per cent in 1984 (10, pp. 7-10).

**Evaluation of the Plan**

At the time of this writing (summer, 1986), the summary
evaluation of the last year of the second five-year plan
for 1981-1985 has not been published, and, therefore, it
is impossible to fully evaluate the achievements of the
plan. Several conclusions, however, may be drawn. First,
as a result of the worldwide recession and the falling
price of petroleum in the early 1980s, coupled with the re-
gional war between Iran and Iraq, Jordan had a difficult
time meeting the goals of its high investment, "big project"
plan for 1981-1985. The kingdom could not maintain its
planned levels of investment without the continued support
of the Arab oil countries and foreign loans from other na-
tions. The recession also slowed domestic revenues, making
the financing of increasing budgets during the plan period
highly problematic. Table XIV also graphically displays
Jordan's declining public revenues between 1981 and 1984
(10, pp. 117-120).
Despite the economic setbacks caused by the recessionary periods, Jordan made substantial progress in social development, especially under the last two five-year plans, but, unfortunately, at times this progress created other unforeseen problems. For example, as of 1985, 4,000 medical doctors were practicing in 595 hospitals and medical centers throughout the country, but 700 physicians were unable to find positions in either the public or the private sector. Another 9,000 Jordanian students studying medicine either at home or abroad will have little opportunity to pursue their profession in their own country. Furthermore, an estimated 1,100 Jordanian doctors are currently practicing abroad. The same situation is true for other traditional professions such as engineering and law. At the same time, there continues to be a shortage of personnel with vocational and technical skills. This imbalance reflects problems not only in Jordan’s educational system but in changing personal attitudes about education. Great strides have been made in education in recent years, but attempts to stimulate the growth of vocational and technical education to meet Jordan’s manpower needs have been less than successful (2, p. 1).

Creating jobs for a rapidly increasing population has been another major problem in Jordan. By 1980, the kingdom's unemployment problem appeared to be solved temporarily
as a result of employment opportunities in the oil-rich Arab countries, especially for college graduates. The falling price of oil and ensuing recession, however, soon reestablished unemployment as a serious obstacle to development, and the unemployment rate increased to 8 per cent in 1985. The highest level of unemployment—21 per cent—was found among university and college graduates. Among female college graduates the unemployment rate was a staggering 41 per cent, and this was a major cause of concern for Jordan.

In 1985, the kingdom had a labor force totaling 502,000 persons, with another 143,000 resident foreign workers. This labor force, however, represented only 21 per cent of Jordan's total population, compared with the 35 per cent normally found in developed societies. There are several reasons for this disparity: a) just over half of the nation's population (51 per cent) is under fifteen years of age, and a large percentage of these children and youths are in school; b) only 12.5 per cent of females were in the labor force in 1985; c) it was estimated that, by 1985, a total of 340,000 Jordanians had immigrated to work abroad, many of them members of the kingdom's best educated professional and managerial groups, resulting in the so-called "brain drain" (4, p. 4).

Despite occasional setbacks in economic growth since the 1960s, annual per capita income in Jordan has continued to increase. In 1979, the kingdom's per capita income was
JD 429; it increased to JD 721 in 1984 and to JD 730 in 1985. The nation has been better able to deal with the demands of modernization as a result of increasing prosperity, although major problems such as unemployment and inflation still threaten the well-being of the state (20, p. 2).

Summary

The purpose of this chapter has been to examine Jordan's development plans and national budgets to determine whether Caiden and Wildavsky's (6) generalizations about countries with poor and uncertain environments are applicable to the kingdom. Clearly, Jordan is poor in natural resources and has an unstable and uncertain environment, which, in turn, is reflected in its development plans and budgets. The plans for 1962-1967, for 1964-1970, and for 1973-1975 had to be completely abandoned or restructured because of environmental changes. Wars with the Israelis, civil war, tension with neighbors, shifting political ties, and major changes in prices of commodities in the international market all have challenged the planning and budgeting processes in Jordan. Jordan has experienced increasing national debt, low domestic revenue yields, and heavy reliance on foreign debt, which tends to fluctuate depending on international politics, as can be seen from the data presented here on the kingdom's plans, budgets, and
expenditures. Amounts called for in the plans and budgets frequently differ from actual expenditures, indicating that finance ministers frequently have to remake budgets because of fluctuations in revenues, as Caiden and Wildavsky suggested (6).

There are, however, some differences between the case of Jordan and those of other developing countries in the poor and uncertain category. In the period before the mid-1970s, Jordan's experience was similar to that of other poor countries. It faced tremendous demands, including caring for a huge influx of refugees, and raising adequate funds for development was a very difficult, if not impossible, task. Since the mid-1970s, however, Jordan has received large amounts of funds from its oil-rich Arab neighbors, which enabled the kingdom to follow a high investment, "big project" strategy of development. This prosperity gave an otherwise poor nation the liquidity to fund needed projects, a phenomenon that was most unusual among developing countries. But the recent decline in oil prices, resulting in a great reduction of this Arab financial assistance, again demonstrates the uncertainty of Jordan's environment.

Caiden and Wildavsky's (6) observation concerning the fragmentation of the budgeting process in poor countries is true in Jordan. The kingdom's budget is not unified;
instead, it consists of two components, a capital budget and a current budget. The former, covering all new construction for development, is prepared by the planning agency that is responsible for obtaining grants and loans and for implementing planning projects. The latter, on the other hand, is the responsibility of the Finance Minister and his budget department. The current budget maintains and supports governmental services generally, including capital expenditures for non-developmental purposes, such as capital expenditures for the maintenance of highways, bridges, buildings, water and sewage facilities, and the like.

The fact that two different groups have responsibility for the national budget in Jordan creates the classical situation described by Caiden and Wildavsky (6), leading to conflict between planners and budgeters. The planning agency in Jordan, the NPC, obviously has been very powerful, as evidenced by the fact that the king's brother, Crown Prince Hassan, has played a major role in planning and that the NPC was responsible directly to the prime minister. Fortunately, during much of the last ten years--the period of the two major five-year plans for 1976-1980 and 1981-1985--adequate funds were accessible, and this prevented major planner-budgeter disagreements over scarce resources. Since 1982, however, funds to finance governmental programs have been substantially reduced, and manifestations
of the inevitable conflict between planners and budgeters have appeared. In 1984, the NPC was reorganized, and the planning function was placed in a regular ministry, a much weaker position than the one that it formerly occupied.

As a result of low domestic revenues, Jordan's Ministry of Finance has been placed under increasing pressure to meet growing demands for current or recurring expenditures. As a result, conflicts have arisen not only between the Finance Minister and planners but between the Finance Minister and other ministers and heads of agencies responsible for the operation of the government. The booming economy in Jordan created not only high public expectations but an increasing demand for governmental services. Department heads, therefore, have been forced to use all kinds of strategies, many of which were described by Caiden and Wildavsky (6), to obtain the funds necessary to operate their departments. Since 1982 and the beginning of the recession, Jordan's Finance Minister has found himself in conflict with both department heads and planners since he has been forced to cut back on all expenditures. In 1986, for example, the Finance Minister reduced governmental expenditures by JD 100 million in order to balance the budget. In short, Caiden and Wildavsky's (6) description of planning and budgeting in poor countries seems to fit Jordan in all respects (2, pp. 2-5).
CHAPTER BIBLIOGRAPHY


CHAPTER VI

ASSESSING THE IMPACT OF GOVERNMENTAL EXPENDITURES ON DEVELOPMENT IN JORDAN

Now that the planning and budgeting processes and their outcomes in Jordan have been examined, this chapter considers the possibilities and problems of assessing the impact of governmental policies on development. Specifically, the impact of governmental expenditures on development must be assessed; in other words, the questions "Can government promote development?" and "Can a poor country make itself more prosperous?" must be answered. The purpose of this chapter is to attempt to evaluate the impact of governmental expenditures on development in Jordan during the last fifteen years.

Anyone who has knowledge of conditions in Jordan from 1970 to 1985 realizes that the kingdom's economy has grown, but one must determine whether this growth was caused by governmental actions. Then, if it is found that governmental expenditures were significant in causing economic development, one must pinpoint the areas in which those expenditures made the greatest contribution--that is, the areas in which government expenditures produced the greatest
return. This chapter attempts to answer these questions and to assess the impact of governmental expenditures on development in Jordan (3, p. 1).

Several problems arise in making such an assessment. First of all, there is no agreement upon an economic theory of development, and no major economic thinker has truly focused on how economies develop or how development occurs in poor countries. Capitalism, which developed from Adam Smith's seminal work, *The Wealth of Nations* (6), was mainly a reaction to merchantism, the prevailing political and economic view of his day. The concept of reliance on the market to promote the individual and public good, so long as government does not interfere, is not relevant to the types of economic problems that poor countries face today. Under the laissez-faire theory, government was to restrict its economic involvement to the problems of defense from external aggression and the maintenance of internal security. Neither does socialism, which developed from Karl Marx's work, *Das Kapital*, deal directly with the questions of development in poor countries. Marx's focuses were on the exploitation of the worker in industrial societies and on the historical dialectic, which he believed would inevitably cause revolution and the creation of a socialist state (7, pp. 79-84).

Since the crisis of the great Depression of the 1930s and the collapse of Smith's laissez-faire paradigm,
economists have searched for explanations of why market forces did not stabilize or solve the problems of the Depression. John Maynard Keynes (1) modified the capitalist paradigm and suggested that government should play a role in preserving economic stability. Keynes' theory provided a theoretical base for much of the recent development of public expenditures in capitalist countries. Despite this increase in governmental expenditures, however, Keynesian theory did not consider the question of economic development as it exists in Third World countries today.

The differences in the role of public expenditures in developed and developing countries are based on differing rationales. In developed countries the role of public expenditures, coupled with governmental monetary controls, is to prevent cyclical fluctuations and economic stagnation and to stabilize employment. In developing countries, on the other hand, the purpose of governmental policies, including expenditures, is not so much to control and stabilize cyclical economic fluctuations as to raise levels of income and employment, to improve the distributional aspect of national income, to balance regional development, and to generally accelerate economic development (5, pp. 23, 42, 114).

In the 1950s and 1960s, a number of scholars became concerned with the field of economic development and began
to try to formulate a general theory of development. A leader in this effort was W. W. Rostow, an American economic historian who presented a theory of the stages of economic development. Rostow's theory described a series of steps through which he said all countries must proceed. Advanced countries, it was argued, had at various times in their histories already passed through the stage of "taking off into self-sustained growth." Underdeveloped countries, in contrast, are still in the traditional or pre-condition stage of development and must pass through a series of prescribed steps in order to "take off into self-sustained economic growth" (4, pp. 1, 3, 4, 12). The principal key to development, according to Rostow's theory, was the mobilization of domestic and foreign savings in order to generate sufficient investments to accelerate economic growth and provide for the "takeoff into sustained growth."

Unfortunately, however, the tricks of development embodied in this theory of stages of growth did not always work. One of the basic reasons why increased investments did not necessarily promote development was that the stages of economic development theory failed to take into account the crucial fact that contemporary Third World nations are actors in and are acted upon by highly integrated and complex international systems in which even the
best and most intelligent development strategies can sometimes be nullified by external forces beyond their control. Furthermore, many of Rostow's (4) assumptions concerning economic development were inappropriate and/or irrelevant to the actual conditions in Third World nations. Whereas the Marshall Plan was successful in Europe because the countries receiving aid possessed the necessary structural, institutional, and attitudinal conditions to make effective use of it, Third World nations lack many of these societal prerequisites for development. As a result of these problems with Rostow's theory of development, there still is no generally agreed-upon theory of development (7, pp. 56-76).

Without such a theory it is difficult to devise a model to explain the causes of growth in developing nations. The difficulty is compounded by the fact that there is also no clear and agreed-upon definition of socioeconomic development, despite its importance as a goal of many of the nations in the world today. Nor is there a simple objective criterion of socioeconomic development against which to validate measurement devices. It is particularly difficult to explain the causes of growth in a country like Jordan that has attempted to achieve development through a strategy of public-private partnerships. If one attempts to assess the impact of governmental expenditures alone on
development, a misleading picture may result because the private sector may also have been instrumental in the developmental process. On the other hand, it is most difficult to assess public and private expenditures for development, in part because of lack of reliable data, and spillover from one sector to another may distort the assessment process (2, pp. 4, 5, 10, 14, 18, 19).

In light of these difficulties, the author has attempted to assess the statistical significance of governmental expenditures in four specific areas in Jordan between 1970 and 1984.*

Statistical Results

The purpose of this chapter is to determine whether a government can promote economic development (as measured by an increase in gross national product) by quantitatively analyzing the following questions. First, what are the impact and significance of governmental expenditures, as a combined measure, on the gross national product in Jordan? Second, which governmental expenditure areas provide the greatest contribution to an increase in the

*Data for governmental expenditures for the various areas, along with information on the Jordanian GNP between the years 1970 and 1984, were taken from the Yearly Statistical Series (1964-1983), special issue, published by the Central Bank of Jordan, and the Monthly Statistical Bulletin, October, 1985, also published by the Central Bank of Jordan.
Jordanian GNP? In order to address each of these issues, six empirical models are examined.

The statistics utilized within each model include the following. To determine the bivariate association of each of the models' independent variables on the GNP, the Pearson correlation coefficient \(r\) is employed.* In order to identify the amount of variation in GNP explained by the linear combination of independent variables in each model, the coefficient of multiple determination \(R^2\) is examined and interpreted. Having obtained a given \(R^2\), the F test is computed to ascertain whether the linear relationship between this study's set of independent variables and the GNP is not zero in the population (i.e., to test for the statistical significance of its departure from zero). The T test is also employed to identify which independent variable is statistically significant within each model examined. An unstandardized regression coefficient and its associated standard error are displayed, in tabular form, for the independent variables examined in each empirical model. In addition, the Durbin-Watson test is utilized to determine whether the data collected from several time periods (i.e., 1970 through 1984) are autocorrelated. In a further attempt to improve the validity

*All zero-order correlation coefficients reported in this study were found to be significant at the 0.000 level.
of the significance tests utilized in this study (which assume constant error variance, or normality), a lag transformation procedure rescaled each of the independent variables (except year) to identify the model that maximizes the variation explained in the GNP. Each model is diagrammed and examined below.

The first model to be examined in this investigation focused on the relationship among each of the governmental expenditure areas, year, and GNP. Specifically, the following model was tested:

**Model One**

\[ C_6 = C_1 + C_2 + C_3 + C_4 + C_5, \]

where

\[ C_1 = \text{year}, \]
\[ C_2 = \text{economic expenditures}, \]
\[ C_3 = \text{social expenditures}, \]
\[ C_4 = \text{cultural expenditures}, \]
\[ C_5 = \text{communication and transportation expenditures}, \]
\[ C_6 = \text{Jordanian gross national product}. \]

The bivariate results of this first equation, based on the zero-order matrix found in Appendix B, indicate that there was a high degree of intercorrelation between the study's variables. The range of Pearson's \( r \) was from 0.84 (\( C_5 \) with \( C_6 \)) to 0.93 (\( C_3 \) with \( C_6 \)). Based on Table XV presented below, which displays the multivariate results of Model One, the multiple regression results indicate that 97.2 per cent of the variation in GNP was accounted
<table>
<thead>
<tr>
<th>Variable</th>
<th>Parameter Estimate</th>
<th>Standard Error</th>
<th>T-Computed</th>
<th>Significant Level of T</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>-93932252.67</td>
<td>76038050.45</td>
<td>-1.223</td>
<td>0.2522</td>
</tr>
<tr>
<td>Year</td>
<td>47210.83281</td>
<td>38585.40545</td>
<td>1.224</td>
<td>0.2522</td>
</tr>
<tr>
<td>Economic expenditures</td>
<td>0.95793909</td>
<td>3.51188438</td>
<td>0.273</td>
<td>0.7912</td>
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<tr>
<td>Social expenditures</td>
<td>21.42960145</td>
<td>5.49213398</td>
<td>3.902</td>
<td>0.0036</td>
</tr>
<tr>
<td>Culture and information expend-</td>
<td>-42.21230811</td>
<td>37.40342775</td>
<td>-1.129</td>
<td>0.2883</td>
</tr>
<tr>
<td>itures</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Communication and transportation expenditures</td>
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<td>7.59359777</td>
<td>-1.967</td>
<td>0.0808</td>
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</tbody>
</table>

\[ R^2 = 0.9716; \ F = 61.589; \ p < .001; \ DW = 1.462; \ N = 15; \text{ first order autocorrelation 0.195.} \]
for by the inclusion of the five independent variables in the equation. In examining the F value \( F = 61.589; p < .000 \), it was concluded that the linear relationship between the independent variables and the GNP in this equation was not zero in the population. The next analysis involved the T test results within the multiple regression equation. Examination of the T's associated with the first model's independent variables identified the governmental area of social expenditures \((C_3)\) as the only statistically significant variable in the model \((T = 3.902; p < .004)\). The governmental area of communication and transportation expenditures \((C_5)\) did, however, approach significance \((T = -1.967; p < .08)\).

The results provided by the Durbin-Watson test for the first model, as shown in Table XV above, indicated that the calculated D was 1.462. Durbin and Watson established upper \((d_u)\) and lower \((d_l)\) limits for the significance of D. At the 5 per cent significance level, with the sample size equal to 15 and K (the number of independent variables and the intercept) equal to 6, the upper limit is 2.220 and the lower limit is 0.562. In order to reject the null hypothesis (i.e., there is no autocorrelation), D must be smaller than \(d_l\). As the results of this statistical test show that D (1.462) was greater than \(d_l\) (0.562), the null hypothesis was not
rejected. Since $D$ was larger than $d_l$ and smaller than $d_u$ (i.e., $d_l (0.562) < D (1.462) < d_u (2.220)$), the results were inconclusive. This suggests that the error process was autocorrelated at the 19.5 per cent significance level (i.e., the first order autocorrelation was 0.195), not at the level of 5 per cent.

In an attempt to address the problem associated with the first order autocorrelation a lag transformation (i.e., a log transformation based within the SAS software package) was necessary. The following equation, referred to as the second statistical model, represents the lag transformation of all independent variables in the study, with the exception of variable $C_1$ (i.e., year).

**Model Two**

$$C_6 = C_1 + X_2 + X_3 + X_4 + X_5,$$

where

$$X_2 = \text{Lag 1 (} C_2),$$
$$X_3 = \text{Lag 1 (} C_3),$$
$$X_4 = \text{Lag 1 (} C_4),$$
$$X_5 = \text{Lag 1 (} C_5).$$

The bivariate results of the second equation, based on the zero-order matrix found in Appendix B, indicate that there was a high degree of intercorrelation between the study's variables. The range of Pearson's $r$ was from 0.92 ($X_5$ with $C_6$) to 0.99 ($X_3$ with $C_6$). Based on Table XVI presented below, which displays the multivariate results of Model Two, the multiple regression results indicate that


**TABLE XVI**

**MULTIVARIATE STATISTICS FOR MODEL TWO**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Parameter Estimate</th>
<th>Standard Error</th>
<th>T-Computed</th>
<th>Significant Level of T</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>-45517963.50</td>
<td>5336402.21</td>
<td>-0.853</td>
<td>0.4185</td>
</tr>
<tr>
<td>Year</td>
<td>23106.87139</td>
<td>27063.41144</td>
<td>0.854</td>
<td>0.4180</td>
</tr>
<tr>
<td>Economic expenditures</td>
<td>-0.16702148</td>
<td>2.41078374</td>
<td>-0.069</td>
<td>0.9465</td>
</tr>
<tr>
<td>Social expenditures</td>
<td>19.74604268</td>
<td>3.96149405</td>
<td>4.984</td>
<td>0.0011</td>
</tr>
<tr>
<td>Culture and information expenditures</td>
<td>-19.57040302</td>
<td>30.84622192</td>
<td>-0.634</td>
<td>0.5435</td>
</tr>
<tr>
<td>Communication and transportation expenditures</td>
<td>-0.88203325</td>
<td>6.30768972</td>
<td>-0.140</td>
<td>0.8922</td>
</tr>
</tbody>
</table>

\[ R^2 = 0.981; \ F = 122.608; \ p < .001; \ DW = 3.273; \ N = 15; \ first \ order \ autocorrelation \ -0.724. \]
98.7 per cent of the variation in GNP was accounted for by the inclusion of the five independent variables in the equation. In examining the F value (F = 1.226; p < .000), it was concluded that the linear relationship between the independent variables and the GNP in this equation was not zero in the population. The next analysis involved the T test results within the multiple regression equation. Examination of the T's associated with the second model's independent variables also identified the governmental area of social expenditures (X₃) as the only statistically significant variable in the model (T = 4.984; p < .001).

The results provided by the Durbin-Watson test for the second model, as shown in Table XVI above, indicated that the calculated D was 3.273. As stated earlier, with the sample size equal to 15 and K (the number of independent variables and the intercept) equal to 6, the upper limit is 2.220 and the lower limit is 0.562. As there is a negative first order autocorrelation (-0.724), in order to reject the null hypothesis (i.e., there is no autocorrelation), D must be greater than 4 - d₁ (4 - .562 = 3.438). As the results of this statistical test show that D (3.273) was less than 4 - d₁ (3.438), the null hypothesis was not rejected. Since D was larger than 4 - dₚ and smaller than 4 - d₁ (i.e., 4 - dₚ (1.78) < D (3.273) < 4 - d₁ (3.438)), the results were inconclusive.
This indicates that the null hypothesis was not rejected and, consequently, autocorrelation was still present.

A third model was constructed of all independent variables (except year) for an assessment of a second lag model. This model is diagrammed as follows.

**Model Three**

\[ C_6 = C_1 + X_{22} + X_{32} + X_{42} + X_{52}, \]

where

- \( X_{22} = \text{Lag 2 (C_2)} \)
- \( X_{32} = \text{Lag 2 (C_3)} \)
- \( X_{42} = \text{Lag 2 (C_4)} \)
- \( X_{52} = \text{Lag 2 (C_5)} \)

The bivariate results of the third equation, based on the zero-order matrix found in Appendix B, indicated that there was a high degree of intercorrelation between the study's variables. The range of Pearson's r was from 0.93 (\( X_{52} \) with \( C_6 \)) to 0.98 (\( X_{22} \) with \( C_6 \)). Based on Table XVII presented below, which displays the multivariate results of Model Three, the multiple regression results indicate that 99.4 per cent of the variation in GNP was accounted for by the inclusion of the five independent variables in the equation. In examining the F value (\( F = 248.389; p < .000 \)), it was concluded that the linear relationship between the independent variables and the GNP in this equation was not zero in the population. The next analysis involved the T test results within the multiple regression equation. Examination of the T's associated
### TABLE XVII
MULTIVARIATE STATISTICS FOR MODEL THREE

<table>
<thead>
<tr>
<th>Variable</th>
<th>Parameter Estimate</th>
<th>Standard Error</th>
<th>T-Computed</th>
<th>Significant Level of T</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>-81402877.03</td>
<td>40324222.96</td>
<td>-2.019</td>
<td>0.0833</td>
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<td>Year</td>
<td>41341.45352</td>
<td>20441.54815</td>
<td>2.022</td>
<td>0.0828</td>
</tr>
<tr>
<td>Economic expenditures</td>
<td>7.16887405</td>
<td>1.62530576</td>
<td>4.411</td>
<td>0.0031</td>
</tr>
<tr>
<td>Social expenditures</td>
<td>16.16005731</td>
<td>3.05086718</td>
<td>5.297</td>
<td>0.0011</td>
</tr>
<tr>
<td>Culture and information expenditures</td>
<td>-93.49839346</td>
<td>26.21432733</td>
<td>-3.567</td>
<td>0.0091</td>
</tr>
<tr>
<td>Communication and transportation expenditures</td>
<td>-5.71075939</td>
<td>4.27166815</td>
<td>-1.337</td>
<td>0.2231</td>
</tr>
</tbody>
</table>

\[ R^2 = 0.9944; \quad F = 248.389; \quad p < .0001; \quad DW = 3.90; \quad N = 15; \quad \text{first order autocorrelation} \quad -0.601. \]
with the third model's independent variables identified three statistically significant governmental expenditure areas. It was found that the areas of economic expenditures \( (T = 4.41; p < .003) \), social service expenditures \( (T = 5.297; p < .001) \), and cultural and information expenditures \( (T = -3.567; p < .009) \) are all significantly related to the Jordanian GNP within the third model.

The results provided by the Durbin-Watson test for this model, as shown in Table XVII above, indicated that the calculated \( D \) was 3.190. As stated in the discussion of the first two models, with the sample size equal to 15 and \( K \) (the number of independent variables and the intercept) equal to 6, the upper limit is 2.220 and the lower limit is 0.562. As there is a negative first order autocorrelation (-0.601), in order to reject the null hypothesis (i.e., there is no autocorrelation), \( D \) must be greater than \( 4 - d_{UL} \) \((4 - .562 = 3.438)\). The results of this statistical test show that \( D \) (3.190) was less than \( 4 - d_{UL} \) (3.438), and the null hypothesis, therefore, was not rejected. Since \( D \) was larger than \( 4 - d_{UL} \) and smaller than \( 4 - d_{LU} \) (i.e., \( 4 - d_{UL} (1.78) < D (3.190) < 4 - d_{UL} (3.438) \)), the results were inconclusive. As in the case of the first two empirical models, the results indicate that the null hypothesis was not rejected and, consequently, autocorrelation was still present. Based on the three
models presented above, it is contended that the second order lag model (i.e., Model Three) is the best predictor of GNP.

In examining each of the zero-order correlation coefficients found in Appendix B, it becomes evident that there may be problems associated with multicollinearity in the data (i.e., the independent variables are highly correlated with each other). One of the strategies employed to address this problem is to combine all of the independent variables into one variable. This procedure was performed (with the exception of including year in the compute statement), and a fourth model was constructed. The following diagram, which includes an index of all governmental expenditure areas as an independent variable, represents the fourth empirical model of this study.

\[ \text{Model Four} \]

\[ C_6 = C_1 + \text{XTOTAL}, \]

where

\[ \text{XTOTAL} = C_2 + C_3 + C_4 + C_5. \]

The bivariate results of this fourth equation, based on the zero-order matrix found in Appendix B, indicate that the zero-order correlation (r) between XTOTAL and C6 was 0.95. Based on Table XVIII presented below, which displays the multivariate results of Model Four, the multiple regression results indicate that 91.8 per cent of the
<table>
<thead>
<tr>
<th>Variable</th>
<th>Parameter Estimate</th>
<th>Standard Error</th>
<th>T-Computed</th>
<th>Significant Level of T</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>-136550085</td>
<td>10736568</td>
<td>-1.272</td>
<td>0.2275</td>
</tr>
<tr>
<td>Year</td>
<td>69274.55892</td>
<td>54480.66144</td>
<td>1.272</td>
<td>0.2276</td>
</tr>
<tr>
<td>Total government expenditures (XTOTAL)</td>
<td>2.53456285</td>
<td>2.28902054</td>
<td>1.107</td>
<td>0.2899</td>
</tr>
</tbody>
</table>

$R^2 = 0.9187; F = 67.795; p < 0.001; DW = 0.679; N = 15; first order autocorrelation 0.562.$
variation in GNP was accounted for by the inclusion of XTOTAL and C1 (i.e., year) in the equation. In examining the F value ($F = 67.795; \ p < .000$), it was concluded that the linear relationship between the independent variables and the GNP in this equation was not zero in the population. The next analysis involved the T test results within the multiple regression equation. Examination of the T's associated with the fourth model's independent variables did not identify the significance of XTOTAL in the model ($T = 1.107; \ p < .289$).

The results provided by the Durbin-Watson test for the fourth model, as shown in Table XVIII above, indicated that the calculated D was 0.679 and the first order autocorrelation was 0.562. At the 5 per cent significance level, with the sample size equal to 15 and K (the number of independent variables and the intercept) equal to 3, the upper limit is 1.543 and the lower limit is 0.946. In order to reject the null hypothesis (i.e., there is no autocorrelation), D must be smaller than $d_1$. As the results of this statistical test show that D (0.679) was smaller than $d_1$ (0.946), the null hypothesis was rejected. This suggests that the error process was not autocorrelated (i.e., the estimated residuals are not mutually interdependent).

In an attempt to obtain an empirical model which identifies a statistically significant predictor of GNP,
a lag transformation was necessary. A fifth equation was constructed, representing the first lag transformation of XTOTAL within the study. This model is diagrammed as follows.

Model Five

\[ C_6 = C_1 + X_{17}, \]

where

\[ X_{17} = \text{Lag 1 (XTOTAL)}. \]

The bivariate results of this fifth equation, based on the zero-order matrix found in Appendix B, indicate that Pearson's r was 0.97. Based on Table XIX presented below, which displays the multivariate results of Model Five, the multiple regression results indicate that 95.4 per cent of the variation in GNP was accounted for by the inclusion of \( X_{17} \) and \( C_1 \) in the equation. In examining the F value (\( F = 113.918; p < .000 \)), it was concluded that the linear relationship between the two independent variables and the GNP in this equation was not zero in the population.

The next analysis involved the T test results within the multiple regression equation. An examination of the T's associated with Model Five identified the combined measure of governmental expenditures (i.e., \( X_{17} \), the transformation of XTOTAL to the first lag) as statistically significant (\( T = 2.531; p < .02 \)).

The results provided by the Durbin-Watson test for the fifth model, as shown in Table XIX below, indicate
<table>
<thead>
<tr>
<th>Variable</th>
<th>Parameter Estimate</th>
<th>Standard Error</th>
<th>T-Computed</th>
<th>Significant Level of T</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>-59855105.59</td>
<td>85826664.40</td>
<td>-0.697</td>
<td>0.5000</td>
</tr>
<tr>
<td>Year</td>
<td>30366.58885</td>
<td>43526.62988</td>
<td>0.698</td>
<td>0.4999</td>
</tr>
<tr>
<td>Total government expenditures</td>
<td>4.50965964</td>
<td>1.78170345</td>
<td>2.531</td>
<td>0.0279</td>
</tr>
</tbody>
</table>

R² = 0.9539; F = 113.918; p < .001; DW = 1.048; N = 15; first order autocorrelation 0.355.
that the calculated $D$ was 1.041 with a first order autocorrelation of 0.355. As discussed in the fourth model, to reject the null hypothesis (i.e., there is no autocorrelation), $D$ must be smaller than $d_1$. As the results of this statistical test show that $D$ (1.048) was greater than $d_1$ (0.946), the null hypothesis was not rejected. Since $D$ was larger than $d_1$ and smaller than $d_u$ (i.e., $d_1$ (0.946) < $D$ (1.048) < $d_u$ (1.543)), the results were inconclusive. This suggests that the error process was autocorrelated at the 35.5 per cent significance level as the first order autocorrelation was 0.195.

As the process of autocorrelation may have influenced the reported significance of $X_{17}$ (i.e., autocorrelation effects estimated variances which are used to generate the $t$-ratio), a sixth and final model was constructed. This model, based on the transformation of $XTOTAL$ to the second lag, is diagrammed as follows.

**Model Six**

$$C_6 = C_1 + X_{27},$$

where

$$X_{27} = \text{Lag 2 (XTOTAL)}.$$

The bivariate results of this sixth equation, based on the zero-order matrix found in Appendix B, indicate that Pearson's $r$ was 0.988. Based on Table XX presented below, which displays the multivariate results of the sixth
<table>
<thead>
<tr>
<th>Variable</th>
<th>Parameter Estimate</th>
<th>Standard Error</th>
<th>T-Computed</th>
<th>Significant Level of T</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>-40031449.04</td>
<td>66615962.36</td>
<td>-0.601</td>
<td>0.5613</td>
</tr>
<tr>
<td>Year</td>
<td>20340.74347</td>
<td>33765.20249</td>
<td>0.602</td>
<td>0.5603</td>
</tr>
<tr>
<td>Total government expenditures (XTOTAL)</td>
<td>5.17618890</td>
<td>1.33539382</td>
<td>3.876</td>
<td>0.0031</td>
</tr>
</tbody>
</table>

$R^2 = 0.9765$; $F = 208.015$; $p < .0001$; $DW = 2.635$; $N = 15$; first order autocorrelation $-0.321$. 
model, the multiple regression results indicate that 97.6 per cent of the variation in GNP was accounted for by \( X_{27} \) (\( X_{\text{TOTAL}} \) transformed to the second lag) and \( C_1 \) (year) in the equation. In examining the \( F \) value \( (F = 208.015, p < .000) \), it was concluded that the linear relationship between the independent variables and the GNP in this equation was not zero in the population. The next analysis involved the T test results within the multiple regression equation. Examination of the T's associated with the sixth model's independent variables identified the combined governmental area \( X_{27} \) as a statistically significant predictor of GNP in the model \( (T = 3.876; p < .003) \).

The results provided by the Durbin-Watson test for the sixth model, as shown in Table XX above, indicate that the calculated \( D \) was 2.635. As stated for Models Four and Five, at the 5 per cent significance level, with the sample size equal to 15 and \( K \) (the number of independent variables and the intercept) equal to 3, the upper limit is 1.543 and the lower limit is 0.946. As there is a negative first order autocorrelation (-0.321), in order to reject the null hypothesis (i.e., there is no autocorrelation), \( D \) must be greater than \( 4 - d_1 \) \( (4 - 0.946 = 3.054) \). The results of this statistical test show that \( D \) (2.635) was less than \( 4 - d_1 \) (3.054), and the null hypothesis, therefore, was not rejected. Since \( D \) was larger than 4 - \( d_1 \)
and smaller than $4 - d_1$ (i.e., $4 - d_u (2.457) < D (2.635) < 4 - d_1 (3.054)$), the results were inconclusive. This signifies that the error process was autocorrelated at the 32.1 per cent significance level, as the first order autocorrelation was -0.321. Based on Models Four through Six presented in this chapter, it is contended that Model Six is the best predictor of GNP.

The purpose of this chapter is to determine whether a government can promote economic development (as measured by an increase in the gross national product) by quantitatively analyzing the following questions.

1. What are the impact and significance of governmental expenditures, as a combined measure, on the gross national product in Jordan?

2. Which governmental expenditure areas provide the greatest contribution to an increase in the Jordanian GNP?

In the final section of this chapter, each of these issues is addressed, based on the statistical analyses presented above.

Assessing the Impact of Governmental Expenditures on the GNP of Jordan

In order to address the first issue, a combined measure of governmental expenditure areas was constructed. This measure was based on the four areas of economic expenditures, social expenditures, cultural expenditures,
and communication and transportation expenditures. Based on the three equations which focus on this issue (i.e., Models Four through Six), the sixth model was found to be the best predictor of GNP. Results of this investigation indicate that, when the combined measure of governmental expenditures (XTOTAL) was transformed into a second lag independent variable (X27), the coefficient of multiple determination increased by 5.8 per cent (i.e., .9765 - .9187 = 0.578). This data transformation procedure also increased the statistical significance of governmental expenditures from the first lag model (i.e., Model Five--T = 2.531; p < .028) to the second lag model (i.e., Model Six--T = 3.87; p < .003). Results also demonstrate a similar pattern when examining the F values for Models Four through Six (i.e., F = 67.8, p < .000; F = 113.92; p < .000; and F = 208.0, p < .000, respectively).

An attempt was made to identify the effects of autocorrelation within each of the models through the use of the Durbin-Watson test. Results indicated that the error process in Model Four was not autocorrelated. Therefore, the estimated residuals within this equation were not mutually interdependent. The error processes in Models Five and Six, however, were found to be autocorrelated at the 35.5 and 32.1 per cent significance levels, respectively.
Although it is suggested that these findings be interpreted with caution (as the data collected from several time periods were found to be autocorrelated), results of this study indicate that, as the combined measure of governmental expenditures (i.e., both $X_{17}$ and $X_{27}$) increases, the Jordanian GNP increases.

**Governmental Expenditure Areas Making the Greatest Contribution to the Jordanian GNP**

Three statistical models were developed and analyzed in order to address this second issue. Of the first three models presented in this chapter, the third was identified as the best predictor of GNP growth. Results of this study indicate that, when the four governmental expenditure areas in the first model were transformed into second lag independent variables in the third model, the coefficient of multiple determination increased by 2.28 per cent (i.e., \( .9944 - .9716 = .0228 \)). This data transformation procedure also increased both the number of statistically significant variables (i.e., from one to three) and the F values from the first to the third model. Results of this investigation indicate that three governmental expenditure areas are statistically significant predictors of growth in Jordan's GNP. The three areas contributing significantly to the GNP are economic expenditures ($T = 4.411; p < .003$), social services expenditures ($T = 5.297; p < .001$), and
cultural and information expenditures \( (T = -3.567; \ p < .009) \). These results can be interpreted to suggest that, as both economic and social service expenditures increase, the Jordanian GNP increases. Conversely, cultural and information services and GNP were found to be inversely related. That is, growth in Jordan's GNP is associated with a decline in cultural and information expenditures.

An attempt was also made to identify the effects of autocorrelation within each of the first three models through the use of the Durbin-Watson test. Results indicated that the error processes in all three models were found to be autocorrelated. Consequently, it is suggested that the above stated findings be interpreted with caution. The implications of the preceding examination are discussed in the following chapter.
CHAPTER BIBLIOGRAPHY


CHAPTER VII

SUMMARY AND CONCLUSION

The conception for this study grew from a reading of Caiden and Wildavsky's work *Planning and Budgeting in Poor Countries* (1). These scholars' generalizations about planning and budgeting in developing countries raised a question in the mind of the researcher concerning whether the generalizations were applicable to the kingdom of Jordan. To study this issue, the researcher decided that, rather than trying to replicate Caiden and Wildavsky's methods, he would examine the outcome of planning and budgeting processes in Jordan to ascertain whether the conditions described by Caiden and Wildavsky were evident there. This method was chosen primarily for two reasons. First, it was impossible for the researcher to conduct interviews in the country under study, as Caiden and Wildavsky had done, because of the travel expense involved. Second, since data on national plans, budgets, and actual revenues and expenditures were available, it was possible to study the outcomes of the planning and budgeting processes over a number of years. Another reason for utilizing outcome data in this investigation was that the researcher hoped to assess the impact of governmental expenditures on development and the
Jordanian gross national product, and the use of outcome data seemed more suitable for this purpose than the survey methods employed by Caiden and Wildavsky (1).

To verify the findings obtained from comparing the outcome data from plans and budgets, the researcher also decided to conduct telephone interviews with key Jordanian officials who participate in the planning and budgeting processes. First, letters describing the dissertation and the generalizations formulated by Caiden and Wildavsky (1) were sent to the officials to inform them about the subject of the telephone interviews. Five calls were made in October, 1986. The results of these interviews are discussed later in this chapter.

Jordan, like other developing countries, only recently established planning and budgeting institutions. The demand for modernization in the early 1960s made the creation of these administrative institutions essential. The evolution of separate planning and budgeting agencies staffed by personnel with different orientations and representing different interests fits the model suggested by Caiden and Wildavsky (1). Such an arrangement was almost inevitably destined to cause conflict and struggles for power between planners and budgeters.

The planning agency in Jordan since the early 1960s has been a very powerful institution, as is evidenced by
its powers over the capital budgeting process, foreign
grant activities, and the implementation of projects
under the national plan as well as by its link with the
prime minister, who was the official head of the planning
agency throughout most of the period under consideration.
Furthermore, the involvement of the king's brother in
planning and development activities also reflects the
status and influence of the planning agency.

In light of the power of the Jordanian planning agency,
Ministers of Finance and their budget officers have had
relatively little power over capital budgets, and those
budgets have an obvious impact on current or recurring
budgets. The evolution of the Finance Minister's power
over other ministries and departments, however, has grown
steadily. For instance, until 1981, the Jordan Valley
Authority (JVA), which is responsible for planning and
developing the water resources in the Jordan valley, had
full freedom to transfer funds in its budget from one
item to another, and, unlike other institutional budgets
in Jordan, the JVA's budget was not itemized--funds were
allocated to the JVA, which it could then spend largely as
it saw fit. Since 1981, however, the Ministry of Finance
and its Budget Bureau had begun to require the JVA to
appropriate capital expenditures by project. This obliges
the JVA to itemize its budget and places it under greater
fiscal constraint. As a result of these changes, relations between the JVA and the Budget Bureau have been fraught with conflict and competition over control of the former's budget (3, pp. 192-193).

The data related to amounts called for in national plans and budgets compared with actual revenues and expenditures during the same period clearly demonstrate the uncertainty of the Jordanian environment. Revenues fluctuate widely from year to year. Since a large percentage of Jordan's revenues comes from foreign sources, those revenues are dependent upon external events. For example, after the clash between the Jordanian army and the Palestinian Liberation Organization in 1970-1971, many rich Arab countries reduced their financial assistance to Jordan. Because of such fluctuations in revenues, budgets have had to be made and remade frequently in order to keep revenues and expenditures in balance. The preparation of recurring budgets, similar to the situation described by Caiden and Wildavsky (1), seems to be a normal process in Jordan.

Due to revenue fluctuations, expenditures often exceed revenues, and, consequently, deficit financing and increasing debt result. The data also clearly show that the amounts estimated in plans and budgets are not what the government actually expends. Plans and budgets are often modified, and at times national plans have been discarded
or remade in their entirety to better reflect the revenue position of the government.

On the basis of these findings, the researcher concludes that the following generalizations presented by Caiden and Wildavsky (1) about planning and budgeting in poor countries are true in Jordan.

1. Since revenues are unpredictable and may fluctuate greatly, estimates of revenues are kept low and estimates of expenditures high by ministers of finance (1).

Data from national plans, budgets, and actual revenues and expenditures clearly reflect the unpredictability of the Jordanian environment and how widely the kingdom's revenues fluctuate. In this unstable environment, Finance Ministers are forced to use strategies in estimating revenues and expenditures similar to those described by Caiden and Wildavsky (1). This pattern of budgeting was also reported in Murrar's (2) earlier study of budgeting in Jordan during the 1960s and early 1970s as well as being verified by all parties interviewed by the current researcher. Murrar stated,

... Typically, both the BOB and the MOF will underestimate prospective revenues and overestimate requirements for recurrent government expenditures to minimize the resources available for capital expenditures. The BOB resorts to this practice of manipulating its figures either to silence the protesting agencies at the time, for authorization purposes (in parliamentary discussion), or for external purposes of meeting the requirements of financial agencies and international funds (2, p. 616).
2. The budget is made and then remade during the fiscal year because of the fluctuations and uncertainties of revenues (1).

As a result of the kingdom's dependency on foreign countries and the uncertainties of rain-fed agriculture in Jordan, accurate forecasting of revenues is virtually impossible, and the data clearly demonstrate that Finance Ministers often must freeze expenditures, especially in the capital budget, and remake the budget to reflect actual revenues.

3. Supplementary budgeting is common because of the inability to accurately forecast costs of essential services (1).

The patterns of expenditures in Jordan show that frequently more money is spent for some programs than is budgeted. This occurs because cost forecasts are inaccurate for a number of reasons, such as lack of statistical data, inflation, and the impact of change in international markets. Supplemental budgeting is used to provide the funds in excess of the original budget.

4. Payments for services and goods are frequently delayed because of cash flow problems (1).

Since Jordan is dependent on funds from oil-rich Arab countries, any delay in payment from these countries forces the kingdom to withhold payments until funds are available.
For example, in 1971, Kuwait, Iraq, and Libya froze all financial assistance to Jordan because of the clash between the Jordanian army and the Palestinian Liberation Organization. A number of other such instances have already been discussed in previous chapters. Furthermore, during periods of crisis and war, which have been very frequent during Jordan's history, funds are frozen to meet the emergency needs of the country. All of these conditions cause long delays in payments for services and goods.

In addition, Jordan has a centralized governmental system, and its accounting and auditing procedures, as was seen in Chapter IV, hinder the flow of the financial and managerial processes. Delays in payments affect the closing of departmental accounts and, in turn, keep the finance and accounting department from assembling the financial data essential for rational budget-making and distributing them to other agencies. As a result, the making of the annual budget is frequently delayed beyond the time provided in the budget calendar.

5. Debts are huge and floating (1).

Deficit financing has been used extensively in Jordan to pay for development, and the national debt has continued to grow. Although all of the kingdom's national plans have called for an increase in domestic revenues in order to reduce the deficit, none of them has been successful in
achieving this goal. The constantly recurring necessity of spending large sums of national defense and of absorbing expenses caused by the influx of waves of refugees is one of the major reasons why Jordan has not been able to reduce its deficits or its dependency on other countries.

6. Investments are often postponed because of insufficient funds (1).

This generalization is true in Jordan although the kingdom has had periods of both feast and famine in revenues during its history. In earlier years, lack of sufficient funds forced Jordan to completely abandon some of its development plans. During the "feast" years from the mid-1970s until the early 1980s, Jordan received a great deal of assistance from the oil-rich Arab countries, but, even in these years, there was seldom enough money to finance all of the projects that had been planned because of inflation and underestimation of costs. As a result, projects frequently had to be postponed or abandoned altogether because of insufficient funds. A recent example of such an event was reported in a Jordanian newspaper article in April, 1986, describing the abandonment of an incomplete $9 million shopping center in the suburbs of Amman because the project was underbudgeted and no supplementary funds were available (4, p. 2). Such postponements or abandonments are frequent in Jordan.
7. Criteria for approving the budget are mainly political in nature rather than technical, and political maneuvering is widely evident among departments regarding budgets (1).

The fact that the Jordanian budget is divided into capital and current categories made and controlled by two agencies, the planning agency and the Minister of Finance, permits different interests to politic for their preferences in governmental actions and also allows departments to develop clientele-supported groups to assist them in the politics of budgeting. Furthermore, the fact that the planning agency may conflict with individual departments in the implementation of their projects further complicates the problems of budgeting and administrative control. In his study Murrar states,

Because of these shortcomings in estimates, reviews, budget hearings, etc., the budget is prepared in an atmosphere of "guestimate" in the sense that the final appropriations are not based on sound rational bases. Lack of data and information on projects and programs, justification for new positions, etc., adds to the shabby way in which the budget is finally submitted to the Council of Ministers. . . . Added to this is the influence of political factors on both resources and allocation procedures. . . . Consequently, the whole authorization process does not represent a guide to governmental policies and goals; it is an example of a fairly well-disciplined political machine under full power. . . . (2, pp. 620-622).

8. Departments are less careful in preparing estimates of needs because of the frequent changes in the budget
and because of the dominance of politics in the budgeting process (1).

Outcome data concerning the planning and budgeting processes do not directly indicate whether this generalization is true in Jordan. The data do show, however, that budgets are frequently remade during the fiscal year because of the uncertainties of revenue and that supplemental budgeting is frequently used to complete projects because of inaccurate forecasting of costs and changes in costs due to inflation and other external events. It can be inferred from these conditions that departments in Jordan are affected as Caiden and Wildavsky (1) found in other developing countries. Murrar's (2) earlier study of budgeting in Jordan reported similar departmental conduct, and the results of the telephone interviews conducted for the current investigation indicate that this situation still prevails in Jordan.

9. Human resources are scarce, and the lack of management talent greatly affects the budgetary process (1).

The analysis of national plans presented here shows that Jordan has had a difficult time implementing the projects and programs called for in its development plans. One reason for these difficulties and the failures in implementing some programs has been lack of administrative and managerial talent. This lack of managerial talent is evidenced by the fact that the Jordanian government has
been forced to modify its strategy for implementing plans under each of its five-year plans. Since the early 1970s, increasing employment opportunities in the neighboring oil-rich countries has led many of those Jordanians with managerial and technical skills to take jobs abroad, resulting in manpower shortages in the kingdom. The shortage of key personnel has also forced salaries of governmental employees up, which, in turn, has had a serious impact on the budgeting process.

10. Each governmental department and division attempts to obtain earmarked funds and to keep any surpluses for itself (1).

Outcome data concerning the planning and budgeting processes in Jordan do not indicate whether this generalization is true. Evidence was found that agencies sought funds from contracts with the planning agency to carry out programs budgeted in the capital budget. There is also evidence that the DOB allocates funds on a quarterly basis so that the Minister of Finance can control the expenditures of various departments and that agencies attempt to make use of the allocation procedures to serve their own purposes (2, p. 624). Murrar's earlier study reported directly on this point as follows.

Not all revenues of the public sector are included in the budget document. This lack of comprehensiveness of the budget as to the inclusion of all revenues is manifest in the present system of "closed
departments" which keep some of their revenues for their own use without incorporating them in the budget receipts. . . . Since some of the resources of these ministries are not included in the budget receipts, it becomes evident that some of their expenditures remain correspondingly outside the budget control as well (2, p. 598).

In the telephone interviews conducted for this study, key planning and budgeting officials agreed that this generalization is true in Jordan.

As previously stated, the researcher conducted telephone interviews with five key planning and budgeting officials in Jordan: a) a former prime minister who had earlier served as the Minister of Finance and who at present serves as president of the House of Notables (Senate), the upper chamber of the Jordanian National Assembly; b) a member of the Ministry of Finance; c) a member of the Ministry of Planning; d) a member of the Jordanian Institute of Public Administration (IPA); and e) a member of the Central Bank of Jordan. The interview with the IPA official was included in order to obtain an opinion from an operating agency. It was also believed that a member of this organization should have greater understanding of the planning and budgeting process since it offers training for many public agencies in Jordan.

Letters were mailed approximately three weeks before the telephone calls were made in order to inform the officials of the subject of the interviews. Copies of the
letter and of Caiden and Wildavsky's (1) generalizations, which were also included, are shown in Appendix A.

During the telephone interviews, the researcher asked each of the officials to respond to the generalizations formulated by Caiden and Wildavsky (1). All five of the officials basically agreed that competition for scarce resources exists in Jordan and that this competition creates tensions between agencies. Even though many of the interviewees were hesitant to respond directly to some of the questions (such as generalization 7, describing political conflict between agencies, and generalization 10, describing how some departments attempt to obtain earmarked funds and to retain surpluses), when asked as a conclusion whether they generally concurred with the generalizations, all of them agreed that they were applicable to Jordan. Several also pointed out that, as a result of the recent recession, the problems described in Caiden and Wildavsky's book (1) are very evident, and Jordan faces major difficulties in financing its development programs.

The second purpose of this research was to assess the impact of governmental expenditures on national development. Specifically, an attempt was made to determine whether national expenditures for development during the last fifteen years significantly affected the growth of the kingdom's gross national product. Additionally, an
attempt was made to identify which government expenditure area(s) made the greatest contribution to the GNP.

Several problems arise in making such an assessment. First, there is no agreed-upon theory regarding economic development—in fact, there is no agreement as to the definition of "development" in general. Second, there is no simple objective criterion of development against which to validate measurement devices.

In light of these difficulties, the researcher attempted to assess the statistical significance of governmental expenditures in four specific areas in Jordan between 1970 and 1984. The four expenditure areas studied were transportation and communication, economic development, social services, and culture and informational services. The specific expenditures under each of these areas were discussed in Chapter I. A series of empirical models was utilized to analyze the contributions of each governmental expenditure area to the GNP of Jordan, and a combined measure of governmental expenditures (i.e., a combined measure of transportation and communication, economic development, social services, and culture and informational services expenditures) was developed in order to reveal the impact and significance of governmental expenditures, as a combined measure, on the GNP.

The findings from the statistical tests showed a significantly strong positive relationship between governmental
expenditures and the Jordanian GNP. Results of the statistical tests also indicate that the areas of economic expenditures, social expenditures, and culture and informational expenditures are statistically significant predictors of growth in Jordan's GNP. These results can be interpreted to suggest that, as both economic and social services expenditures increase, the Jordanian GNP increases, while culture and informational service expenditures and the GNP were found to be inversely related—that is, growth in Jordan's GNP is associated with a decline in cultural and information expenditures.

Taken together, these findings indicate that government expenditures have had a significant impact on development in Jordan and that expenditures for social services make the greatest contribution to an increase in the Jordanian GNP. Although the results of this study suggest that Jordan has been able to promote development, it cannot be concluded that all developing countries can by their own efforts promote development. Jordan is in many ways unique as a developing country in that many adversities have tended to work to its advantage. Its position as a front-line country against Israel has brought other Arab countries to its defense. Because Jordan serves as a buffer between many of the oil-rich Arab states, these Arab countries have been able to invest large sums of capital in Jordan's
development. This has enabled the kingdom to adopt a "big project," high capital cost strategy of development that most developing countries would never achieve.

In addition, the floods of refugees that have followed each of the Middle Eastern wars have created huge demands for governmental services and programs. These demands, in turn, have forced the government to expand and modernize in order to meet its challenges. The shortage of jobs and resources forced many Jordanians to seek employment opportunities abroad, which exposed them to other cultures and helped to bring about change. The fact that Jordan has had a relatively stable government throughout its history has given its political elites an opportunity to pursue development and modernization during periods of peace in the region. Even its lack of oil reserves has worked to Jordan's advantage. Jordanians have not enjoyed the promise of great wealth from these resources and, as a result, have had to work harder to ensure a better future. Jordanians extol education because it can lead to better employment opportunities and a more prosperous future. Jordan is unique in that it has never suffered many of the problems of other developing countries, such as insufficient food, starvation, military coups, and lack of capital for self-development. The uncertain and unstable environment in the country has been manipulated by its political elites to
its advantage. The test Jordan now faces, in the current period of declining oil prices, is whether it has the ability to continue planning for development and modernization. This is especially difficult in an era when the kingdom cannot count on receiving as much assistance from its Arab neighbors as it has in the past.
CHAPTER BIBLIOGRAPHY


APPENDIX A

LETTER AND GENERALIZATIONS BY CAIDEN AND WILDAVSKY
SENT TO PLANNING AND BUDGETING OFFICIALS
IN JORDAN
September 4, 1986

Dear Sir:

I am a Jordanian student completing a Ph.D. dissertation at North Texas State University on the subject, "Planning and Budgeting in Jordan," and I need your help to verify the findings. Specifically, I have compared Jordanian plans and budgets over the past fifteen years to see if the generalizations made by two other scholars, Caiden and Wildavsky, are applicable to Jordan. Would you please read the following generalization about planning and budgeting in developing countries and advise me if they are true in Jordan. I will call you in the near future in order to expedite my research.

Thank you for your assistance. I should be returning to teach at Mu'teh University as soon as I finish the dissertation, and I shall be happy to send you a copy of the dissertation. Thank you again.

Sincerely,

Sulieman Al-Lawzi
NTSU, Box 9617
Denton, Texas 76203
U. S. A.
Caiden and Wilavsky, two scholars, made the following generalizations about planning and budgeting in developing countries. Please indicate if they are applicable to Jordan.

1. Since revenues are unpredictable and may fluctuate greatly, estimates of revenues are kept low, and estimates of expenditures high by ministers of finance.  
   (a) true in Jordan  
   (b) not true in Jordan  
   (c) comment

2. The budget is made and then remade during the fiscal year because of the fluctuations, and uncertainty of revenues.  
   (a) true in Jordan  
   (b) not true in Jordan  
   (c) comment

3. Supplemental budgeting is common because of the inability to accurately forecast costs of essential needs.  
   (a) true in Jordan  
   (b) not true in Jordan  
   (c) comment

4. Payments for services and goods are frequently delayed because of cash-flow problems.  
   (a) true in Jordan  
   (b) not true in Jordan  
   (c) comment

5. Debts are huge, and floating.  
   (a) true in Jordan  
   (b) not true in Jordan  
   (c) comment

6. Investments are often postponed because of insufficient funds.  
   (a) true in Jordan  
   (b) not true in Jordan  
   (c) comment

7. Criteria of approving the budget are mainly political in nature rather than technical, and political maneuvering is widely evident among departments regarding budgets.  
   (a) true in Jordan  
   (b) not true in Jordan  
   (c) comment

8. Departments are less careful in preparing the estimates of needs because of the frequent changes in the budget and because of the dominance of politics in budgeting process.  
   (a) true in Jordan  
   (b) not true in Jordan  
   (c) comment

9. Human resources are scarce, and the lack of management talent greatly affects the budgetary process.  
   (a) true in Jordan  
   (b) not true in Jordan  
   (c) comment

10. Each governmental department and division attempts to obtain earmarked funds and to keep any surpluses for themselves.  
    (a) true in Jordan  
    (b) not true in Jordan  
    (c) comment.
APPENDIX B

ZERO-ORDER CORRELATION MATRICES OF STUDY VARIABLES
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