

695



THE HASHEMITE
KINGDOM
of JORDAN

5

**YEAR
PROGRAM**

for **ECONOMIC
DEVELOPMENT**
1962 – 1967

THE JORDAN DEVELOPMENT BOARD

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His Excellency

THE PRIME MINISTER

I have the honor to transmit to Your Excellency the revised edition of the Five-Year Program for Economic Development (1962-1967) of the Hashemite Kingdom of Jordan, which has been constructed by the Planning Division of the Development Board in conjunction with the Ministries, Departments and Authorities of the Jordan Government, and, in consultation with representatives of the private sector. This revised edition has been prepared in the light of extended discussions of the preliminary draft with the said ministries, departments and authorities.

The program is hereby presented to Your Excellency at your specific directive in compliance with Article XI of the Development Board Law of 1957 which entrusts the Board with the responsibility of formulating the economic development policy of Jordan, including the preparation of a comprehensive economic program spelling out specific time stages, relative priorities, estimated costs, anticipated results and sources of financing.

It is my earnest hope that Your Excellency will kindly take whatever steps are deemed necessary for consideration and adoption of the program in the manner that the Government judges most appropriate.

I feel it my duty to emphasize the urgency for Your Excellency to issue a directive to the various organs of the Jordan Government calling upon them to take note of the financial provisions contained in the program in the course of the preparation of their budgetary requests for the financial year 1962-1963, which coincides with the first year of the Five-Year Program.

I should like to report to Your Excellency that the program is the result of laborious and coordinated efforts expended by the Planning Division as well as by numerous individuals in the planning committees of every ministry, department and authority over many months of systematic and sustained work. Their cooperation, good will and devotion to duty were of great assistance to the Development Board in the preparation of this program within the period scheduled by the Government for its finalization. We are grateful to Your Excellency for mobilizing and directing the whole Government machinery towards this end.

I wish to acknowledge with deep appreciation the generous assistance extended to the Development Board and to the ministries which have cooperated in the preparation of this program by the Ford Foundation advisors on the manifold facets of planning. Mr. Hugh Walker, Professors Ben Lewis, L.J. Zimmerman, Clark Ploom, Joel Dirlam, Andrew Watson, P. Sargent Florence, William Snavelly,

Dascomb Forbush, Terence Young and John Hilliard, have in continuing succession over the past two and a half years placed their extensive experience and dedication at the disposal of the Board and in the closest cooperation with our own staff, made possible the preparation of this program.

I also wish to acknowledge our deep debt to the distinguished members of the Royal Fiscal Commission, which included in addition to the Jordanian members, Dr. Philip Taylor, Dr. Walter Heller and Dr. Ward Macy, as advisors from the Ford Foundation. The Commission's intensive and able survey of Jordan's fiscal system in the summer of 1960 has been an invaluable aid in our economic planning effort.

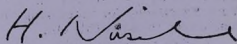
I also wish to acknowledge our gratitude to Mr. R. S. Porter from the British Middle East Office, whose advice and assistance to the Department of Statistics provided us with one of the principal ingredients in our planning effort, namely, The National Income Survey.

The assistance of the many advisors from the United States Operations Mission to Jordan, the United Nations Technical Assistance Board and other friendly governments and agencies has been of great value.

But while acknowledging with deep gratitude these many assistances, I wish to emphasize that the program is the cooperative effort and achievement of all the agencies in the Jordan Government. The high qualities of service displayed by these agencies will stand us in good stead in carrying out this program of economic development with vigor and determination.

May I take this opportunity to express on behalf of all members and employees of the Development Board our abiding faith that this long-range program will be implemented successfully, inspired in that faith by the dedicated, foresighted and bold leadership of His Majesty the King whose motto «Let us build this Country and serve this Nation» has been the driving force behind the nation-building process in its manifold dimensions in which all citizens of this country are actively and loyally engaged.

Please accept, Excellency, assurances of my highest esteem.



Hazem Nuseibeh
Vice President
Jordan Development Board

CONTENTS

THE HASHEMITE KINGDOM OF JORDAN FIVE YEAR PROGRAM FOR ECONOMIC DEVELOPMENT 1962 — 1967

Chapter		Page
I	Introduction	9
II	Sources of Development Funds	23
III	The Program for Agriculture	33
IV	The Program for Fisheries	71
V	The Program for Forestry	79
VI	The Program for Water	97
VII	The Program for Mining	123
VIII	The Program for Industry	137
IX	The Program for Tourism	161
X	The Program for Electricity	181
XI	The Program for Trades and Services	191
XII	The Program for Transportation	197
XIII	The Program for Municipal Development	215
XIV	The Program for Education	223
XV	The Program for Health	247
XVI	The Program for Social Welfare	271
XVII	The Program for Communications	283
XVIII	The Program for Construction	289
XIX	The Program for Financial Institutions	297
XX	Fiscal Program	321
XXI	The Program for Government Administration	331
XXII	The Program for Statistics	339
XXIII	The Financial Summary	353

INTRODUCTION

The Hashemite Kingdom of Jordan has had to grapple with major political, sociological, demographic and economic problems resulting from the events of 1948. To begin with, there was a three-fold increase in population but with a compensating increase of only one third in arable land area.

Furthermore, Jordan was faced with the necessity of completely rerouting its trade and lines of communication. Previously these had been directed westward to the Mediterranean coast where there were modern ports, airports, highways, railroads and telecommunications facilities. After 1948, however, Jordan no longer had access to these and it became necessary to develop new trade routes and lines of communication. The unusual pressures which Jordan faced made it necessary to compress infra-structural developments which in most countries have taken place over a number of generations, into a much shorter period of time. Indeed, in little over a decade new highway, harbor, airport and telecommunications facilities have been constructed, and trade routes have been re-oriented in other directions.

The efforts of the people of Jordan with financial and technical aid extended from a number of sources in the past decade has made possible the construction of a solid foundation for economic development in the future.

Though increases in the amount of outside assistance over present levels will be required for the execution of the five-year program described in this document, the rate of increase in foreign aid called for is markedly less than the rate of increase which has occurred over the past eight years. And looking beyond the 1962-67 period, successful implementation of the five-year program is expected to raise Jordan's economy to a level which will permit reductions to be made in the amount of financial help required from outside sources.

INTRODUCTION

Economic development is of necessity a complex matter. In even a relatively small country like Jordan the number of variables which must be taken into account is large indeed. Basically the question becomes that of what resources — physical as well as financial — can reasonably be expected to be available during the planning period and what are the most efficient uses which can be made of them. Since resources are always limited it is important that efficiency criteria be selected carefully so that the maximum benefits of economic development can be obtained from the resources available.

In the present five-year development program the goal of expanding gross domestic output has been accorded the highest priority, with the goals of reducing unemployment and reducing ultimate dependence upon foreign aid following in that order. Each of the vast number of individual proposals brought forward for consideration during the development of this program has been considered in the light of its costs in terms of the resources required for its implementation and the anticipated contributions which it would make to the attainment of the goals listed above. Those proposals which have not been included were rejected because their estimated cost-benefit ratios were too high, or putting it the other way round, because their benefit-cost ratios were too low. Since the specific proposals recommended in the program are considered to fall within the limits of the resources expected to be available, the only priority ordering included at this final stage of the planning process is an ordering by date of initiation. The appropriate dating of individual projects is of course essential if an effective progression of developmental projects is to be attained.

Before meaningful economic planning could be undertaken in Jordan, it was necessary to accumulate basic data about the existing state of the economy. Thus over the past several years attention has been given to the development of fundamental statistical information. Among the studies made have been those on national income, manpower, the industrial survey, and the agricultural sample study. The formal planning process itself from start to the completion of the present document has extended over many months and involved the participation of a great many governmental officials, businessmen, farmers, technical experts, and others. Briefly the planning process has involved the following steps.

INTRODUCTION

First, representatives of the Jordan Development Board held two major meetings, presided over by the Prime Minister, with top officials of all government ministries, departments, and authorities to discuss the ways in which the various government agencies would cooperate in the development of a five-year program of economic development. The agencies were asked to give careful and systematic consideration to those existing programs which should be expanded and to new programs which should be added in order to speed the pace of economic development. The planning committee in each ministry or authority was asked to coordinate the planning activities being carried on within its agency.

Second, members of the technical staff of the Planning Division of the Jordan Development Board held numerous meetings with officials in the ministries and authorities, with businessmen, and with farmers to discuss various developmental proposals. On the basis of these discussions, of memoranda submitted by governmental agencies, and of independent research conducted by the Planning Division, a number of staff papers dealing with developmental projects were drafted. These were discussed within the Planning Division and also with appropriate persons in the individual agencies.

Third, on the basis of this background of study and research, draft chapters for the various sections of the five-year program were written by the technical staff of the Planning Division.

Fourth, the individual draft chapters were reviewed paragraph by paragraph in committee meetings of the technical staff of the Planning Division, with the Vice President of the Jordan Development Board serving as chairman. In these discussions projects were included, deleted, or modified on the basis of priority considerations. At this stage of discussion whenever the committee had questions about particular matters, experts from the government agency concerned or from the appropriate area of business or agriculture were asked to meet with the committee and to advise it. On the basis of all of the discussions held, agreement was reached within the Planning Division on the individual projects to be included in the five-year program.

Fifth, individual draft chapters were revised in the light of agreement reached in the Planning Division discussions and the preliminary draft of the five-year program was completed and cir-

INTRODUCTION

culated to the ministries and authorities for comment.

Sixth, the government agencies were given one month in which to review the program and to transmit their reactions in writing to the Jordan Development Board. The planning committees in the agencies were asked to assume the responsibility of coordinating this review. During this period of reexamination members of the Planning Division visited the various government agencies to discuss informally the preliminary draft of the program and the agencies' reactions to it.

Seventh, the written comments of the ministries and authorities were given careful consideration by the technical staff of the Planning Division and individual programs were adjusted whenever this was consistent with the efficiency criteria being followed in the development of the program as a whole.

Eighth, all of the changes made in individual programs were reviewed in committee meetings of the technical staff of the Planning Division, with the Vice President of the Jordan Development Board serving as chairman. In these meetings agreement was reached on the changes to be incorporated in the revised edition of the five-year program.

Ninth, the five-year program for economic development was presented to the government for action.

This outline of the steps which were followed in developing the program has been included to indicate the thought and care which have gone into the preparation of the program. Though, as is true of any comprehensive economic planning document, this program will be subject to modification on the basis of experience during the period of its implementation, those who have participated in its preparation are confident that it will provide an effective guide for economic development during the years which lie immediately ahead, and that its implementation will enable Jordan to move a long way toward the economic independence for which it is striving.

The importance of economic development for Jordan cannot be overemphasized. Though substantial progress has been made in recent years a number of problems still remain. Some of the more pressing problems may be noted briefly.

The productivity of labor in Jordan is relatively low. It is estimated that the average annual output per member of the labor

INTRODUCTION

force is approximately JD 200. A large number of employed workers, particularly in agriculture, have a productivity which is well below the average; and the output of the substantial number of unemployed is almost negligible.

As a corollary of the low average productivity of the labor force, the average annual per capita income which is estimated to be approximately JD 50 is also relatively low. Though this is above the level in a number of less developed countries, it nonetheless is indicative of the inadequate living conditions endured by a substantial portion of Jordan's population.

Jordan continues to have a serious unemployment problem. It is estimated that nearly one-third of the labor force is regularly unemployed. In addition, many laborers are engaged in low-productivity jobs and consequently earn very meagre incomes. The unemployment problem has been greatly intensified by the presence of some half a million refugees from Palestine.

Jordan is heavily dependent upon imports which currently represent approximately one-third of the total value of goods used in the country. Or, putting it differently, imports are equal to about one-half the total value of all goods produced in Jordan. Since receipts from exports and tourism represent less than one-fourth of the value of imports, three-fourths of the country's imports must be covered by assistance from abroad. This heavy dependence upon foreign aid made necessary by the circumstances of the origin of the new Kingdom represents a condition which Jordan is making a determined effort to overcome.

The role of major importance played by imports has resulted in the development of a somewhat unbalanced economic structure. A disproportionately large number of Jordan's workers and businessmen are engaged in « non-basic » activities — trade, service, financial, and governmental — which are related to the handling of foreign goods. The relative importance of such activities will diminish as Jordan's domestic production increases.

Additional problems which have a bearing upon Jordan's economic development are the country's location in regard to foreign markets, the relative scarcity of currently exploited basic raw materials, the small size of the local market, the limited supply of trained manpower, and the relative shortage of capital.

INTRODUCTION

The continuing heavy dependence of the country upon budget support assistance — assistance which has been basic to the maintenance of a stable democratic government and a free-enterprise economy — and the existence of the problems noted above have led to the rather widely held view that Jordan is doomed to perpetual dependence upon large infusions of outside financial support if economic and political chaos are to be avoided.

Actually the outlook is considerably brighter and much more encouraging than has been generally realized. This is not intended to imply that solutions to the problems of economic development in Jordan are simple but to emphasize the fact that these problems certainly should not be dismissed as insoluble. In this connection it should be remembered that even in the absence of any general plan of economic development Jordan's gross domestic product rose from JD 51.3 million in 1954 to JD 81.8 million in 1959, an increase of JD 30.5 million for this six-year period. Significant gains were registered by all sectors of the economy except agriculture which was adversely affected by serious drought conditions during the second half of the period. It should be noted also that gross private fixed capital formation increased by more than four-fold over the six years while the rate of gross public fixed capital formation approximately doubled during the same period.

As further evidence of the economic development which has taken place in the recent past, it should be mentioned that income originating in mining and manufacturing enterprises increased by 80 % from 1954 to 1959, income originating in construction approximately trebled, income originating in transport more than doubled, income originating in wholesale and retail trade increased by some 74 %, the contribution of public administration and defence to gross domestic product increased by 77 %, and the contribution of the services sector approximately doubled. Only in the case of the agriculture and forestry sector was there a significant decline. Here the contribution to gross domestic product declined by approximately 26 % as a result of abnormal drought conditions.

The marked growth in Jordan's economy from 1954 to 1959 was accompanied by an increase in the deficit on goods and services transactions of approximately JD 20.2 million. This deficit was largely financed by foreign grants and loans.

There is every reason to believe that with careful planning,

INTRODUCTION

Jordan's economic development during the coming five years can be even more impressive than that of the recent past; for there are many important investment possibilities waiting to be exploited or to be exploited more fully. As yet Jordan is not taking advantage of the possibilities for extracting chemicals from the Dead Sea. A modern, large-scale plant can produce potash, bromine, and other chemicals for the world market. Phosphate production and sales abroad can be substantially increased. Clays for ceramic products and sand for glass are largely unutilized. There are extensive opportunities for investment in tourist sites and facilities. Favorable possibilities for increased investment in the fishing industry prevail. In agriculture further stages of the Yarmouk project should be undertaken with the eventual target of utilizing fully the whole of the Jordan Valley; and wadi flows and underground water sources remain to be tapped in order to increase land productivity. Also much hill land can be terraced and prepared for fruit cultivation, for forest development, and for pasture. In addition there are undoubtedly many other possibilities for profitable investment which will be revealed by feasibility studies to be conducted as part of the five-year program. And, finally, the intensive geological survey of Jordan which is currently in progress may well reveal commercially profitable sources of important mineral resources.

Though Jordan's economy has developed significantly over the past six years, it has become increasingly apparent to the Jordan Development Board that the attainment of an optimum rate of economic growth must be based upon a comprehensive and well-integrated development plan. To meet the urgent need for such a plan, the Planning Division has worked intensively over the past year to construct a five-year program for economic development. In constructing this program careful consideration has been given to Jordan's needs, local resources, and probable outside financial help in the form of grants, loans, and technical assistance.

It is hoped that implementation of the five-year program will result in a rise in Gross National Product from approximately JD 90 million for 1961 to approximately JD 144 million for 1967. This represents an increase of 60 per cent for the period, or an annual rate of growth of approximately 10 per cent. It is further estimated that this increase in GNP would create at least 60,000 additional jobs which would mean a 21 per cent rise in employment during the five-year period. Productivity per worker is expected

INTRODUCTION

to increase at the same time by approximately five per cent per annum.

The five-year program for economic development also provides for substantial improvement in Jordan's balance of trade position. It is estimated that exports could be JD 21 million above present levels by 1967 while imports may have increased by only JD 8 million. Thus the annual excess of imports over exports could have been reduced by JD 13 million by the year 1967. The program also includes plans for substantial improvements in the areas of education, health, and social welfare.

To attain these important economic and social benefits the program provides for the carrying out of development projects in virtually all sectors of the economy. Major emphasis, however, has been given to those sectors which give promise of providing the greatest contributions to Jordan's economic growth. These sectors are agriculture, including forestry; industry, including the extractive industries; and tourism. Some of the more important individual projects and goals in each of these sectors are described briefly below.

In agriculture which provides employment for more than one-half the employed labor force and in normal crop years accounts for roughly 25 per cent of Gross National Product, proposed projects involving major expenditures include the completion of Stages I and II of the Yarmouk-Jordan Valley Project by the East-Ghor Canal Authority; the development of rural water supplies by the Central Water Authority; a marked expansion in the capital and lending activities of the Agricultural Credit Corporation; a major increase in the number and size of Agricultural Credit and Thrift Cooperatives; the establishment of an Agricultural Marketing Bureau; and an expansion in the activities of the Research Department of the Ministry of Agriculture.

In forestry, which also falls under the broad heading of agriculture, major projects include extensive afforestation in the northern region and also afforestation of 175,000 dunums of Government land as well as extensive afforestation in 500 selected villages throughout the country. The total additional planting will amount to 30 million trees.

Besides the projects listed a number of other important but

INTRODUCTION

less expensive projects in agriculture and forestry are planned. The total cost of the agricultural program exclusive of water resource development for agricultural purposes is estimated to be somewhat over JD 13,000,000 and the total cost of the forestry program is estimated to be roughly JD 1,000,000. The combined total for agriculture and forestry is thus approximately JD 14,000,000; and when projected expenditures for water development in the area of agriculture are included, this total is increased to approximately JD 37,000,000.

The industrial sector, including mining, accounted for 10 per cent of Jordan's gross domestic product in 1960 and for somewhat less than 10 per cent of total employment. Rapid development in these areas along economically sound lines is important both from the standpoint of providing import substitution and from the standpoint of increasing exports, particularly of such products as phosphate and potash chemicals. The program strongly emphasizes the development of private industry and a number of measures to be taken to encourage this development are described in the five-year program. Included in this connection are plans for the institution of both a modern company law and an industrial law; proposals for a number of feasibility studies to determine what additional industries have reasonable promise of being profitable ventures for private enterprise; a proposal for the establishment of a National Standards Institution; and plans for the re-establishment of an Industrial Development Corporation which would provide JD 500,000 of investment funds per annum during the period of the Program and for which an eventual total capitalization of JD 10 million is anticipated.

It is also proposed that the Government take such steps as may be necessary: 1. to enable the Jordan Phosphate Company to raise its production to 1,500,000 tons per annum by 1967; and 2. to bring about the establishment of a full-scale plant for the production of potash and related chemicals by the end of 1964. It is further planned to carry out a program of geological mapping and a crash survey program to ascertain the economic potential of other minerals.

A number of other industrial and mining projects are also included in the five-year program. The total sum required for the development of these sectors of the economy is approximately JD 19.5 million. Over half of this sum, JD 11.1 million, is to be derived

INTRODUCTION

directly from private Jordanian sources, JD 0.7 million is to come from the Government of Jordan through its budget in addition to the sale of government holdings of industrial securities (such sales would constitute an addition to the amount of private participation); and JD 8.9 is to be sought from external sources. From these figures it can be seen that private investment funds are to be relied upon to supply a major part of the industrial financing required during the coming five years. It is confidently to be anticipated that such funds will be forthcoming as new, favorable, investment opportunities are revealed by industry-feasibility studies and as the investment climate is improved through the adoption of both a modern company law and an industrial law. Developments planned in the area of financial institutions will also contribute to the financing of industrial development.

The estimated economic results of the industrial and mining programs include an addition of over JD 12,000,000 to the value of Gross National Product; the creation of 12,750 additional jobs; and an increase in exports or substitutes for current imports of more than JD 9,000,000.

The third major area for development described in the five-year program is tourism. At present spending by tourists in Jordan yields somewhat more than JD 3 million worth of foreign exchange per year. This exceeds the amount of foreign exchange earned by any of the export commodities. Plans for this sector of the economy call for doubling the number of tourists visiting Jordan by 1967 and tripling the income received from this source. To raise tourist spending to JD 9 million by 1967 it will be necessary to increase the average length of stay of tourists and also to increase their average rate of daily spending.

Among the things required to bring about and provide for the planned expansion of tourism are a vigorous advertising and promotional campaign abroad; a major expansion of hotel facilities; the provision of other physical facilities for the comfort and convenience of tourists; and an expansion in the program of restoration and preservation of historical sites, buildings, and monuments. Also required is the development of good international airport facilities which can accommodate the largest jet airliners.

The total amount budgeted in the five-year program for promotional purposes, necessary technical assistance, the development

INTRODUCTION

of plans for additional facilities for the comfort of tourists, attention to historical sites, the development of an international airport, etc. is approximately JD 3.8 million. This does not include an allowance for the cost of hotel construction or the cost of constructing rest houses and other comfort facilities for tourists. Though detailed estimates of these costs are not yet available, it is probable that they will raise the total of tourist and tourist-related developmental expenditures to roughly JD 9.8 million.

Successful implementation of the program for tourism is expected to provide an increase in Jordan's national income of JD 4.5 million per year over the five-year period; to increase employment by some ten to fifteen thousand persons; and to reduce the country's unfavorable balance of payments by JD 5 million per year.

Though agriculture, industry, and tourism are the sectors given major emphasis in the five-year program, it should be recognized that provision is made for important developmental expenditures in virtually all other sectors of the economy as well.

The total amount of development funds required for the implementation of the five-year program is approximately JD 127 million. Of this sum, JD 21 million is to be provided from increased internal revenue receipts of government, including municipal governmental units, JD 47 million from the private sector, and JD 59 million from foreign loans, grants, and technical assistance.

Though successful implementation of the five-year program for economic development will by no means solve all of Jordan's economic problems, it will, nonetheless, provide major improvement in the general condition of the country's economy. Furthermore, perhaps one of the most important discoveries made in the course of the intensive study that went into the preparation of the five-year program is the knowledge that the opportunities for economic development in Jordan are far more extensive than had been generally realized. Indeed it is to be hoped that continuation of the economic momentum to be developed under the five-year program in the longer-run will lead to a closing of the balance of payments gap and to the elimination of the country's dependence upon foreign assistance.

In reply to the natural question of why the program calls for the particular developmental projects which are included, it may

INTRODUCTION

be stated again that the choice reflects a careful assignment of priorities and the need to maintain economic balance. Not all of the projects suggested by the ministries could be included within the maximum physical, administrative, and financial resources which could reasonably be assumed to be available during the coming five years. In addition, priority considerations made it necessary to reduce the magnitude of some of the projects recommended by the ministries.

It is inevitable that the implementation of a program of economic development of the magnitude of the one described in this document will place severe strains upon the administrative and technical personnel of governmental agencies and of various sectors of the private economy. This has been taken into account in the development of the program. Where particular projects have seemed to be beyond the present capacity of local personnel, the temporary use of foreign technical experts has been recommended. In all cases it is intended that such experts would, as part of their regular duties, train Jordanian counterparts who would take over full responsibility as soon as they achieve the necessary degree of technical skill. In addition, the program for advanced training in various fields which is already underway will be continued and accelerated to insure an adequate supply of Jordanian experts to take over these responsibilities.

This development program has been based upon the assumption that the level of budget-support assistance extended to Jordan from outside sources will remain at the 1961-62 level throughout the five-year period from April 1, 1962 through April 1, 1967. This will be necessary to insure the success of the program, for the Jordan Government is called upon to make heavy developmental expenditures during this period. Even maintaining the present level of budget-support assistance will impose an increasing burden upon the government, for the government's regular operating expenses will undoubtedly rise somewhat during the coming five years. And superimposed upon such increases will be the substantial amount of developmental expenditures to be financed by the government.

Increasing efforts toward self-help are being made by the government. This is evidenced by the continued implementation of additional proposals contained in the Report of the Royal Fiscal Commission. To impose an increasing burden of taxation upon a

INTRODUCTION

public having at the start a relatively low per capita level of income, however, will only be tolerable in the long run if it is evident that a sufficiently strong trend of economic development is underway to provide reasonable hope for individual economic betterment in the near future. The full financial support of the various foreign governments and agencies which are called upon to participate in the financing of the five-year program, is strongly urged so that the economic development which Jordan is sacrificing to achieve may in fact be attained. With this support and with the conscientious participation of Jordan's businessmen, financiers, farmers, non-farm workers, taxpayers, and governmental personnel, major economic progress can be achieved.

Finally, it should be emphasized that though economic progress is desirable for its own sake, the corollary of such progress must be social equanimity within a framework of freedom. Jordan has represented a stable element in an age of political turbulence and social turmoil which has engulfed many parts of the world. Continuation of this country's stability and orderly progress will depend, to a large extent, upon the success of its economic development effort and the extent to which the fruits of this development are equitably distributed amongst various segments of the population.

We are firmly convinced that this can be achieved and that Jordan has a unique opportunity to demonstrate how a determined and conscientious people are able and willing to shoulder the grave challenges of our time without foregoing their cherished values or their faith in a free but responsible society.

With determination and good will at home and full support from abroad, Jordan will continue to develop as a democratic society in dignity, freedom and justice for all its citizens.

CHAPTER II

SOURCES
OF
DEVELOPMENT FUNDS

Capital for the economic development of Jordan can be made available on a continuing annual basis from:

- 1) Private savings of Jordanian individuals.
- 2) Retained earnings and depreciation allowances of Jordanian corporations.
- 3) The budget of the Government of Jordan.
- 4) The budgets of Jordan's municipalities.
- 5) Private individuals and corporations in foreign countries.
- 6) Loans and grants from foreign governments.
- 7) Loans and grants from international agencies.

Estimates of funds actually made available from each of these sources in recent years follow.

CHAPTER II

Estimates for the past three years of the private savings of Jordanian individuals, and the uses which they made of these savings are given in Table 2.1

USES OF PRIVATE SAVINGS OF INDIVIDUALS 1958-1960 (millions of JD.) TABLE 2.1

SOURCES :	1958 1959 1960			USES :	1958 1959 1960		
	Personal Income	72.6	85.4		91.4	New Private Construction Invest. in Uninc. Enterprises	2.9
Less :				Net Purchases of Domestic Securities	.6	.4	.4
Pers. Taxes and Transfers	4.0	4.2	4.4	Net Increase in Bank Dep. Holdings	1.6	1.7	.5
Personal Consumption	65.5	77.1	82.5	Investment 'Abroad plus Statistical Discrepancy	.2	1.0	1.7
Personal Savings	<u>3.1</u>	<u>4.1</u>	<u>4.5</u>	Uses of Pers. Savings	<u>3.1</u>	<u>4.1</u>	<u>4.5</u>

The retained earnings and depreciation allowances of non-financial Jordanian Corporations (corporate savings), and uses made of these savings, are estimated for the past three years (in millions of dinars) in Table 2.2.

CORPORATE SAVINGS AND THEIR USES (Millions of JD.) TABLE 2.2

CORPORATE SAVINGS :	1958 1959 1960			USES :	1958 1959 1960		
	Retained earnings	.10	.10		.10	Total Uses	.40
Depreciation allowances	.30	.34	.38				
Total Corporate Savings	<u>.40</u>	<u>.44</u>	<u>.48</u>				

Total private savings available in Jordan is therefore estimated for the past three years (in thousands of dinars) as follows:

	1958	1959	1960
Personal Savings	3.1	4.1	4.5
Corporate Savings	.4	.4	.5
Total Private Savings	<u>3.5</u>	<u>4.5</u>	<u>5.0</u>

SOURCES OF DEVELOPMENT FUNDS

This program assumes that total private savings will grow over the next five years as —

- 1) Personal incomes — and savings — rise together with economic development.
- 2) Expanding investment opportunities — and higher returns on invested funds — stimulate savings and reduce consumption.
- 3) New and expanding corporations both increase retained earnings and find total depreciation allowances rising with growing capital investment.
- 4) The income tax law is changed so that the individual taxpayer cannot claim the tax paid by the corporation as a personal tax credit. This should encourage greater retention of earnings by corporations and thus greater investment in industry.

Development funds are also made available from the budget of the Government of Jordan.

In the broadest sense, all government expenditures (seen as necessary for the administration of the country and the maintenance of stability) can be conceived of as development expenditures.

In a narrower sense, only government expenditures offering direct encouragement or assistance to the private economy, building or maintaining necessary public facilities, or financing specific producing units, should be conceived of as development expenditures.

The narrower view is accepted in drawing this program.

The table on page 26 summarizes budget receipts and expenditures of the Government of Jordan. It shows « ordinary » (or continuing) expenditures in « development » areas at the JD 9 million per year level; « Extraordinary » (or capital) expenditures in similar areas vary between JD 2.5 to 4.5 million per year.

The table on page 26 also indicates Jordan's heavy reliance on foreign grants and loans which must be maintained at high levels if expenditures in development areas are to be significantly increased.

CHAPTER II

Receipts and expenditures budgeted by the Government of Jordan in the two most recent budgets are given in Table 2.3.

**RECEIPTS AND EXPENDITURES BUDGETED BY THE GOVERNMENT OF JORDAN
1961 & 1962 FOR FISCAL YEARS ENDING MARCH 31 (millions of JD)**

SOURCES:	1961		1962		USES:	1961		1962	
Total Domestic Income	11.00	12.52	Ordinary Expenditures in "Non - deve- lopment" Areas		19.13	19.17			
Customs and Excises	4.80	5.07	Jordan Arab Army		16.15	16.00			
Taxes	1.62	1.95	Security Forces		2.25	2.30			
Licenses	.56	.78	Other (1)		.73	.87			
Fees	1.70	2.00	Ordinary Expenditures in "Develop- ment" Areas		8.83	9.23			
Posts, telephones, & teleg.	.60	.70	Municipal Affairs, Ministry of Interior		.01	.01			
State domain revenues	.03	.05	Ministry of Education		2.77	2.85			
Interest and profits	.68	.90	Ministry of Social Welfare		.25	.25			
Miscellaneous Income	1.01	1.07	Ministry of Agriculture		.35	.32			
Foreign Grants & Loans (4)	19.50	16.95	Ministry of Public Works		.75	.75			
Budget support	16.50	16.45	Ministry of National Economy		.02	.02			
Loans for economic projects	.50	.50	Ministry of Communications (P.T.T)		.44	.42			
Relief aid (cost of grain)	2.50	Nil	Ministry of Finance		.24	.24			
Total Receipts	30.50	29.47	Ministry of Health		1.00	1.07			
Budget Deficit	5.19	1.66	Customs Department		.19	.19			
			Land and Surveys Department		.18	.18			
			Hashemite Broadcasting Station		.32	.23			
			Forestry Department		.11	.10			
			Civil Aviation Department		.08	.08			
			Veterinary Department		.06	.05			
			Tourism Authority		.08	.08			
			Statistics Department		.02	.02			
			Antiquities Department		.03	.04			
			Import and Export Department		.01	.01			
			Currency Control Department		.01	.01			
			Irrigation and Water Power Dept.						
			Central Water Authority		.10	.20			
			Jordan Development Board		.13	.11			
			East Ghor Canal Authority		Nil	.30			
			Other (2)		1.68	1.70			

SOURCES OF DEVELOPMENT FUNDS

Extraordinary Expenditures in "Deve- lopment" Areas	4.22	2.73
Roads	.82	.52
Desert Road	.73	.50
Buildings & Equip.- Palaces	.04	.02
" " " - Min. of Social Wel.	.07	Nil
" " " - Civil Aviation	.08	.08
" " " - Irrig. & Water Power	.05	Nil
" " " - Min. of Finance	.02	.02
" " " - Min. of Agriculture	.01	.01
" " " - Min. of Interior	Nil	.06
" " " - Min. of Health	.05	.04
" " " - Min. of Commun.	.73	.64
" " " - Tourism Authority	Nil	.02
" " " - Ministry of Education	.09	.17
" " " - Excise & Customs	.01	.01
" " " - Hashemite Broad- casting Station	Nil	.09
Census Operations Dept. of Statistics	.03	.02
Jordan Dev. Bd. Participation in Tech- nical and Economic Projects	.35	.10
Aqaba Port	.14	.28
Commitments Per Jordanian-German Agreement	Nil	.02
Purchase of Dead Sea Scrolls	Nil	.03
Allosteration Expenses	Nil	.03
Participation in International Dev. Orgs.	.50	.17
Other (3)	.50	Nil
Total Expenditures	35.69	31.13

- (1) Expenditures on Pensions, Ministry of Interior (except Municipal Affairs), and Ministry of Defense.
- (2) All government ministries, departments, and agencies except those specifically listed or indicated in footnote (1).
- (3) Includes (1) Transportation and Distribution of Wheat, (2) Relief to Drought-stricken Villages, and (3) An Unobligated Reserve.
- (4) Excludes grants for U.S. Economic and Technical Projects.

CHAPTER II

Assuming that budget support from foreign countries remains at present levels (of approximately JD 16.5 million per year), government expenditures in development areas can be substantially increased out of

- growing tax and other governmental revenues as production and income grow with economic expansion.
- growing tax and other governmental revenues as methods of administration and collection are improved.
- growing tax and other governmental revenues as rates are increased and exemptions and exclusions are reduced.
- reduced expenditures in non-development areas.
- reduced expenditures via more efficient administration which will allow some reductions in ordinary expenses in development areas.
- rental payments of the pipeline.
- a desirably growing government indebtedness.
- a reduction in idle government bank balances.

This program assumes that substantially all increases in government's domestic income shall be made available to development areas.

Development funds are also made available in small amounts by municipalities and villages in Jordan.

Since funds made available by villages are very small (inasmuch as village contributions to development programs are primarily in the form of labor) and since data regarding them do not exist, no estimate thereof is included herein.

This section therefore relates only to municipalities.

Again, in the broadest sense, all municipal expenditures (seen as necessary for the administration of the municipality and the well-being of its citizens) can be conceived of as development expenditures. However, in this case, only the capital expenditures of the municipalities are taken as evidence of development funds made available by them.

SOURCES OF DEVELOPMENT FUNDS

Development funds made available by municipalities — taken as equal to capital expenditures less funds from the Municipal Loan Fund — are as indicated by Table 2.4.

TABLE 2.4
CAPITAL EXPENDITURE AND SOURCES OF FUNDS OF
JORDANIAN MUNICIPALITIES (1959-61)
(Millions of JD for Fiscal Years Ending March 31)

Sources:	1959	1960	1961	Uses	1959	1960	1961
Loans of Municipality Loan Fund	2	2	3	Expenditure on capital assets (incl. streets and roads, water supply systems, sewage systems, government buildings, etc.).	3	4	5
From municipal funds (incl. taxes collected by the Government of Jordan for the account of municipalities)	1	2	2				
Total	3	4	5				

Municipal funds available for development (capital expenditures) purposes can be substantially increased (as the need for municipal facilities grows).

- out of increased customs and excise revenues (collected for the municipalities by the Government of Jordan). These revenues will rise :
 1. As production and income grow with economic expansion.
 2. As methods of administration and collection improve.
 3. As rates rise.
- out of increased local revenues (1) from the operation of electric utilities, agricultural markets, and water supply systems, and (2) from local taxes and fees (for reasons as above).
- out of borrowing (other than of grant funds through the Municipal Loan Fund). Creditors may well include :
 1. The Jordanian public and banks
 2. Foreign suppliers.
 3. Foreign national and international lending agencies.

Private sources abroad — individual and corporate — make

CHAPTER II

funds directly available for economic development in Jordan by lending money to, or by taking ownership interests in, private businesses operating in Jordan. Amounts — estimated as follows (in million of dinars) — have been small.

	1959	1960
Foreign private investment in Jordan	.1	.3

Private individuals — emigres — of course send much larger sums into Jordan as private donations. Such donations become personal income to those receiving them and a portion of such income is no doubt saved and invested in Jordan.

Capital resources from private persons and corporations abroad can be increased by aggressively encouraging the establishment of branch plants of foreign companies in Jordan and by encouraging investment in Jordan by emigres.

Loans and grants from foreign governments have been spent in Jordan for economic development as follows —

LOANS AND GRANTS FOR FISCAL YEARS ENDING MARCH 31 (in millions of JD.)

	1959	1960
United States (excluding budget support payment)		
Economic Assistance Program	2.9 (1)	2.2 (1)
Technical Cooperation Program	.7 (1)	.7 (1)
Development Loan Fund	*	*
Export-Import Bank	Nil	Nil
P. L. 480	(2)	
United Kingdom (excluding budget support payments (3))	.5	.5
Total	<u>4.1</u>	<u>3.4</u>

* Negligible. By June 30, 1961, total disbursements had reached JD 420,000.

- (1) Fiscal year ending June 30.
- (2) Not included in total. From 1958 to date, JD 3.2 million have been realized for economic projects via the sale of surplus agricultural products in Jordan.
- (3) Also included as « Loans for Economic Projects » in table on page 26.

SOURCES OF DEVELOPMENT FUNDS

International agencies — via the technicians which they furnish as well as the loans and grants which they make — have also contributed capital resources. Actually, in Jordan their assistance has been generous but in the form of technicians. No assessment is here made of the costs thereof.

Capital resources available for economic development in Jordan in 1960 can therefore be summarized as follows (in millions of dinars) :

	1960
Private savings of Jordanians	4.5
Retained earnings and depreciation allowances of corporations	.5
Expenditures of the Government of Jordan in "Development" Areas	13.1
Net expenditures of municipalities on capital items.	.2
Foreign private investment	.3
Loans and grants from foreign governments	3.4 (1)
Loans and grants from international agencies	Nil
Total	<u>22.0</u>

- (1) Excluding counterpart funds generated by the sale of surplus agricultural products in Jordan.

The importance of grants from foreign governments is much greater than indicated directly so far inasmuch as —

- 1) Budget support grants allow development expenditures by the government.
- 2) Budget support grants allow the purchase of goods and services by government from the private sector and thus give rise to a large proportion of private saving and generate both income and investment opportunities.

In this regard —

- 1) Budget support grants make-up almost two-thirds of government revenue.
- 2) Government purchases of goods and services make up more than one-third of the gross value of production in Jordan.

Capital for economic development can also be made available from liquid assets accumulated in past years. Such assets include —

CHAPTER II

- 1) Assets held abroad —
 - a) Sterling balances owned by the Currency Control Board, the commercial banks, and private firms and persons.
 - b) Other assets which can be sold to acquire goods needed for development in Jordan.
- 2) Assets held in Jordan
 - a) Hoards of precious metals (gold and silver) held in the form of coins and jewelry.
 - b) Idle bank and/or currency balances owned by individuals, corporations and by the Waqf and other charitable funds.

Estimates of funds actually potentially available from each of these sources is possible only for sterling balances.

Sterling balances are held in London as follows (in million of dinats) :

	Holdings on 31/12/60
Currency Control Board	16.4
Other Holders	14.5
Total	30.9

There are no available data on other assets held abroad by Jordanians or on locally held hoards of gold and silver. Both, however, are believed to be large.

Idle bank and currency balances seem large but needs therefor are difficult to identify and funds potentially available from these sources consequently difficult to estimate.

CHAPTER III

THE PROGRAM FOR AGRICULTURE

Agriculture is of great importance to Jordan since —

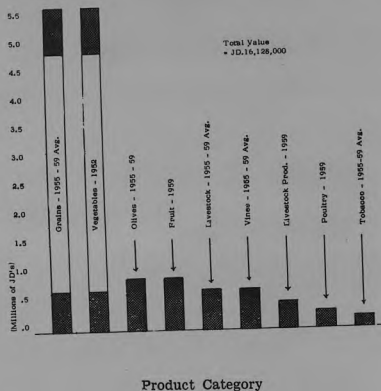
- 1) It offers employment (much only part-time) to almost 300,000 persons, more than one-half the employed labor force.
- 2) Output from agriculture — and income for farmers — can be substantially increased.
- 3) Expanding agricultural output can serve to stimulate marketing and processing activities.
- 4) Agricultural imports exceed exports by more than JD. 11 million per year, an unfavorable balance in agricultural trade which must be reduced.

Furthermore, demand for agricultural products will grow as

- (1) population increases, and
- (2) income rises with economic development. Unless agricultural production in Jordan can be increased, this growth in demand will require a large undesirable growth in imports.

CHAPTER III

Value of agricultural production by source is pictured below --



Just under 90 per cent of this agricultural production is from crops — from grains, vegetables, fruits, and tobacco. Only slightly more than 10 per cent of the gross income of Jordan's farmers is from livestock and livestock products.

THE PROGRAM FOR AGRICULTURE

About three-fourths of the value of Jordan's crops — in an average year — is produced without irrigation on rain-fed lands.

Rain-fed agriculture

- 1) Is uncertain, yields varying widely with rainfall, and
 - credit facilities are difficult to provide in view of the great risks associated with successive poor crops.
 - prices and incomes fluctuate sharply.
 - export markets are difficult to build on widely fluctuating supplies.
- 2) Has been adversely effected in the past half century as
 - deforestation and over-grazing has led to soil erosion and depletion.
 - phloxera has destroyed vines and terraces have fallen into disrepair.
- 3) Insofar as it emphasizes grain production, Jordan produces a product which is generally in excess supply and low in price in world markets. Indeed, Jordan is a high-cost producer of grains even though agricultural earnings are low. This follows from the frequently inadequate rainfall and lack of scientific methods.

In view of the present great importance of rain-fed agriculture with the unsatisfactory characteristics previously indicated, Jordan must :

- 1) Improve storage programs for grains designed to stabilize prices and incomes.
- 2) Halt soil erosion, step-up rebuilding the fertility of the land, and increase production via reforestation and via land terracing for expanded vine, olive, and fruit production.
- 3) Develop range resources — including those in forest areas — and rigorously control animal numbers to avoid over-grazing.
- 4) Explore all possible alternatives to low-value grain production.
- 5) Expand as rapidly as possible the more-stable, higher-valued production from irrigated lands.

CHAPTER III

While in an average year only about one-fourth of the value of Jordan's crops is produced on irrigated land, this share is rising rapidly as :

- wells are dug particularly in the Jordan Valley.
- perennial wadi flows and springs provide water for small schemes.
- the project for stage 1 of Yarmouk — Jordan Valley Project Proceeds.

The growing importance of irrigated output is illustrated by the relatively rapid increases in outputs of those products primarily produced on irrigated land. Examples include increases in output from 1954 to date as follows :

- vegetables : + 200% (both irrigated and rain-fed)
- bananas : + 350%
- citrus : + 1000%

Also desirable is an expansion in output of livestock and livestock products and of poultry by :

- improving the breeds, tethering, and hand-feeding of sheep and goats. This will increase the output of meat and milk without increasing the number of animals and consequent over grazing of pasture land.
- improving the breeds and increasing the number of cattle. This will increase the output of meat and particularly of milk.
- improving the breeds, hatcheries, and care of chickens while at the same time increasing their numbers. This will increase output of both poultry and eggs.

Secondary benefits include :

- the provision of a manure supply.
- the provision of a market for « green stuffs » desirable in rotation in irrigated areas.
- the provision of a market for possible by-products of such potential industries as fish-processing, sugar-refining, or vegetable oil refining using local oil-bearing crops.

THE PROGRAM FOR AGRICULTURE

- the expansion of higher-valued production, the demand for which rises rapidly with income.

But, of course, this expansion awaits assured sources of feed supplies which must be planned for in advance.

In every case, expanding the value of agricultural production provides the major goal.

But, of course, expanding production also means :

- greater volume for transport, trading, and processing in Jordan. That is, it means more off-farm employment and income.
- expanded exports (or reduced imports) and a better balance of trade.

Programs for increasing agricultural output — the highest priority goal — include :

- 1) The discovery or development of new and improved varieties of crops and livestock and of new and improved methods of cultivation and husbandry (including use of machinery, fertilizers, irrigation, methods, etc.)

Given a particular type of agriculture, output can always be increased by research and development work. This work is the responsibility of the Research Department, Ministry of Agriculture, and is well underway in Jordan. However, varietal work is further advanced than methods work. Work with regard to irrigation methods is now becoming particularly important and is not far advanced.

New research and development work is called for by **Specific Proposal No. A1.**

- 2) The convenient summary and dissemination of research results to extension personnel, agricultural education institutions, and sophisticated farm operators and managers.

No matter how excellent work in agricultural research and development is, its effective impact depends upon imaginative and attractive programs of publication and demonstration reporting results (obtained both in Jordan, or, when relevant, elsewhere). These publication and demonstration

CHAPTER III

programs are of great importance and must be done with the same vigor, care, and system which characterizes research. They are the responsibility also of the Research Department, Ministry of Agriculture. To date, however, and with the exception of the Deir Alla Station reports, they have not been notably satisfactory.

A specific program for better dissemination of results is presented by **Specific Proposal No. A2**.

- 3) The discovery or development of improved, or lower cost, sources of needed farm inputs (e. g., seeds, seedlings, machinery, fertilizers, breeding stock, etc.).

More productive farmers will increasingly use many items produced off the farm. These items must be of uniform, satisfactory quality and available at reasonable prices. Where spare parts are required, they must also be available on the same basis.

Required here are (1) the specification of standards [by, jointly, the Research Department, Ministry of Agriculture, and the (proposed) National Standards Institute], (2) the enforcement of standards (by relevant ministries and departments, as appropriate), (3) feasibility studies and financial assistance to encourage either private business firms or cooperatives to provide the (improved and standardized) inputs [with the feasibility studies being provided by the Jordan Development Board (with the advice of the Ministry of Agriculture) and financing being provided by the (proposed) Industrial Development Corp. (for private business firms) or by the Agricultural Credit Corp. (for cooperatives)], and (4) where private firms and/or cooperatives cannot provide inputs of proper quality at fair prices, the Ministry of Agriculture should move to organize government corporations to do so.

Specific proposals for meeting needs under this head are found in « The Program for Industry » as well as in this section. In « The Program for Industry » are found proposals for (1) the National Standards Institute, (2) Feasibility studies, and (3) an Industrial Development Corp. In this section, **Specific Proposals Nos. A3 and A4** are presented.

THE PROGRAM FOR AGRICULTURE

- 4) The discovery and development of markets for agricultural products.

A growing output of an expanding agriculture can be sold without discouraging declines in prices only if new markets can be found and old ones aggressively cultivated. These activities should be the responsibility of a (proposed) Agricultural Marketing Bureau. See **Specific Proposal No. A5**.

- 5) The discovery or development of improved, or lower cost, marketing methods, procedures, institutions, and facilities. The farm value of agricultural products can always be improved by furnishing products in the form, and at the time and place, desired by consumers or by reducing the cost (increasing the efficiency) by which they are assembled, transported, and sold.

Raising farm values through improving marketing procedures requires (1) an active and resourceful program of research relating to marketing methods, procedures, and institutions [by the (proposed) Agricultural Marketing Bureau] so that the situation is accurately understood, (2) the specification of standards to ensure consumer-demanded products [the formulation of such standards the joint responsibility of the (proposed) Agricultural Marketing Bureau and the (proposed) National Standards Institute] (3) the enforcement of standards (by relevant ministries and departments, as appropriate), (4) feasibility studies and financial assistance to encourage private firms or cooperatives to provide the improved marketing machinery [with the feasibility studies being provided by the Jordan Development Board (with the advice of the Ministry of Agriculture) and financing being provided by the (proposed) Industrial Development Corporation (for private business firms) and by the Agricultural Credit Corporation (for Cooperatives)], and (5) where private firms and/or cooperatives cannot provide needed services, the Ministry of Agriculture should move to organize government corporations to do so.

Again, some specific proposals relevant to this point are found in « The Program for Industry ». In this section, **Specific Proposals Nos. A4 and A5** are presented.

CHAPTER III

- 6) The adjustment of production (cropping) patterns in response to changing price (profit) opportunities.

No given pattern of agricultural output will always yield maximum income to farmers. Income maximizing patterns change with shifts in (1) farming techniques, (2) demand for, and prices of, farm products, and (3) prices of necessary farm inputs. Farmers — and the country — will gain if these changing patterns can be anticipated and/or be adjusted to promptly. A (proposed) Economic Analysis Group Research Division, Min. of Agric. should be responsible for anticipation of change and for suggesting desirable adjustments thereto. See **Specific Proposal No. A6.**

- 7) The imparting of practical information to individual farmers. All of the activities indicated above suggest the development of information useful to farmers. This information must, however, be effectively presented to farmers. Thus, an effective extension program is a must. It is a responsibility of the Rural Development Department, Ministry of Agriculture (which has assumed this responsibility from the prior Extension Division).

Interviews conducted while this program was being developed suggest that extension activities to date have not been sufficiently effective. Proposals for improving them are contained in **Specific Proposal No. A7.**

- 8) A system of agricultural education at all levels. An extension program works with existing farmers. Agricultural education provides information before the student becomes a farmer and in addition makes him a more sophisticated recipient of future information.

At a higher level, agricultural education provides specialized farm research and extension personnel and informed businessmen in farm-related activities.

Agricultural education in the primary and preparatory schools in rural areas is now — and should remain — the responsibility of the Ministry of Education (using materials and techniques developed in cooperation with the Ministry of Agriculture).

Agricultural education at the secondary level is now divided

THE PROGRAM FOR AGRICULTURE

— one school (at Khadouri) now under the Ministry of Education, the other (at Jubeiha) now under the Ministry of Agriculture. This work should be expanded and concentrated as the responsibility of the Ministry of Education (using materials and techniques developed in cooperation with the Ministry of Agriculture).

Education in agriculture beyond the secondary level does not now exist in Jordan. Education at this level to provide only technicians needed by the Ministry of Agriculture or by large private farmers needs to be given to so few students as not to justify an agricultural college. (Necessary trainees could be sent abroad). Only if the agricultural college also provides (1) teacher training for prospective teachers of agricultural subjects, (2) farm business administration, (3) agricultural economics, (4) science training using labs and staff required for agricultural training, and (5) expanded facilities for farm research, does it become potentially advisable. It should be begun only after careful study and after taking full account of the needs for high quality. It should be considered — and, if found desirable, operated — by a (proposed) Board of Regents for Higher Education.

Specific programs for agricultural education are contained in «The Program for Education».

- 9) An expansion of supply of productive land for rain-fed agriculture by terracing, sub-soiling and tree and/or vine planting.

Much land in rain-fed areas is either under-utilized (by planting low-yield, low-value grain) or (if hilly) not used at all except for grazing. This land can frequently produce substantial outputs of olives and of fruits, including grapes, if the land is properly prepared and tended.

Major expansion in this area requires (1) study to determine the amount and location of land for this type of development (the responsibility of the Research Division, Ministry of Agriculture, and particularly of its (proposed) Economic Analysis Division), (2) purposeful extension work guiding and encouraging individual farmers (the responsibility of the Rural Development Division, Ministry of Agriculture), (3) financial assistance to the program (by the Agricultural

CHAPTER III

Credit Corporation), and (4) an expanded compulsory tree planting program.

Programs under this head are indicated by **Specific Proposals Nos. A3, A7, A8 and A9.**

- 10) A rationalization and expansion of the supply of livestock and livestock products, including poultry and poultry products.

Expanded production in Jordan of livestock and poultry and their products is desirable. In addition to research and development work and other activities previously alluded to, expanded production requires (1) feasibility studies to specify types and amounts of new and/or expanded livestock and poultry activities which should prove profitable, such studies to be provided by the Jordan Development Board (in cooperation with the (proposed) Economic Analysis Group, Research Department, Ministry of Agriculture), (2) financial assistance to feasible projects by the Agricultural Credit Corp., (3) programs for maintaining and improving animal health, the responsibility of the Veterinary Department, Ministry of Agriculture, (4) programs — some on a pilot basis — to demonstrate and achieve higher standards of selection, breeding and care of livestock, these programs the responsibility of the Animal Husbandry Division, Ministry of Agriculture, in cooperation with the Rural Affairs Ministry (5) plans to improve and maintain range lands, the responsibility of the Ministry of Agriculture, and (6) provision of adequate feed supplies. See **Specific Proposals Nos. A3, A10, A11, A12, and A13.**

- 11) The expansion, improvement, and coordination of credit facilities to individual farmers (1) for purposes specified above, and (2) for such other purposes as will allow the utilization of output-expanding methods.

Many output-increasing programs require relatively large capital expenditures beyond the means of individual farmers. Meeting resultant credit needs is the responsibility of the Agricultural Credit Corporation working to meet seasonal credit needs — through Thrift and Loan Cooperatives.

The ACC should work within an improved framework within which (1) excessive past indebtedness has been reduced to

THE PROGRAM FOR AGRICULTURE

manageable proportions (by the operations of a (proposed) Farm Indebtedness Board, (2) land settlement has been completed (the responsibility of the Lands and Surveys Department), (3) debt moratoriums are abolished (although Loan conditions reasonably protective of the debtor should be established), and (4) seasonal loans are made exclusively by cooperative societies. See **Specific Proposals Nos. A3, A14, A15, and A16.**

- 12) Careful consideration of integrated farm-nonfarm activities involving the farm production of industrial crops.

Some potentially desirable agricultural developments await parallel industrial developments: (1) Sugar beet production and a sugar refinery. (2) Additional tobacco varieties and appropriate cigarette company purchasing and blending policies. (3) Vegetable oil crops and local development of facilities for oil extraction. (4) Production of fruits and vegetables to canning standards and the establishment of local processors. (5) Expanded livestock production and commercial feed production.

These parallel farm-nonfarm developments are covered by specific proposals in «The Program for Industry».

Specific Proposal No. A1

- a proposal to expand the activities of the Research Department, Ministry of Agriculture.
- to be done:

- 1) The Research Department now possesses (1) well-defined for the research program at its present level and for pro- (2) well-worked plans in being for an expanded program, (3) stations, laboratories, and other facilities adequate for the research program at its present level and for providing related technical services, and (4) a cadre of well trained Jordanian research workers with a possibility of training a full staff in a relatively short time.

(Note: The research program planned includes research related to every important area of agriculture in Jordan, viz. (1) improvement of wheat and barley by breeding and selection, (2) seed improvement, (3) plant disease control, (4) insect pest control, (5) improvement of fruit crop

CHAPTER III

production, (6) improvement of vegetables, (7) improvement of irrigation practices, (8) soil fertility studies, (9) forage and fodder production and (10) range sheep and range management. It also specifically includes the provision of a soil tests-analyses- program for Jordan's farmers which is of vital importance in selecting crops, varieties, fertilizers, etc. , scientifically).

- 2) Because of the important nature and function of the Research Department, it is essential that necessary legislation be promulgated to establish the Department of Research as a legally constituted Department attached to the Ministry of Agriculture, to be administered by a qualified Director of Research who shall have full responsibility and authority for planning, execution and reporting on all approved agricultural research projects essential to the economic development of Jordan. The Department of Research shall be constituted so as to be administered as a discrete governmental unit with its own appropriate budget.
- 3) It is, however, essential that knowledge of Jordan's agricultural research program be as wide as possible and that the future modification and development of that program reflect the needs of farmers and related governmental departments. To these ends, an advisory Committee of nine (1) Repr. of Min. of Agriculture, (2) Repr. of Min. of National Economy, (3) Repr. of USOM, (4) Repr. of Rural Development, (5) Repr. of F. A. O. , (6) Repr. East Ghor Canal Auth. , (7) (8) Two leading farm operators, and (9) Repr. of Jordan Dev. Bd. — Chr:) shall be constituted prior to January 1, 1962. This Committee shall meet as required with representatives of the Research Department to familiarize itself with the research program and shall comment thereon in writing prior to March 1, 1962. Subsequent to this initial contact the Committee shall meet with representatives of the Research Department at least twice per year, submitting written comments prior to January 1 each year. Written comments shall go to the Research Department with copies to all agencies represented on the Committee.
- 4) In addition to recruiting a full complement of qualified

THE PROGRAM FOR AGRICULTURE

Jordanian research scientists, it may be necessary to secure the services of foreign technicians, experts and advisors in fields where qualified Jordanians are not available. These may be requested from UNTAB, USOM or other agencies furnishing technical assistance for specific assignments in the Department of Research. In addition to technical advisors presently contemplated from USOM /J. and in order to ensure the continued injection of fresh ideas and independent evaluation of results achieved, the Director, Research Department through the established channels shall make every effort to secure a commitment from UNTAB to provide (beginning April 1, 1963) two suitable foreign technicians to work within the Research Department at all times.

— Costs and financing : As detailed in the plans of the Research Department, Ministry of Agriculture. They can be summarized as follows : -

	(in thousands of Dinars)		
	Budget Jordan Govt.	External Sources	Total
	(over present Budg.)	Grants	
	J.D.	J.D.	J.D.
1963	40	—	40
1964	80	14	94
1965	80	14	94
1966	80	14	94
1967	80	14	94
Total	360	56	416

Specific Proposal No. A2

- a proposal to expand and improve the dissemination of agricultural results.
- to be done:
 - 1) To get past results effectively reviewed for dissemination :
 - a) Preparation (prior to February 1, 1962) by the Director, Research Department, Ministry of Agriculture, of an informal five-year summary of activities and results at all experiment stations and demonstration farms. This summary will be accompanied by specific recommenda-

CHAPTER III

tions for (1) a publication program based thereon, both of research and extension publications, and demonstrations for relevant interested persons, such as extension agents and agricultural teachers. The summary and recommendations will be given an advisory review by the Committee (constituted in **Specific Proposal No. A1**) which shall render its written review to the Director, Research Department, prior to March 1, 1962. The Director shall then revise his summary and recommendations as desired and shall distribute copies to all members of the Committee.

- b) Proceeding under the terms of the recommendations prepared under a. above, the Director, Research Department, shall be responsible for the desired publications program and for programs of meetings and demonstrations. He shall distribute copies of all publications and invitations to all meetings and demonstrations to the Committee.
 - c) The Director, Research Department, shall publish, as soon as the results have been verified or adequately proven under local conditions, four series of publications, as follows: (1) Scientific Journal Series (to report research results of scientific merit) (2) Research Bulletin Series (to publish results of research work of practical value to professional agriculturalists), (3) Agricultural Information Bulletin Series (to publish agricultural information on scientific subjects with specific recommendations aimed at Extension Agents of the Rural Development Department and (4) Farmer Bulletin Series (in very simple language to publish specific recommendations to farmers).
- 2) To provide specialized staff for dissemination activities:
- a) Beginning April 1, 1962, the Research Department, Ministry of Agriculture, shall add a small Technical Reports and Publications Section consisting of a qualified Technical Editor (as Section Chief), an Assistant Technical Editor, and Illustrator, together with necessary secretarial assistance.
 - b) The Research Department and the Rural Development

THE PROGRAM FOR AGRICULTURE

Department shall establish a coordinated procedure for dissemination of agricultural information and recommendations to farmers as follows:

- i. Beginning April 1, 1962 the Rural Development Department shall establish a Farm Relations Section consisting of a National Farm Relations Specialist to arrange, coordinate and conduct farm meetings and demonstrations, an Assistant National Farm Relations Specialist, and five District Farm Relations Specialists, together with necessary clerical assistance. (The five District Farm Relations Specialists may have other duties).
 - ii. Prior to September 1, of each year the National Farm Relations Specialist of the (Rural Development Department) (R.D.D.), will arrange meetings with the concerned research specialists of the Department of Research to plan the ensuing year's program of farmers' meetings, demonstrations, meetings and publications, radio and press publicity, etc. on the basis of recommendations derived from the results of specific research work of the previous years. The National Farm Relations Specialists will then arrange with each District Farm Relations Specialists for Extension Agents' workshops at which the Research Specialist will instruct the agents concerning the recommendations to be demonstrated and also in the methods of conducting the demonstrations. Appropriate bulletins, pamphlets and posters will be issued to each agent with instructions for their use. The agents with the assistance of the District Farmer Relations Specialist will then conduct demonstrations and meetings in their villages according to plan.
 - c) Staff for the Technical Reports and Publications Section of the Research Department and Farmer Relations Section of R.D.D. should receive as rapidly as possible training in the U.S. including practical experience.
- 3) To provide for publications, farm demonstration and

CHAPTER III

meetings, an annual budget allowance of JD. 3000 to the Research Department for publications and JD. 3000 to the Rural Development Department for farm meetings and demonstrations shall be made each year.

— costs : Estimates are as follows :

(in thousands of Dinars)

	For fiscal years ending March 31				
	1963	1964	1965	1966	1967
	JD	JD	JD	JD	JD
Salaries and misc. exp.	6	6	6	6	6
Allocations for publications meetings and demonstrations	6	6	6	6	6
Training costs	4.6	4.6	-	-	-
Total	16.6	16.6	12	12	12

— Financing :

	(in thousands of Dinars)			Total
	Budget Jordan Govt.	External Sources	Grants	
	JD.	JD.	JD.	
1963	12 (1)	4.6 (2)	-	16.6
1964	12 (1)	4.6 (2)	-	16.6
1965	12 (1)	-	-	12
1966	12 (1)	-	-	12
1967	12 (1)	-	-	12
Total	60	9.2	-	69.2

- (1) Salaries and misc. expenses and allocations for publications, meetings and demonstrations. (2) Training costs.

Specific Proposal No. A3

— a proposal for expanding the activities of the Agricultural Credit Corporation.

- 1) Agriculture in Jordan requires a vast amount of credit. Credit is required : (1) to finance seasonal needs through advances to the rural credit and thrift cooperatives, (2) to finance purchases of agricultural machinery, including irrigation pumps, (3) to finance irrigation works on indi-

THE PROGRAM FOR AGRICULTURE

vidual farms or for small groups of farmers, (4) to finance terracing, sub-solling, and tree and/or vine planting on a large scale, (5) to provide credit to cooperatives for a wide variety of supply and marketing activities, (6) to finance livestock expansion, (7) for additional purposes possibly including financing the restated and readjusted farm indebtedness secured by land mortgages. A minimum of JD. 1,000,000 per year of new capital should therefore be made available to the Agricultural Credit Corporation by : —

- a) Borrowing of JD. 350,000 abroad (application to be formally prepared and submitted prior to January 1, 1962) to provide minimum foreign exchange needs of the program ;
- b) Allocating JD. 550,000 (or more, as available) from local sale of U.S. agricultural products (as described by **Specific Proposal No. A17**) ;
- c) Raising at least JD. 100,000 per year in Jordan by : —
 - i. Requiring the purchase by borrowers of 4%, 10 year bonds issued by the Agricultural Credit Corporation and guaranteed by the Government of Jordan in an amount equal to 5% of each new loan extended, such purchase to be made at the time the loan is granted.
 - ii. Selling 6%, 10 year bonds issued by the Agricultural Credit Corporation and guaranteed by the Government of Jordan to the general public. These bonds will also be purchasable by the (proposed) Central Bank of Jordan and eligible — along with sterling balances — as legal backing for currency issued.
- 2) Provide for expansion of the staff of the Agricultural Credit Corporation (1) to handle the expanded volume of business, (2) to provide for desired decentralization, and (3) to allow a small research section. Recommendation for such expansion to be made prior to January 1, 1962, by a Committee consisting of (1) Chairman, Agricultural Credit Corporation (2) representative of an important creditor agency, and (3) Repr. of Jordan Dev. Bd., Chr. Staff ex-

CHAPTER III

pansion will be financed by a grant from the Government of Jordan to release Corporation funds in expanded volume for new loans.

- 3) Provide adequately trained personnel for the expansion foreseen. Recommendations for training needs to be made prior to January 15, 1962, by the Committee specified under 2., above.
- 4) Provide adequate equipment for the expansion foreseen. Recommendations for equipment needs to be made prior to February 1, 1962, by the Committee specified under 2., above.
- 5) Provide for a review of lending practices to (1) allow more effective decentralization to district offices, (2) speed service, (3) facilitate supervision, and (4) to allow more effective use of funds by increasing size of loans to potentially more efficient borrowers. This review shall be undertaken by the Committee constituted under 2., above, which shall report its recommendations in writing to the Apr. Credit Corp. prior to March 15, 1962.
- 6) Limit the activities of the Agricultural Credit Corp. to loans of more than one year (except that where Thrift and Loan Coop. do not exist, the Agricultural Credit Corporation shall continue to bear the responsibility of issuing seasonal loans).

— Additional costs: (in thousands of dinars).

	New Capital Contribution JD.	Increased Staff Costs		Training Equipment Costs		Total JD.
		JD.	JD.	JD.	JD.	
1963	1,000 (1)	15	8	5	1,028	
1964	1,000 (1)	17.5	8	3	1,028.5	
1965	1,000 (1)	20	8	2	1,030	
1966	1,000 (1)	20	8	1	1,029	
1967	1,000 (1)	20	8	1	1,029	
Total	5,000	92.5	40	12	5,144.5	

(1) Minimum amount. More may be made available from proceeds of sale of surplus agricultural commodities.

THE PROGRAM FOR AGRICULTURE

— Proposed financing: (in thousands of dinars).

	Budget	Sole of	External Sources	Total	
	Jordan Govt.	A.C.C. Bonds	Grants Loans		
1963	15 (1)	100 (2)	563 (3)	350 (4)	1,028
1964	17.5 (1)	100 (2)	561 (3)	350 (4)	1,028.5
1965	20 (1)	100 (2)	560 (3)	350 (4)	1,030
1966	20 (1)	100 (2)	559 (3)	350 (4)	1,029
1967	20 (1)	100 (2)	559 (3)	350 (4)	1,029
Total	92.5	500	2,802	1,750	5,144.5

(1) Staff costs.

(2) New capital contributions.

(3) New capital contributions at the rate of JD 550,000 per annum out of proceeds of sale of agricultural produce.

Training and equipment costs : balance of figure quoted over JD 550,000 per year.

(4) New capital contributions. It is suggested that negotiations be begun therefor with the IDA.

Specific Proposal No. A4

— a proposal to establish and operate a wheat seed certification program in Jordan.

— to be done :

- 1) Prior to February 1, 1962, the Chief, Agronomy Section, Ministry of Agriculture, (in cooperation with a Repr. of Jordan Development Board) will elaborate the Section's existing plans for a wheat seed certification program in Jordan into a fully articulated project. This elaboration will detail :
 - a) Personnel requirements and costs by year over the program period.
 - b) Equipment requirements (including winnow graders) and costs by year over the program period.
 - c) Specific work targets for each year of the program.

CHAPTER III

- d) Plans for recovery of program costs out of revenues from seed sales.
- 2) The Chief, Agronomy Section (acting for the Minister of Agriculture and within the framework of the project as articulated under 1., above) will supervise the implementation of the project over the program period. He will make annual reports in writing prior to January 1, to the Minister of Agriculture (with copies to the Jordan Development Board).
- Costs : Costs are to be specified in the project developed under 1., above. They are, however, estimated for purposes of this program as follows: —

(in thousands of dinars)

	For fiscal years ending March 31					Total
	1963	1964	1965	1966	1967	
	JD.	JD.	JD.	JD.	JD.	JD.
Salaries and supplies	3.0	4.0	4.5	6.0	6.5	24
Equipment	8.5	8.5	—	—	—	17
Total	11.5	12.5	4.5	6.0	6.5	41

- Financing : Salaries and supplies — Budget, Jordan Government; equipment — external sources, grants.

Specific Proposal No. A5

- a proposal to provide an Agricultural Marketing Bureau: (1) for the discovery and development of markets for agricultural products, and (2) to develop improved marketing methods, procedures, and institutions.
- to be done :
- 1) A Committee has already been constituted to draw up a set of recommendations and a necessary draft statute. This Committee will soon submit its final recommendations and draft statute to the Council of Ministers for approval and submission to Parliament.
 - 2) The Committee — in preparing its recommendations and draft statute — shall take account of the following

THE PROGRAM FOR AGRICULTURE

- a) That the Bureau's activities will cut across ministerial lines and that it may sometimes have to act as an independent corporation in the conduct of its activities. The Bureau should therefore be provided with a high degree of administrative autonomy. It is here suggested that the Bureau should have a Director in complete charge of operations, assisted by an Advisory Committee.
 - b) That the Bureau's major tasks shall include :
 - (1) Market research — the discovery of new markets and the expanded analysis of old.
 - (2) Marketing research — studies designed to determine present methods, procedures, and institutions and to suggest improvements therein.
 - (3) The development of advertising and sales programs abroad as research indicates appropriate.
 - (4) The specification and enforcement of standards required by consumers in relevant markets.
 - (5) The recommendation of desirable commercial agreements with foreign governments.
 - (6) Under carefully controlled conditions, the guarantee of payments by foreign importers to Jordanian exporters.
 - c) That the Bureau's work will be highly technical and will require careful recruitment and training and the use of foreign experts.
 - 3) The actual formation of the Bureau and the commencement of its operations should be accomplished by April 1, 1962.
- Costs : to be indicated precisely in the Committee recommendations (see 1., above). Estimates for purposes of this document are as follows:

CHAPTER III

(in thousands of dinars)

Fiscal 1963	JD 38.6 (1) (2)
Fiscal 1964	JD 48.6 (1) (-)
Fiscal 1965	JD 58.6 (1) (2)
Fiscal 1966	JD 57 (3)
Fiscal 1967	JD 67 (3)
Total	269.8

- (1) Including costs of two trainees abroad.
- (2) Including two foreign technicians.
- (3) Including one foreign technician.

— Financing :

	(in thousands of Dinars)		
	Budget	Jordan Govt. External Sources	Total
	JD.	Grants JD.	JD.
1963		38.6 (2)	38.6
1964	10 (1)	38.6 (2)	48.6
1965	40 (1)	18.6 (2)	58.6
1966	50 (1)	7. (2)	57.
1967	60 (1)	7. (2)	57.
Total	160	109.2	262.8

(1) To be financed from a small tax on exports.

(2) Includes JD. 4,600 per year for each of the first three years for two trainees, and JD. 14,000 per year for each of the first three years and JD. 7,000 for each of the remaining two years for foreign technicians.

Specific Proposal No. A6

— a proposal to establish an Economic Analysis Group in the Research Department, Ministry of Agriculture, continuously to identify and forecast changes in income maximizing al-

THE PROGRAM FOR AGRICULTURE

ternatives and to suggest changes in desirable production patterns.

— to be done :

- 1) Prior to January 15, 1962, the Director, Research Department, Ministry of Agriculture, shall prepare detailed plans for a small, highly-competent, Economic Analysis Group to be included in his Department. These plans shall recognize the need for a small group of skilled technicians (experts in agricultural economics) which can translate changing market and technical conditions into income-maximizing new patterns and programs. In formulating his plans, the Director shall take account of (1) the desirability of starting small and growing with experience, (2) the fact that this group can call upon other agencies of government for data and should not become an agency for primary data gathering.
- 2) The plans prepared as outlined above shall then be referred to a Committee of four (1) a Repr. of Min. of Nat'l. Econ., (2) a Repr. of USOM/J, (3) a Repr. of Jordan Dev. Bd., and (4) a Repr. of Min. of Agri. — Chairman) for review. The views of this Committee shall be submitted in writing prior to February 15, 1962, to the Director, Research Dept., who shall revise his plans in light thereof and make every effort (in cooperation with a Repr. of the Jordan Dev. Bd.) to obtain a financing commitment therefor from USOM/J.
- 3) In April, 1962, or as soon thereafter as qualified staff — both Jordanian and foreign — can be assembled the Group shall be constituted and begin its work.
- 4) The Group — as soon as assembled and as the pressure of other work allows — shall undertake studies including the following : —
 - a) Areas in which optimum land use is consistent with terracing, deep-soiling, and tree and vine planting. See Specific Proposal No. A11.
 - b) Agricultural production, existing and potential, in the Arab World and the implications thereof for Jordan.

CHAPITRE III

- c) The long-term needs of Jordan for agricultural imports and the possibility of meeting them (1) by gifts of surplus commodities from the U.S. for sale in Jordan, or (2) by reciprocal sales (or barter) with countries taking Jordan's exports.
 - d) Price, output, and foreign trade movements for all major agricultural products in Jordan.
 - 5) The Economic Analysis Group will report promptly its significant findings (using the services of the Publications and Farm Relations Group as appropriate).
 - 6) On or before November 1, 1962, and every year thereafter, the chief of this section shall prepare a written report summarizing activities to date and outlining future plans. This report shall be submitted through the Director, Research Department, to the Repr., Jordan Dev. Bd., with copies to the agencies or ministries mentioned in 2., above.
- Costs : To be indicated precisely in the plans prepared under 1., and 2., above. A rough estimate for purposes of this document is JD. 22,500 per year including (1) costs of a foreign technician, and (2) expenses of two persons per year for training abroad.
- Financing: External Sources — Grants.

Specific Proposal No. A7

- a proposal for improving the extension activities of the Rural Development Department, Ministry of Agriculture.
- to be done :
- 1) To improve the organization. The Rural Development Department, Ministry of Agriculture, is one of the larger and more important governmental departments. Its work potentially affects many people and can contribute much to increases in national income. Furthermore, the Department is only now being organized to combine the prior Extension Service with the prior National Community Development Department and organizational problems can be conveniently considered. Therefore, to provide an optimum organization for work with villagers

THE PROGRAM FOR AGRICULTURE

(including agricultural extension work):

- a) The Director, Rural Development Department, will prepare (with the cooperation of a Repr., Jordan Dev. Bd.) prior to February 1, 1962, a document detailing (1) the present staffing pattern of the Department indicating the qualifications and responsibilities of each person, and (2) significant relationships to all government ministries, agencies, departments, etc.
- b) Prior to February 1, 1962, the Director, Rural Development Department, and a Repr., Jordan Dev. Bd., will make every effort to obtain the services of the U.N. General Public Administration Advisor to make — or to supervise — a study of, and recommendations for, the organization of the Rural Development Department. Specifically within the terms of reference for the proposed study are considerations of (1) the relationships of the Department with all other government divisions including — but not limited to — the Research Department, Ministry of Agriculture, the various subject matter departments of the Ministry of Agriculture (e.g. Horticulture, Agronomy, Animal Husbandry, etc.), and the Department of Co-operative Development, Ministry of Social Affairs. (2) the desirability of substantial outside employment by staff in the Department, (3) the location and composition of staff in district offices, (4) the nature of program planning, and (5) the number and qualifications of foreign experts required.
- c) After recommendations flowing from the study detailed in (2) above become available, the Director, Rural Development Department, shall prepare action thereon within three months of the receipt thereof, asking such additional budget support as is thereby made necessary. The Director, acting for the Minister of Agriculture, shall, of course, make final decisions on organization but shall report in writing his reasons for not implementing any recommendations of the study, such written reasons being submitted to the Jordan Development Board through the Minister of Agriculture.

CHAPTER III

- 2) To improve extension program planning procedures.
- a) The extension program should reflect (1) the high priority economic needs of the country, (2) the latest research findings, (3) the « felt-needs » of the farmers, and (4) the knowledge, capacities, and interests of the extension agents themselves. The program should always be limited to achievable objectives and adequate time must be taken for its development and execution.
 - b) Prior to December 15, 1961, a Committee of sixteen (1) Repr. of Res. Dept., Min. of Agril., (2) Repr. of Dept. of Forestry, Min. of Agr., (3) Repr. of Dept. of Coops., Min. of Social Affairs, (4) Repr. of Agri. Credit Corp., (5) Repr. of East Ghor Canal Auth., (6) Repr. of Central Water Auth., (7) Repr. of Agri., Marketing Bd., (8) Repr. of Jordan Dev. Bd., (9) Repr. of Min. of Nat' l Economy, (10) Repr. of Min. of Ed. (11) Repr. of Min. of Health, (12) Repr. of Min. of Public Works, (13) Repr. of Min. of Interior, (14) Repr. of the Union of Women Societies, (15) Repr. of the Union of Chambers of Commerce, and (16) Repr. of Rural Dev. Dept. Min. of Agril., Chairman) shall be constituted to examine past program planning procedures and to recommend new, cooperative means for their development. This Committee, at its option, may constitute sub-committees as desired to prepare detailed recommendations for the total committee's consideration.
 - c) The Committee, in recommending new program planning procedures, shall:
 - (1) Indicate techniques for insuring that programs required for implementation of proposals in this document are included in the work plans of the Rural Development Dept.
 - (2) Indicate techniques for insuring that the publications, programs, and demonstrations of the Research Department are properly conceived for, and integrated into, the extension program — including the extension publications program.

THE PROGRAM FOR AGRICULTURE

- (3) Indicate techniques for determining and instilling the needs of farmers into the extension program.
 - (4) Indicate techniques for effectively getting the views of agents considered in developing the program.
 - (5) Suggest how priorities can be assigned so that more important projects are handled first, less important ones later.
 - (6) Suggest how more detailed planning, better materials, and improved follow-up can sharpen and expand the effectiveness of extension projects.
- d) The Committee shall submit its report not later than March 1, 1962, to the Minister of Agriculture through the Director, Rural Development Department.
- e) Subsequent program planning is, of course, the responsibility of the Minister of Agriculture working through the Director, Rural Development Department who shall be informed by the Committee report. However, each year prior to November 1, the Director, Rural Development Department, shall submit a written report on program planning for the year just completed and plans for the year to come to the Committee. The Committee will submit its comments thereon in writing prior to November 15. The first report under this section is to be submitted by November 1, 1962.
- 3) To provide improved facilities and staff:
- a) Due to uncertainties relating to the starting of the new Rural Development Department, it has been undesirable to firm-up needs for new facilities and staff. However, some additions will undoubtedly be required.
 - b) After the studies and recommendations contemplated by 1. and 2. are completed, the Director, Rural Development Department, shall prior to March 15, 1962, prepare detailed requests for new facilities and staff as required to:

CHAPTER III

- (1) Implement the recommendations arising out of 1. and 2. above.
- (2) Provide an adequate Audio-Visual Section for the Department.
- (3) Provide an adequate Village Youth Section for the Department.

— costs: JD. 20,000 per year allocated to meet requests under 3., above.

— financing: Budget, Jordan Government.

Specific Proposal No. A8.

— a proposal to determine the location and amount of land for planting (with, as necessary, terracing and sub-solling) with olive and fruit trees and with vines.

— to be done :

- 1) Prior to July 1, 1962, the Director, Research Department, Ministry of Agriculture (in cooperation with a Repr. of Jordan Dev. Bd. and making maximum use of his Economic Analysis Group) shall develop detailed, written plans for a research project designed to determine the amount and location of land for olive and fruit tree and for vine plantation. In developing this plan, he shall specifically consider:
 - a) The need for criteria for determining land both technically and economically utilizable for hill fruit production.
 - b) The desirability of coordinating this research with related projects (e. g. , the catchment survey of the entire northern region to be done by the Department of Forests).
 - c) All possible techniques for inventoring land potentially useful for hill fruit production.
 - d) The need to develop standard costs of planting for locations of various types.
 - e) The necessity of establishing priorities among various

THE PROGRAM FOR AGRICULTURE

locations which should — in the long run — be planted.

- f) The development of a program which will speed-up planting of olive and fruit trees and vines.
 - g) The time, money, and training required if the study is to be carried out, on the one hand, by Jordanians or, on the other hand, by foreign experts.
- 2) Prior to August 1, 1962, a Committee of seven (1) Repr. of Rural Dev. Dept. , (2) Repr. of Agri. Cred. Corp. , (3) Repr. of Lands and Surveys Dept. , (4) Repr. of Jordan Dev. Bd., (5) Repr. of Civil Aviation Dept. (Metereology) (6) Repr. of Min. of Agri. (Horticultural Section), and (7) Repr. of Res. Dept., Chairman, shall be constituted to give advisory comment in writing prior to August 15, 1962, on the research plans prepared under 1. , above.
 - 3) After having taken account of Committee comments, the Director, Research Department, shall revise his plans and proceed to the research which shall be completed not later than December 31, 1963. During the period of research, interim reports shall be submitted (on December 31, 1962 — June 30, 1963 — December 31, 1963) to the Committee for its comments in writing within 15 days.
 - 4) The research should stipulate a program for a speed-up in olive, fruit, and vine planting in the years immediately following. This program will be submitted to the Jordan Development Board for assignment of responsibility for implementation beginning April 1, 1964.
- costs: Research costs are estimated herein at JD. 10,000 during fiscal years of 1963 and 1964. Subsequent program costs are not here estimated.
- financing: Budget, Jordan Government.

Specific Proposal No. A9

— a proposal that the tree planting program be expanded so that demonstration plots of at least 50 dunums each planted

CHAPTER III

to olives, fruit, and vines are established near each suitable village.

— to be done :

- 1) Prior to June 1, 1962, the Director, Rural Development Department (in cooperation with a Repr. of Jordan Dev. Bd. and with the Horticulture Division) shall prepare a program for establishment of 300 50-dunum (or more) demonstration plots in as many villages to be planted to olives, fruit, and vines. This program is to contemplate the establishment of 20 plots in fiscal 1963, 40 plots in 1964, 60 plots in 1965, 80 plots in 1966, and 100 plots in 1967. It shall :

- a) Specify the location of plots for each year. Plots should be so selected that they can be properly serviced by expert specialists and by extension agents. They should be located (1) where soil and climate are known to be suitable, (2) in areas not now fully exploiting fruit production potentials, and (3) where the plots are easily accessible and observable.

- b) Specify the nature of optimum plantings on each plot.

- c) Provide for a guard-cultivator on each plot.

- d) Provide cost estimates by year for the program.

- 2) The Director, Rural Development Department (in cooperation with the Horticulture Division) shall implement the program developed above.

- 3) Prior to June 1, each year, the Director, Rural Development Department (in cooperation with a Repr. of Jordan Dev. Bd.) shall review actual results and revise the program in light thereof.

— costs: To be detailed under 1., above. Estimated for purposes of this document as follows:

THE PROGRAM FOR AGRICULTURE

(in thousands of dinars)

For fiscal years ending March 31	1963	1964	1965	1966	1967	Total
	JD.	JD.	JD.	JD.	JD.	
Cost of seedlings and planting	8	1.6	2.4	3.2	4	12
Cost of guard-cultivators & Supervisors	1.8	5.1 (1)	9.9 (2)	14.2 (3)	18.9 (4)	49.9
Total	2.6	6.7	12.3	17.4	22.9	61.9

- (1) Includes cost of guards and supervisors from 1963;
- (2) Includes cost of guards and supervisors from 1964;
- (3) Includes cost of guards and supervisors from 1965;
- (4) Includes cost of guards and supervisors from 1966.

— financing : Budget, Jordan Government.

Specific Proposal No. A10

— a proposal to determine the feasibility of a number of livestock projects in Jordan.

— to be done :

- 1) Prior to April 1, 1962, the Jordan Development Board (in cooperation with the Research Department, Ministry of Agriculture) shall have prepared and mailed invitation to tender for a full-scale feasibility study covering several livestock and related activities including (1) dairy herds, (2) beef cattle production, (3) tethered sheep and goats for milk, hair or wool, and meat, and (4) poultry for eggs and meat. It will ask that the study include the following :

- a) An examination of the present and future market for each of the products indicated, or implied, above.

- b) An indication of the size of herds and flocks necessary in Jordan if demand determined under a., above, is to be met domestically.

- c) A detailed consideration of inputs required (i.e., feeds, medicines, veterinary services, breeding stock, etc.) if herds and flocks of the size indicated under b. above are to be kept in Jordan.

CHAPTER III

- d) A statement of the prices at which feed must be made available locally if products are to be furnished at (1) prices competitive with imports with present customs rates, (2) prices when customs rates have been raised 10 percentage points, and (3) prices when customs rates have been raised 20 percentage points.
- e) An estimate of the capital costs involved in production of each of the products.
- 2) Prior to June 15, 1962, the Jordan Development Board shall have selected an agency to make to study and shall have let the contract therefor. The study shall be completed prior to April 15, 1963.
- 3) After the study has been received, the Economic Analysis Group, Research Department, Ministry of Agriculture (in cooperation with a Repr. of Jordan Dev. Bd.), shall make specific recommendation of feasible livestock operations urging (1) such customs protection as is reasonable and necessary for the protection of a livestock industry in Jordan, and (2) such changes in cropping patterns in Jordan as are called for. This recommendation will be turned over to the Rural Development Department to get appropriate private action.
- costs : The cost of the feasibility study is estimated at JD 5,000.
- financing : Out of funds presently available for feasibility studies.

Specific Proposal No. A11

- a proposal for the improvement and expansion of veterinary services in Jordan.
- to be done :
- 1) Expanding livestock production on a scientific basis in Jordan will quickly bring growing importance and expanding responsibilities to the Veterinary Department, Ministry of Agriculture. Therefore, prior to January 15, 1962, the Director, Veterinary Department (in cooperation with a Repr. of Jordan Dev. Bd.) will develop a pro-

THE PROGRAM FOR AGRICULTURE

- gram for the improvement and expansion of veterinary services in Jordan. This program will include :
- a) Consideration of the economic gain to be derived from each activity suggested. No activity will be submitted unless gains exceed costs by a satisfactory margin.
- b) Anticipation of a changing animal and fowl population in Jordan and the need for quality therein.
- c) Recommendations for the timing of the various parts of the program.
- d) Estimates of program costs by year.
- e) An indication of needs for foreign experts and/or for training abroad, these needs specifically tied to the program proposed.
- 2) Activities under the program developed under 1., above, are the responsibility of the Veterinary Department.
- 3) Prior to December 31 each year, the Director, Veterinary Department (in cooperation with a Repr. of Jordan Dev. Bd.) shall review the actual operation of the program and revise the program in light thereof.
- costs : Costs are to be specifically developed under 1, above. Preliminary estimates for purposes of this program are as follows (in thousands of Jordan dinars):

	1963	1964	1965	1966	1967	Total
	JD.	JD.	JD.	JD.	JD.	JD.
Salaries & misc. expenses	5.0	7.5	10.0	10.5	12.0	45
Capital expenditures	10.0	10.0	10.0	10.0	10.0	50
Foreign experts	7.0	14.0	14.0	7.0	7.0	49
Training abroad		4.6	4.6	4.6	4.6	18.4
Total	22.0	36.1	38.6	32.1	33.6	162.4

- financing : Salaries, misc. exp., and capital expenditures — Budget, Jordan Government. Foreign experts — external sources, grants. Training abroad — external sources, grants.

Specific Proposal No. A12

- a proposal for planning to improve the management of range lands.

CHAPTER III

— to be done :

1) The quantity and quality of range land will be improved (1) with large scale afforestation, and (2) desert dams (when built by the Central Water Authority). This range land should be carefully managed for optimum results. Therefore, prior to July 1, 1962, a Committee of five [(1) Repr. of Animal Husbandry Dept., (2) Repr. of Rural Dev. Dept., (3) Repr. of Jordan Dev. Bd., (4) Repr. of Res. Dept., and (5) Repr. of Dept. of Forests — Chr.] shall be constituted to perfect plans for range management and control of grazing. The Committee's deliberations shall include :

- The assumption that grazing on public lands is a privilege, not a right, to be granted only to those which meet proper standards.
- Development of criteria for determining the number of animals to be allowed to graze for what periods on lands of various types.
- Giving priority in grazing rights to breeds best adapted for production in Jordan and to flocks which are best managed to maximize production.
- Development of an organization for range management, recommending foreign experts if required.

2) The Committee shall present its plans in writing to the Jordan Development Board prior to September 1, 1962. The Board shall then act as it deems appropriate in light of the plans presented to it.

— costs : None not covered in budgets at present levels.

— financing : No additional funds required.

Specific Proposal No. A13

— a proposal to establish hay-baler centers to harvest wild grasses now growing on government land in the valleys.

— to be done :

The Animal Husbandry Department, Ministry of Agricul-

THE PROGRAM FOR AGRICULTURE

ture, and the Deir Alla Research Station have already begun a modest program of harvesting wild grasses on government land for sale as feed in drouth areas. Based on this program and prior to December 15, 1961, the Director, Animal Husbandry Department (in cooperation with a Repr. of Jordan Dev. Bd.) will perfect plans for the expansion thereof and for the systematic sale of the resultant product. He will then proceed to implement the program on the basis of these plans.

— costs : JD 4,500 per annum.

— financing : Budget, Jordan Government, with reimbursement from sale.

Specific Proposal No. A14.

— a proposal to expand the size and number of agricultural Credit and Thrift Cooperatives to allow them to take over so far as possible from the Agricultural Credit Corporation the burden of supplying seasonal (short-term) credit to farmers.

— to be done :

1) The Department of Cooperative Development, Ministry of Social Affairs, now possesses detailed plans for the expansion of agricultural Credit and Thrift Cooperatives. Ignoring here problems of organization and control (covered in «The Program for Social Affairs»), these plans call for making funds available to the 232 existing agricultural Credit and Thrift Cooperatives and to 300 new ones to be established as follows :

(in thousands of Dinars)

	1963	1964	1965	1966	1967	Total
<u>No. to be</u>						
formed	40	60	65	65	70	300
expanded	232	272	332	397	462	
<u>Capital Required for Loans</u>	<u>JD</u>	<u>JD</u>	<u>JD</u>	<u>JD</u>	<u>JD</u>	<u>JD</u>
from paid-up Capital						
and Surplus	59	82.5	86.6	171.4	154.6	554.1
from A.C.C.	239	291.3	340.8	366.9	526.5	1,764.5
Total	298	373.8	427.4	538.3	681.1	2,318.5

CHAPTER III

2) It is herewith recommended that funds be made available annually prior to May 1, by the Agricultural Credit Corporation to the Jordan Central Cooperative Union for distribution to agricultural Credit and Thrift Cooperatives subject to (1) the availability of funds to the A.C.C., (2) a showing satisfactory to the A.C.C. that the funds are needed, disbursed under adequate control, and adequately supervised, and (3) the concurrence in writing of the Jordan Development Board.

— costs and financing : As given in Table above and in Specific Proposal Social Affairs I. See **Specific Proposal A3** for Financing and Agricultural Credit Organization.

Specific Proposal No. A15.

— a proposal to establish a Farm Indebtedness Board to (1) register all existing agricultural debt, (2) restate and readjust this indebtedness, and (3) register and regulate all future agricultural lenders.

— to be done :

1) Prior to February 1, 1962, a Committee of six ((1) Repr. of Min. of Agrl., (2) Repr. of Min. of Nat'l Econ., (3) Repr. of Min. of Justice, (4) Repr. of Jordan Dev. Bd., (5) Repr. of Land and Surveys Dept., and (6) Repr. of Agri. Credit Corp., Chr.) shall be constituted to draft legislation creating a Farm Indebtedness Board which shall be empowered to :

a) Provide for the registration prior to given date of all loans granted in the past for agricultural purposes, no loan not so registered to be legally collectable after the expiration of the registration period.

b) Establish procedures and tribunals for restatement and readjustment of agricultural indebtedness along the lines of the law of Cyprus, 1940.

c) Set machinery and rules for the registration and regulation of agricultural lenders in the future.

2) The Committee shall present its report and draft legislation to the Council of Ministers not later than March 1, 1962. Upon approval by that body, the draft legislation

THE PROGRAM FOR AGRICULTURE

shall be presented for parliamentary approval as required.

— costs : To be estimated by the Committee. A rough estimate for purposes of this program and for administration only is JD 7,500 per year for fiscal 1964-65-66.

— financing : Budget, Jordan Government.

Specific Proposal No. A16.

— a proposal to expand the staff of Lands and Surveys Department.

— to be done :

1) The Lands and Surveys Department is now confronting two big jobs which should be completed promptly : (1) To assist in the land settlement program in the East Ghor. This work will require increasing effort for some time, particularly inasmuch as the document recommends the construction of Stage 2 of the project. (2) To complete the land settlement program on the West Bank so that land ownership can be identified. This will allow much more orderly procedures in dealing with many farm problems. The Lands and Surveys Department will need to be expanded if undue delays are not to result.

2) Prior to February 15, 1962, the Director, Lands and Surveys Department (in cooperation with a Repr. of Jordan Dev. Bd.) shall formulate specific requests for meeting the minimum staff and training needs to accomplish the tasks indicated above. Every effort will be made to secure the views of the U.N. Public Administration Advisor and to be guided by them.

— costs : Costs will be detailed in the future under 2., above. Estimated for this program document as JD 16,000 per annum.

— financing : Budget, Jordan Government.

Specific Proposal No. A17.

— a proposal to (1) regularize the flow to Jordan for sale in

CHAPTER III

Jordan of U.S. surplus agricultural commodities under P.L. 480, and (2) to make development funds available from the proceeds thereof.

— to be done :

- 1) Prior to March 1, 1962, the Jordan Dev. Bd. shall prepare a study detailing regular shipments of U.S. agricultural products which — if available free — Jordan can utilize for local sale and the generation of local currency for economic development. This study shall:
 - a) Estimate average wheat requirements (excluding UNRWA needs) and average wheat production, assuming import of regular quantities equal to the difference thereof. (This assumes storage during years of high local production, sale from storage during poor years. To assure a regular flow of development funds, borrowing against stored wheat will be resorted to).
 - b) Estimate growing animal feed requirements (with growing dairy herds, growing poultry flocks, and expanded scientific feeding generally) which can be met from imported feeds (barley, corn, oats, etc.). For some items, this may again require storage during years of high local production.
 - c) Estimate requirements for all other products which might be available under the program.
 - 2) Prior to March 1, 1962, the Jordan Dev. Bd. shall enter into negotiations with USOM/J to obtain assurances of the regular shipments of agricultural commodities as determined under 1., above.
 - 3) As soon as assurances of commodities' availability is received from USOM/J, the Jordan Development Board shall undertake to see to it that the necessary administrative machinery and storage facilities are made available to the efficient operation of the program.
 - 4) Expenses of the program shall be paid from the receipts therefrom. All other receipts shall be allocated to the Agricultural Credit Corp. for its loan program.
- costs and financing : To be covered out of program receipts.

CHAPTER IV

THE PROGRAM FOR FISHERIES

Jordan's imports of fish

- are substantial, valued at JD 275,000 in 1959.
- rising regularly, imports of fresh fish having increased in value by two and a half times between 1952 and 1959.

Jordan's production of fish

- is small, valued at JD 9,000 in 1959.
- was, not until recently, tending to rise. Tonnage in 1959 was lower than in 1952. However, tonnage rose from 67 to 113 tons from 1959 to 1960 and is expected to exceed 150 tons in 1960.

While demand for fish in Jordan is likely to rise

- in continuation of past trends.
- in view of present low levels of per capita fish consumption of less than 10 per cent of that in all O. E. E. C. countries.
- with rising levels of income and of increasing urbanization accompanying economic development.

An expansion of Jordan's fish catch offers directly

- an increase in production and in national income — in Jordan.
- additional employment and an exploitation of an available natural resource now largely unused.

CHAPTER IV

- the substitution of local production for imports and a consequent improvement in the balance of trade.

Indirect advantages of an expansion of Jordan's fish catch include

- the possibilities of value-increasing, employment-increasing, processing by cleaning, filleting, salting, drying, smoking, canning, or freezing and packaging.
- the furnishing of fish meal as a poultry and animal feed to support an expansion of poultry and livestock production.

The desired expansion of fish production in Jordan can come from both

- deep-sea fishing in the Gulf of Aqaba and the Red Sea.
- inland fish ponds.

The program for an expansion of Jordan's fisheries now requires:

- 1) Immediate satisfactory agreements on fishing rights with the Saudi Arabian and U. A. R. governments.

Fishing from small boats in waters now known to contain fish in commercial quantities means fishing in the coastal waters of Saudi Arabia and Egypt. Present agreements with these countries do not afford dependable fishing rights to Jordanian fishermen.

See **Specific Proposal No. Fi 1.**

- 2) A crash program to encourage and enable the Jordan Fisheries Company to quickly expand its catch to 300 tons per year. Jordan's fish production now falls so far short of current consumption that an approximate doubling of present output seems possible within a year and without detailed study.

This crash program is suggested by **Specific Proposal No. Fi 2.**

- 3) A long-range program for the expansion of deep-sea fishing by Jordanians.

A long-range commitment to expansion of deep-sea fishing by Jordanians sufficient — along with the potential production of fish ponds — to meet all domestic needs requires a

THE PROGRAM FOR FISHERIES

detailed feasibility study by qualified experts. This should be begun promptly.

See **Specific Proposal No. Fi 3.**

- 4) A long-range program for fish pond development.

Fish can be supplied domestically from fish ponds as well as by deep-sea fishing. Economic and technical problems related thereto should, however, be carefully studied and projects actually begun only after their feasibility has been clearly established.

See **Specific Proposal No. Fi 4.**

Specific Proposal No. Fi 1

- a proposal to clearly establish rights of Jordanian fishermen in the coastal waters of Saudi Arabia and the U. A. R.
- to be done:

Prior to February 15, 1962, the Ministry of Foreign Affairs (working with a Representative of the Jordan Development Board and a Representative of the Jordan Fisheries Co.) shall if possible negotiate a firm agreement with Saudi Arabia and with the U.A.R. allowing Jordanian fishermen adequate rights in the coastal waters of these countries.

- costs and financing: None not covered in current budgets.

Specific Proposal No. Fi 2.

- a proposal for a crash program to encourage and enable the Jordan Fisheries Company quickly to expand its catch to 300 tons per year.
- to be done:

- 1) Prior to January 15, 1962, a Committee of three ((1) Repr. of Jordan Dev. Board, (2) Repr. of Jordan Fisheries Co., and (3) Repr. of Min. of National Economy — Chr.) shall be constituted with the purpose of taking such actions as necessary to increase the Jordanian fish catch to an annual rate of 300 tons prior to January 1, 1963.

- 2) The Committee shall survey the immediate needs of the Jordan Fisheries Company with a view toward additional

CHAPTER IV

government investment in the company to meet them. These needs should be determined and met as soon as possible.

- 3) If the Jordan Fisheries Company seems unwilling or unable, to move vigorously toward the achievement of the goals set herein, the Ministry of National Economy shall move to obtain a controlling interest in the company or to encourage the entry of a new company in the field.

— Costs : Must be worked out by the Committee as noted above. A rough estimate for purposes of this program suggests that JD 35,000 be set aside for investment in the Jordan fishing Company during fiscal 1963.

— Financing: Budget, Government of Jordan.

Specific Proposal No. F1 3

— a proposal for a full-scale feasibility study of marine fisheries and related activities in order to provide a long-range program for the expansion of deep-sea fishing by Jordanians:

— to be done:

- 1) Prior to March 1, 1962, the Jordan Development Board shall have prepared and mailed invitations to tender for a full-scale feasibility study of the marine fisheries. It will ask that the study include the following:
 - a) An examination of present and future markets for fish in Jordan and for exports including an analysis of consumer preferences for certain species.
 - b) An analysis of the quantities and species of fish to be found in the Gulf of Aqaba and in the accessible parts of the Red Sea.
 - c) A detailed consideration of the type of ships and tackle and mode of operation best suitable to market and supply conditions.
 - d) The recommendation of processing, transportation, or marketing developments now required, or likely to be required in the next ten years.
 - e) A statement of needed legislation and/or international agreements.

THE PROGRAM FOR FISHERIES

- f) A recommendation as to required foreign consultants and the sources thereof.
 - g) An indication of training required by the staff.
 - h) Estimates of revenues and expenditures for the next ten years for a fishing company using optimum methods.
 - i) Estimates of the capital needs over the next ten years of the fishing company referred to in h, above.
- 2) Prior to June 1, 1962, the Jordan Development Board shall have selected an agency to make the feasibility study and shall have let the contract therefor. The study shall be completed prior to April 15, 1963.
 - 3) After the study has been received and assuming its results to be such as to require a further expansion of fisheries activities, then:
 - a) If the Jordan Fisheries Company has been making satisfactory progress (See Specific Proposal No. F1. 2), the study will be turned over to it for implementation. The government will stand ready — as appropriate — to make additional funds available to the Company through the (proposed) Industrial Development Corporation, taking in addition a stock interest equal in value to the cost of the feasibility study.
 - b) If the Jordan Fisheries Company has not been making satisfactory progress, or does not choose to expand as indicated by the report, the Ministry of National Economy shall move to buy control or to stimulate the organization of a new company to do so.
 - c) In either case, the expanded fisheries company should select and appoint a highly qualified manager with wide knowledge of all aspects of fishing operations, processing, and marketing. He should be given wide freedom of action. The Board of Directors should meet only infrequently to concern itself with policy matters. Members of the Board should not give instructions to the manager except to convey decisions reached at meetings of the Board.

CHAPTER IV

- Costs : Of feasibility study, estimated at a minimum of JD 5,000. Of expansion of fisheries operations, not now estimated.
- Financing : Of feasibility study, out of funds now available for such studies. Of expansion, out of funds available to (proposed) Industrial Development Corporation.

Specific Proposal No. Fi 4.

- a proposal for a feasibility study of fish pond development.
- to be done:
 - 1) Prior to March 1, 1962, the Jordan Development Board shall have prepared and mailed invitations to tender for a technical study of fish pond development. It will ask that the study include the following:
 - a) An investigation of water availability and suitable sites for fish ponds in Jordan. Thirty to fifty of the best sites in Jordan should be specifically recommended if available.
 - b) The development of specifications for the construction of typical fish ponds together with estimates of the cost thereof.
 - c) Instructions for the operations of fish ponds, including considerations governing the choice of species.
 - d) A consideration of methods for ownership and operation of the ponds and for the provision of technical advice and financing.
 - e) An estimate of annual costs and of fish outputs adequate to allow a determination of the price of fish at which the operation becomes profitable. (Other aspects of a market study will be done under the provisions of Specific Proposal No. Fi 3).
 - 2) Prior to May 15, 1962, the Jordan Development Board shall have selected the agency to make the feasibility study and shall have let the contract thereof. The study shall be completed prior to April 15, 1963.
 - 3) After the study has been completed, it will be turned over

THE PROGRAM FOR FISHERIES

- to the appropriate agency for implementation (per the recommendation developed under I.d., above).
- Costs : Of feasibility study, estimated at JD 3,000. Of construction and operation of ponds, not now estimated.
 - Financing: Of feasibility study, out of funds now available for such studies. Of construction and operation of ponds, out of funds available as appropriate either to the Agricultural Credit Corporation or to the (proposed) Industrial Development Corporation.

THE PROGRAM FOR FORESTRY

The current value for forest products in Jordan is only about JD 300,000 per year.

At the same time, vast areas — hundreds of thousands of dunums once tree covered — lie barren of trees and

- valuable water which could be held in the soil flows unused into the sea and the water table falls.
- irreplaceable top soil washes away.
- low lands are subject to damaging floods.
- men stand unemployed, or underemployed.
- imports of wood and wood product total more than one million dinars per year and can be expected to increase.

And, in recent years and in the face of great need, areas newly planted to trees have totalled less than 5,00 dunums per year.

A large-scale afforestation program in Jordan is therefore necessary to:

- 1) Directly expand production — and income — opportunities by the production and sale of forest products.
- 2) Indirectly expand production — and income — opportunities by
 - providing additional, more productive crop land by reducing erosion in the uplands, flood damage in the lowlands and silting in irrigation projects.

CHAPTER V

- raising the water table and thus improving the supply of water for domestic, industrial, and irrigation uses.
 - providing a local raw material for cutting, transport, and fabrication in Jordan.
 - providing additional pasture in forest areas.
- 3) Increase employment opportunities in
- planting of forest.
 - care and administration of forest areas, including pasture as it develops.
 - cutting of trees.
 - fabrication of wood products.
 - agriculture as water and land are conserved.
- 4) Reduce imports of wood and wood products via the production of local substitutes.

Proposals for increasing the quantity and usefulness of forest (wooded) areas in Jordan include:

- 1) Surveys to specify areas and species for forest development (and to establish priorities for afforestation and related range development).

It is clear that large-scale afforestation programs should be carefully planned if optimum results are to be achieved. It is equally clear that needs are so great that work should begin very soon. Both short-range and long-range studies are therefore recommended — the first to provide good intelligence for an immediate start, the second to define the entire job. Required are:

- a) A crash program by the Department of Forests, Ministry of Agriculture to produce data from existing sources sufficient to identify 175,000 dunums of state domain to be afforested with proper species during the period of the 5-year Program.

See **Specific Proposal No. F1**

- b) A more-detailed, longer-range, forest inventory and catchment study by the Department of Forests, Ministry of

THE PROGRAM FOR FORESTRY

Agriculture. The assistance of the United Nations Special Fund has been asked for this study.

See **Specific Proposal No. F2**

- c) A market study establishing present and future wood requirements. This study should be arranged for soon by the Jordan Development Board in order that species may be selected in light thereof.

This study is provided for by **Specific Proposal No. F3**.

- 2) The specification of a recommended tree planting program for villages and for individual farmers.

In addition to afforestation of state lands, private plantings are also necessary (as a conservation, pasture-improving measure) and profitable (as a wood-provider). Such plantings must, however, be undertaken using proper methods and species on land appropriate for the purpose. The Department of Forests, in cooperation with the Research and Rural Development Departments, must therefore develop a carefully-considered program.

Procedures for program development are spelled out in **Specific Proposal No. F4**.

- 3) The large-scale planting of trees.

If the very large need for afforestation in Jordan is to be met, a substantial start must be made immediately. The projects indicated below provide for the planting of trees on about 225,000 dunums over the next five years. All of these projects are primarily the responsibility of the Department of Forests, Ministry of Agriculture.

- a) A project on state lands designed to afforest 175,000 dunums between April 1, 1962 and March 31, 1967.

See **Specific Proposal No. F5**.

- b) A project along perennial wadis (on both public and private land) which will yield approximately 24,000 dunums of woodland. This project contemplates the planting of quick-growing varieties which will yield a saleable product in from 4 to 6 years. At the same time, this planting will hold soil along stream banks in place.

CHAPTER V

See **Specific Proposal No. F6.**

- c) A project for village woodlots intended to provide forests of at least 50 dunums each for 500 villages.

See **Specific Proposal No. F7.**

- 4) The provision of high-quality, low-cost seedlings in numbers necessary for the program.

No afforestation program can proceed without the prior growing of good seedlings of the proper species available at the right place and time. The provision of seedlings requires careful prior planning and vigorous execution. It is the responsibility of nurseries operated by the Department of Forests, Ministry of Agriculture.

Specific Proposal No. F8 details measures to provide proper seedlings.

- 5) Forestry education in the schools.

Forest development takes a long time. Many of its benefits — such as soil conservation, flood control, and the raising of the water table — are neither obvious nor direct. As a result, forestry education must stress needs and benefits as well as techniques of planting, care, and cutting.

Forestry education is needed at all levels. At the primary and preparatory levels, it should concentrate on what the individual farmer and citizen needs to know — and to do — about forest development. At the agricultural secondary schools, it should provide practical as well as theoretical training sufficient to allow the student to do effective extension work relating to woodlot development and afforestation. If an agricultural college is organized, it should provide special work in forestry adequate to provide specialists for the Department of Forests. Recommendations for improved forestry education are contained in «The Program for Education».

- 6) An extension program for forestry.

Extension work related to forestry has two aspects: (1) It recommends and assists the proper planting, care, and cutting of private and village woodlots. (2) It recommends and assists in the proper grazing pasture use of forest areas. To

THE PROGRAM FOR FORESTRY

avoid duplication and to make full use of the existing extension organization, forestry extension work should be among the specific responsibilities of the Rural Development Department, Ministry of Agriculture, assisted by the Department of Forests.

Specific activities relating to extension for the Department of Forests are indicated in **Specific Proposal No. F9.**

- 7) A program for the improvement of legislation and regulation.

See **Specific Proposal No. F10.**

- 8) The provision of necessary staff, organization, overhead, and training.

The programs indicated above will require much of the Department of Forests. Careful consideration will need to be given to its needs for staff, for organization, and for training if it is to meet its responsibilities.

Specific Proposal No. F11 establishes procedures for meeting these needs.

Ornamental tree plantings in municipalities, along highways, or at tourist sites are not a part of «The Program for Forestry». These desirable activities are the responsibilities of such other agencies as (1) municipalities, (2) road building and/or maintenance crews, and (3) the Department of Antiquities. The Department of Forests should not dissipate its capacities by giving attention to them although it may provide seedlings at cost for them.

Specific Proposal No. F1.

- a proposal to provide quick identification of 175,000 dunums to be afforested between April 1, 1962 and March 31, 1967, and to cost and schedule appropriate planting thereon.

— to be done:

- 1) Prior to March 1, 1962, the Director, Department of Forests (in cooperation with a Repr. of Jordan Development Board) shall prepare a program for afforestation of 175,000 dunums in five years (25,000 dunums in fiscal 1963, 30,000 in fiscal 1964, 35,000 in fiscal 1965, 40,000 in fiscal 1966, and 45,000 in fiscal 1967). This program shall:

CHAPTER V

- a) Specify areas to be planted each year. The number of areas to be planted should be few, large, and — if possible — near adjacent forests. Such selection will increase planting efficiency and lower guarding cost. Preference in choice of sites shall be given to those (1) with soil and climate known to be suitable, (2) promising greatest soil and water conservation benefits, (3) offering greatest ease of access, and (4) with available labor.
 - b) Specify species and number of seedlings to be planted in each area.
 - c) Specify number of workers, and duration of employment required for preparation and planting at each site. Preparation work should be spread over the entire dry season after the spring harvests in order to minimize the supervisory staff and to give workers continuous employment through half of the year.
 - d) Specify estimated costs of preparation and planting at each site and estimated costs of subsequent guarding.
- 2) Prior to December 31 each year, the Director, Department of Forests (in cooperation with a Repr. of Jordan Development Board), shall review actual planting progress and results and revise the program of afforestation in light thereof.

— costs : No additional assignable costs inasmuch as the work will be done with existing staff and budget.

— financing : Current budgets.

Specific Proposal No. F2.

— a proposal for a detailed, long-range, study of (1) existing forest areas, and (2) the afforestation — such studies being supplemented by (1) establishment of a forestry research program, (2) demonstration areas, and (3) experimental forestry work in the South.

— to be done:

- 1) Prior to January 1, 1962, the Director, Department of Forests (in cooperation with a Repr. of Jordan Development Board) will revise an existing project draft (Amended

THE PROGRAM FOR FORESTRY

Version, Special Fund Project — Jordan, «Forestry, Range, and Catchment Study of Northern Jordan and Establishment of an Experimental Training Section in the South», dated April, 1961) submitted to the United Nations Special Fund. The revised draft should include provisions for:

- a) A forest inventory which will establish (1) the areas and conditions of present forest areas, (2) cutting schedules, (3) forest hygiene needs and methods, and (4) additional planting needs.
 - b) A catchment survey of the entire northern region (covering both state and private lands) producing not only recommendations as to areas to be afforested but comprehensive recommendations for changes in land use patterns (including specific practical suggestions for methods of achieving them).
 - c) The establishment of training and demonstration units in areas in which considerable change is recommended in the use of privately owned land. The units should operate under F. A. O. supervision for at least three years.
 - d) The establishment of a small, continuing, long-term forestry research program concentrating on nursery methods (including containers, soils, fertilization, and watering), soil preparation, choice of sites and species, forest pests and diseases, and cutting policy. A part of this program will include determining what sites and species are suitable for planting in the South (followed by a demonstration and training station there if required).
 - e) A few fellowships for forestry training abroad (in addition to local training provided in centers established in part for that purpose). The revision need not include a wood consumption survey which is otherwise provided for by Specific Proposal No. F3.
- 2) Immediately upon completion of the revised draft, it will be submitted to the United Nations' Special Fund and every effort will be made to get a firm commitment from that

CHAPTER V

agency for support thereto. Such trips aboard as may become necessary for this purpose will be authorized.

- 3) Assuming the commitment of the Special Fund to the project, the Director, Department of Forests, will be designated Co-Manager of the project (along with an F. A. O. representative) and selected members of the Department of Forests staff will be assigned to it. In addition, the Director, Department of Forests (acting for the Government of Jordan) will make certain necessary facilities available to the project and to the F. A. O. experts assigned to it.
- 4) Prior to the start of work under this project, the Director, Department of Forests (in cooperation with a Repr. of Jordan Development Board) shall summarize additional budget requirements if he is to successfully carry both his other activities and this project.
- 5) To (1) improve on-going coordination with related agencies, and (2) encourage early preparation of plans for continuing projects, the Director, Department of Forests and Repr. of F. A. O. shall meet with Repr. of Jordan Dev. Bd. to review progress and explore needs at least once every six months.

— costs : A detailed cost calculation will be developed as part of the revised project draft referred to under 1., above. For purposes of this program, total costs are estimated at JD 235,000 of which the United Nations' Special Fund is assumed to contribute JD 130,000. Of Jordan's JD 105,000 contribution, JD 45,000 beyond the current budget level of the Department of Forests is estimated. Assuming that the project begins September 1, 1962, costs are estimated as follows (in thousands of dinars):

FOR FISCAL YEARS ENDING MARCH 31

	1962	1964	1965	1966	1967
External sources, grants (1)	18	39	39	27	7
Budget, Government of Jordan (2)	7	15	15	8	-

- 1) Includes for 1966 and 1967 one FAO technician to supervise operation of training and demonstration units after conclusion of basic study.
- 2) Costs in addition to present budget only. Total values of Jordan's contribution to the study will be JD 105,000.

THE PROGRAM FOR FORESTRY

— financing: As above.

Specific Proposal No. F3.

— a proposal for a market study to establish present and future wood requirements in Jordan.

— to be done:

- 1) Prior to February 1, 1962, the Jordan Development Board shall prepare and mail invitations to tender for a market study for wood and wood products in Jordan. This study will include:
 - a) An inventory of wood production and imports and the uses made thereof in Jordan.
 - b) An inventory of wood product imports into Jordan.
 - c) A forecast of demand for wood and wood products in Jordan in 1965, 1970 and 1975.
 - e) Suggestions as to wood product industries which might prove profitable in Jordan which might therefore be subjected to feasibility study.

2) Prior to May 1, 1962, the Jordan Development Board shall have selected an agency to make the market study and shall have let the contract therefore. The study shall be completed prior to February 15, 1963. The results of this study shall be made available to the Director, Department of Forests and to other interested ministries and departments for appropriate action.

— costs : Estimated at JD 2,000.

— financing : Out of funds now available for feasibility studies.

Specific Proposal No. F4.

— a proposal for the specification of desirable private planting of trees.

— to be done:

- 1) Prior to June 1, 1962, the Department of Forests shall develop specific recommendations for desirable private tree plantings adequate to provide a basis (1) for the establishment of village woodlots as recommended by

CHAPTER V

Specific Proposal No. F7, (2) plantings on private lands along perennial wadis as recommended by Specific Proposal No. F6, and (3) an extension program with farmers as recommended by Specific Proposal No. F9. These recommendations should be submitted to the Repr. of Jordan Development Board and the Representative of R.D.D.

- 2) Prior to July 1, 1962, a Repr. of Jordan Development Board and a Repr. of Rural Development Department shall submit their views in writing to Director, Forest Department. Copies of final recommendations will be sent to all other interested agencies.

- costs : No additional costs. Work to be carried by existing staffs and budgets.
- financing : Within current budget levels.

Specific Proposal No. F5.

- a proposal to afforest 175,000 dunums in the five years beginning April 1, 1962.
- to be done:

- 1) Prior to February 1, 1962, the specification of areas and species to be planted together with a schedule therefor. See Specific Proposal No. F1.
- 2) The expansion of seedling production. See Specific Proposal No. F8.
- 3) The Department of Forests — per the program prepared under Specific Proposal No. F1 — will be responsible for planting and policing the designated areas.

- costs : To be developed in detail as part of the activities covered by Specific Proposal No. F1. However, excluding expanded nursery costs (covered by Specific Proposal No. F8), preliminary estimates for purposes of this report are as follows (in thousands of dinars):

THE PROGRAM FOR FORESTRY

FOR FISCAL YEARS ENDING MARCH 31

	1963	1964	1965	1966	1967
Preparation and planting (1)	75	90	106	120	135
Guarding (2)	—	2	4	7	10
Vehicles (Five Tank Trucks)	2	2	2	2	2
Facilities (Cisterns, Roads)	5	5	5	5	5
	82	99	116	134	152

- 1) Estimated at JD 3 per dunum.
- 2) Estimated at JD 400 for each 5,000 dunums.

- financing : Budget, Government of Jordan.

Specific Proposal No. F6.

- a proposal to plant trees on 24,000 dunums along the banks of perennial wadis.

- to be done:

- 1) Prior to October 1, 1962 (and providing that prior deliberation under Specific Proposal No. F4 discloses that tree plantings in perennial wadis is desirable), the Director, Department of Forests (in cooperation with a Repr. of Jordan Development Board) shall prepare a program for planting (on both public and private land) fast-growing, saleable species of trees (e.g., eucalyptus, poplar) along 400 kms. of wadis. (Considering both sides of the wadi, 800 kms. of wadi banks are to be planted. On the basis that each km. of bank will provide the equivalent of 30 dunums for planting, the program envisages the planting of 24,000 dunums — 3,000 dunums in fiscal 1964, 5,000 in 1965, 7,000 in 1966, and 9,000 in 1967). This program shall be prepared along lines specified in Specific Proposal No. F1.

- 2) Plantings per the program developed under 1., above, are the responsibility of the Department of Forests. However, plantings on private holdings shall be carried out under the terms of the Compulsory Afforestation Law which is pending.
- 3) Guarding of trees on public land is the responsibility of

CHAPTER V

the Department of Forests, of trees on private land of the owner thereof.

- 4) Prior to December 31 each year, the Director, Department of Forests (in cooperation with a Repr. of Jordan Development Board) shall review actual planting progress and results and revise the program in light thereof.

— costs : To be developed in detail as part of the activities under 1., above. However, excluding expanded nursery costs (covered by **Specific Proposal No. F8**), preliminary estimates for purposes of this report are as follow (in thousands of dinars):

FOR FISCAL YEARS ENDING MARCH 31

	1964	1965	1966	1967
Preparation and planting (1)	15	25	35	45
Guarding	-	1	2	3

1) Estimated at JD 6 per dunum with JD 3 per dunum charge on private owners.

— financing : Budget, Government of Jordan (NOTE: Revenue can be expected from sale of wood in years immediately following).

Specific Proposal No. F7.

— a proposal to provide forests of at least 50 dunums each for 500 villages.

— to be done:

- 1) Prior to December 1, 1962 (and providing that prior deliberation under **Specific Proposal No. F4** confirms the desirability of village woodlots), the Director, Department of Forests (in cooperation with a Repr. of Jordan Development Board) shall prepare a program whereby woodlots will be planted with the cooperation of 500 villages in Jordan — 50 villages in fiscal 1964, 100 in 1965, 150 in 1966, 200 in 1967. This program will:

THE PROGRAM FOR FORESTRY

a) Specify the area from which villages will be selected each year. Villages from only one area should be selected each year to minimize costs. Preference in choice of areas shall be given to those (1) with soil and climate known to be suitable, (2) promising greatest conservation and potential pasture benefits, and (3) expressing the greatest willingness to cooperate.

b) Develop a procedure whereby — for each village — (1) the Village Council and the Department of Forests, with the District Governor as a third party, agree to cooperate in planting a plot of at least 50 dunums of public land to trees, (2) the Village Agent of the Rural Development Department selects the land, supervises its preparation, orders the seedlings, and then supervises their planting — all within a framework of general supervision of the Department of Forests, (3) the village school agrees to coordinate teaching of forestry with the actual planting plans and perhaps to have its students participate in the actual work of preparation and planting, (4) the Department of Forests supplies seedlings free and contributes one JD per dunum toward planting costs, and (5) the village agrees to guard the forest area for a period of five years.

2) The Department of Forests is responsible for implementing the program developed under 1., above.

3) Prior to December 31 each year, the Director, Department of Forests (in cooperation with a Repr. of Jordan Development Board), shall review actual progress under the program and revise subsequent plans in light thereof.

— costs : Excluding expanded nursery costs (covered by **Specific Proposal No. F8**) while assuming each village plot to be 50 dunums, cost will be JD 2,500 in fiscal 1964, JD 5,000 in 1965, JD 7,500 in 1966, and JD 10,000 in 1967.

— financing : Budget, Government of Jordan.

Specific Proposal No. F8.

— a proposal for an expansion of production of high-quality, low-cost seedlings.

CHAPTER V

-- to be done :

- 1) Prior to December 31, 1961, the Director, Department of Forests (in cooperation with a Repr. of Jordan Development Board), shall prepare estimates of seedling requirements by species and by year for the program year. He shall take account of seedling needs (1) for the planting of 175,000 dunums of state land as proposed by Specific Proposals Nos. F1 and F5, (2) for plantings along perennial wadis as suggested by Specific Proposal No. F6, (3) for village woodlots as required by Specific Proposal No. F7 (4) for private plantings, and (5) for ornamental planting by municipalities and other governmental agencies.
- 2) Seedling requirements during fiscal 1963 are likely to be well within present nursery capacity and plans. The Director, Department of Forests, shall therefore proceed to produce seedlings for this year according to present procedures.
- 3) Seedling requirements for fiscal 1964 and following are likely to exceed present nursery capacity. Before expansion, the method of organizing the production of seedlings should be the subject of study with expert assistance. Prior to April 15, 1962, the Director, Department of Forests, (with the assistance of a Repr. Jordan Dev. Bd.) shall have made arrangements for a technical expert to study :
 - a) The optimum location and size of nurseries.
 - b) The efficient organization and staffing of nurseries.
 - c) The possibility of meeting a portion of total requirements via contract with private farmers.
 - d) The recommendation of standards for proper seedlings.
 - e) The estimation of costs for producing seedlings at several representative volume levels.
 - f) The recommendation of a pricing policy for private buyers.

THE PROGRAM FOR FORESTRY

- 4) Prior to May 15, 1963, and taking due account of the recommendations of the technical expert, the Director, Department of Forests, and the Director, Research Department, Ministry of Agriculture, shall agree in writing as to the standards to be specified for proper seedlings under the various programs. Copies of this agreement shall be made available to the (proposed) National Standards Institute and to the Jordan Development Board.

-- costs : Costs depend upon the number of seedlings required and the cost of their production, both factors to be developed under the program described above. Tentative cost estimates for purposes of this program are developed as follows.

SEEDLING REQUIREMENTS (in millions) FOR FISCAL YEARS ENDING MARCH 31

	1963	1964	1965	1966	1967
Specific Proposal No. F5	2.5	3.0	3.5	4.0	4.5
Specific Proposal No. F6	-	.6	1.0	1.4	1.8
Specific Proposal No. F7	-	.3	.5	.8	1.0
Private Plantings	.5	.6	.7	.8	.9
Ornamental Plantings	.1	.1	.1	.1	.1
Total	3.1	4.6	5.8	7.2	8.3

Assuming (1) that present budget funds are adequate to produce 3.1 million seedlings, and (2) additional seedlings can be produced for JD 4,000 per million, then additional nursery costs are JD 6,000 in fiscal 1964, JD 10,800 in 1965, JD 16,400 in 1966, and JD 20,800 in 1967. Technical expert is estimated to cost JD 2,000.

-- financing : Budget, Government of Jordan.

Specific Proposal No. F9.

- a proposal for extension activities of the Department of Forests.
- to be done :
 - 1) Under the provisions of Specific Proposal No. F4, techni-

CHAPTER V

cal recommendations for desired private tree plantings are to be developed. After these technical recommendations are completed and before September 15, 1962, the Department of Forests (in cooperation with the Rural Development Department) shall prepare a pamphlet for the use of extension agents and farmers covering the planting and management of private woodlots. This pamphlet should discuss in detail the choice of site and species, planting techniques, tree care, and cutting policies. Costs and benefits should be thoroughly examined.

- 2) The Department of Forests (in cooperation with the Rural Development Department and the Hashemite Broadcasting Service) shall develop two series of radio broadcasts.
 - a) Prior to October 1, 1962, for delivery during the period in which (1) a large-scale tree-planting on public land is getting underway per **Specific Proposals Nos. F1 and F5**, and (2) a large-scale study of forest needs is beginning per **Specific Proposal No. F2**, a series for the general public emphasizing the need for work in afforestation and the benefits which it will bring.
 - b) Prior to July 1, 1963, a series directed to farmers and based on the pamphlet prepared under 1., above. This, or a similar, series might well be repeated in subsequent years.
- 3) The Department of Forests (in cooperation with the Rural Development Department and a Repr. of Jordan Development Board) shall develop from time to time newspaper articles on all aspects of forestry work and land conservation. These articles should be tied to newsworthy forest developments but exploit every opportunity for broad public education.

— costs : Except as additional staff is requested under **Specific Proposal No. F11**, these activities will be carried by the existing staff and budget.

— financing : Current budgets.

Specific Proposal No. F10.

— a proposal for evaluating all legislation and regulations re-

THE PROGRAM FOR FORESTRY

lating to forest development in Jordan and for the recommendation of changes or additions thereto.

— to be done :

- 1) Prior to May 1, 1962, the Director, Department of Forests, shall prepare a memorandum summarizing all legislation and regulations relating importantly to the development of forests in Jordan and suggesting desired changes or additions thereto. He shall specifically consider :
 - a) Whether the present goat law is adequate together with measures to secure wider adoption and stricter enforcement.
 - b) Legislation and/or improved enforcement to reduce illicit grazing and cutting in both state forests and private woodlots.
 - c) Legislative needs to establish range control in forest areas.
 - d) The feasibility of promoting private afforestation by (a) allowing individuals to take title to any state domain on which they plant and care for seedlings to the satisfaction of explicit standards over a certain period, and (b) exempting from the payment of land tax any land having a slope of a specified percentage or more on which trees are planted and cared for to the satisfaction of specific standards over a certain period.
- 2) The memorandum prepared (see above) shall be referred to a Committee of six ((1) Repr. of Min. Agrl., (2) Repr. of Min. of Justice, (3) Repr. of Min. of Interior, (4) Repr. of Jordan Dev. Bd., (5) Repr. of Dept. of Lands and Surveys, and (6) Director of Forests — Chairman) for review and for comment in writing prior to June 1, 1962.
- 3) Prior to October 1, 1962, the Director, Department of Forests, working in cooperation with the Committee specified above, shall prepare such laws and regulations as are required. These laws and regulations shall be submitted for approval as appropriate.

CHAPTER V

- costs : No additional costs. Work to be carried by existing staff and budgets.
- financing : Current budget.

Specific Proposal No. F11.

- a proposal to provide necessary staff, organization, overhead, and training for the Department of Forests.
- to be done :

Prior to January 15, 1962, the Director, Department of Forests (in cooperation with a Repr. of the Jordan Development Board) shall examine this program for forestry and formulate specific requests for meeting the minimum staff, organization, overhead, and training needs of the Department of Forests. In formulating these requests, every effort will be made to secure the views of the U.N. Public Administration Advisor and to be guided by them.

Specifically to be considered is the possibility of obtaining foreign executive personnel to provide leadership to certain projects for which trained and experienced local personnel are not available.

- costs : Costs will be detailed later as indicated above. Rough estimates for purposes of this document are, however, made as follows (in thousands of dinars) :

	FOR FISCAL YEARS ENDING MARCH 31				
	1963	1964	1965	1966	1967
For staff and overhead	3.0	3.5	4.0	4.5	5.0
For training abroad	4.6	4.6	2.3	2.3	2.0
For foreign experts	7.0	14.0	14.0	14.0	7.0
	14.6	22.1	20.3	20.8	14.0

- financing : For staff and overhead — Budget, Government of Jordan.
For training abroad — External grants.
For foreign experts — External grants.

CHAPTER VI

THE PROGRAM FOR WATER

Jordan is an arid country which has serious water problems. Over 86 per cent of the land area receives an average annual rainfall of less than 200 mm; and water problems are made even more acute by the seasonality pattern of the rain which is received — the bulk of the rainfall is limited to the period from November to April, and it never rains during the summer months. In addition, there are wide variations in the amount of rain received from year to year and from one area to another. These variations give rise to unpredictable cyclical fluctuations in the output of agricultural commodities on rain-fed land and intensify the water problems of villages, towns, and cities.

Since water is of such prime importance to Jordan for domestic, industrial, and irrigation purposes, it is essential that the optimum development of available water resources be given a high priority position in the program of economic development.

Fortunately the possibilities for extensive water development are quite promising. Ground water resources have been tapped to only a limited extent and substantially increased supplies from this source can be expected as the program of exploration continues. Also the usefulness of surface water can be greatly increased through the development of holding and storage facilities. At present much of the surface water which originates in the winter and spring is not captured for later use but is permitted to flow unharnessed down the wadis.

CHAPTER VI

Two agencies now bear primary responsibility for water development in Jordan. They are (1) the East Ghor Authority for the development of irrigation from the waters available from the Yarmouk River or from other sources in the area irrigated thereby; and (2) the Central Water Authority for the development of all other water sources and areas.

Jordan's water program for the coming five years is to give major emphasis to:

- 1) The development of surface water;
- 2) The location of new sources of ground water;
- 3) The preservation and restoration of existing cisterns, wells, dams, irrigation channels, etc.;
- 4) The development of more rational distribution, conservation and treatment systems;
- 5) And the irrigation of the Jordan Valley.

A brief statement of the terms of reference of the CWA and of the East-Ghor Canal Authority will be helpful before turning to the descriptions of individual projects to be carried out by each agency.

The Central Water Authority was established by Law No. 51 for the year 1959; and it started limited operations on 1 June 1960, and assumed full scale operations in September 1960. According to the law the Central Water Authority was created for the purpose of, "Investigating, planning, establishing, promoting, implementing, constructing, and to the extent necessary, managing and operating a comprehensive program for development, conservation, protection, and control of the water resources of the Kingdom of Jordan, for maximum feasible use for domestic, municipal, livestock, industrial, irrigation, hydro-electric power and other beneficial purposes."

With such an all inclusive term of reference it must be supposed that all elements of water resource development with the exception of the East Ghor Canal Authority come under the CWA. For the purpose of the Five Year Plan it is considered proper that all water development costs of the Kingdom except those of the East Ghor Canal Authority shall be included under CWA presentation.

Brief descriptions of the individual projects and activities to be

THE PROGRAM FOR WATER

carried out by the CWA under the five-year program are included in **Specific Proposal No. W. 1.**

The East-Ghor Canal Authority was established by Law No. 13 for the year 1960. According to the law this Authority is given the responsibility "...of planning and constructing the East-Ghor Canal, of administering, maintaining, and carrying out all of the activities connected with the project, and of settling the disputes which may arise from the use of the waters of the Yarmouk river, the waters which come down to the project zone from the valleys, and the springs which are within the project zone which may be used in implementing the project."

Brief descriptions of the individual projects and activities to be carried out by the East-Ghor Canal Authority under the five-year program are included in **Specific Proposal No. W. 2.**

Specific Proposal No. W. 1

— a proposal for the expansion of activities of the Central Water Authority.

— to be done:

The Central Water Authority shall carry out the individual programs and activities described briefly below during the period, 1962-67. During this period monthly progress reports shall be submitted to the Jordan Development Board; and the Board shall present any comments thereon to the Director and to the Board of Directors of the CWA. Changes in the program below proposed by the CWA shall be submitted in writing at least one month in advance of the intended execution date to the Jordan Development Board for consideration and comment. In addition, the following committees shall also be appointed:

- 1) Prior to June 1, 1962, a Committee of four ((1) Repr. of Min. of Agr., (2) Repr. of Min. of Nat. Economy, (3) Repr. of Mun. Affairs Dept., (4) Repr. of Jordan Dev. Bd. — Chr.) shall be constituted to receive written reports prior to July 1 each year from the Director of the SWA on results of hydrological and ground water studies. The Committee shall, in turn, submit written comments thereon. The report and comments shall be forwarded to the Jordan Development Board for study and appropriate action.

CHAPTER VI

- 2) Prior to January 1, 1962, a Committee of five ((1) Repr. of Rural Dev. Dept., Min. of Agri., (2) Repr. of Village Loan Fund, (3) Repr. of Mun. Affairs Dept., (4) Repr. of Min. of Fin., and (5) Repr. of Jordan Dev. Bd. — Chairman) shall be constituted to review the project for the development of village water supplies. Committee comments shall be made in writing prior to January 15, 1962, if possible. The Director of the CWA shall revise the project as appropriate in the light of these comments and submit it for approval to the Board of Directors of the CWA.
- 3) Prior to February 15, 1962, a Committee of four ((1) Repr. of Min. of Agri., (2) Repr. of Agri. Mkt. Bur., (3) Repr. of East Ghor Auth. and (4) Repr. of Jordan Dev. Bd. — Chr.) shall be constituted to review the project for the location, design, construction, operation, and financing of those earth dams and irrigation systems which can be justified. Committee comments shall be made in writing prior to March 1, 1962. The Director, C.W.A., shall revise his plans as appropriate in light of these comments and submit them for approval to Board of Directors, C.W.A.

Individual Programs and Activities to be carried out by the CWA during the Period
1962 - 67

1) SPRING DEVELOPMENT

There are 1357 accessible springs in Jordan that vary from 8,000 M3/Hr. to less than 1 M3/Hr. Though most of these springs have a flow of less than 5 M3 per hour, in the aggregate they furnish domestic, stock, and some agricultural water to at least 750,000 people. During the recent past considerable emphasis has been placed upon cleaning, developing, protecting and fully utilizing such springs; and CWA, Community Development, Church World Services, individual villages, private owners and others have performed such work. This work should be continued until all possible spring water is developed, protected and used.

The average cost of spring development is about JD 800 per spring according to the work accomplished in the past. Using all the facilities expected to be available in the Kingdom during 1962-63 some 75 springs should be completely cleaned, developed and pro-

THE PROGRAM FOR WATER

ected. As experienced personnel and money become available, the next 4 years should see 100 springs completed per year. Thus a total of 475 springs serving approximately 332,500 people will be completely renovated during the five-year plan at a cost of approximately JD 380,000.

2) SMALL IRRIGATION PROJECTS

Under the agricultural loan program, CWA, and other programs, engineering assistance and loan and grant money will be made available to small farmers to develop and make full use of their water resources in order to get as intensive and efficient irrigation as possible. Such work will consist of water source development, pump installations, reservoir and canal construction, pipe line installation, drainage construction, land levelling and other details necessary for full utilization of available irrigation water. Under the five-year plan 120 projects will be completed affecting 60,000 dunums and costing approximately JD 240,000.

3) CISTERN CONSTRUCTION

The use of cisterns in Jordan is age old and there are thousands throughout the nation. There are many that with rehabilitation and repair can again be made available. Also there are areas where more could be constructed to use fully the surface water resource. In general, cistern use is not recommended because of its inefficient use of the water and because of the uncertainty of supply. Nevertheless in marginal areas, where no other water resource is available, the cistern is the only source that can be used. As surface hydrology becomes available in the later years of this five-year plan, more intelligent location and use of cisterns will be possible.

It is expected that the CWA, and other agencies will build or reconstruct at least 10 cisterns per year. This of course does not include the common small individual private cistern. Thus some 50 cisterns will be rehabilitated or constructed during the five-year plan at a cost of JD 25,000.

4) DAM CONSTRUCTION

Another treatment of surface water in Jordan is the construction of small wadi dams to collect run off for subsequent use. Many have been built by previous inhabitants and are still in use while others have fallen into disrepair. The CWA has initiated a program to repair existing dams and to construct new dams at favourable sites. The

CHAPTER IV

fullest use will be taken of surface water hydrology as it is developed. Also modern techniques of earth and rock fill-design and construction practices will be used to construct dams previously not believed feasible.

Prior to February 15, 1962, the Director, Central Water Authority (in cooperation with a Repr. of Jordan Dev. Bd.) shall begin to prepare outline plans for the identification, design, construction, operation, and financing of the maximum number of earth dams and/or irrigation systems which can be technically justified. These outline plans shall include estimates of annual costs phased over the 5 years of the program.

In 1962-63 it is expected that 6 dams will be constructed and the following years will see 10 each. So for the full 5 year plan 46 dams will be constructed at a cost of JD 460,000.

5) DRILLED WELLS

The major untapped water resource in Jordan is that underground. Several hundred drilled wells will be necessary to exploit fully this water. Production wells must keep pace with the economy and a considerable number of exploratory wells will be necessary to supplement the geological studies required to locate and assess the various water bearing strata.

The CWA possesses 12 drill rigs and expects to keep them busy throughout the plan. In addition, the drilling of wells will be contracted for as much as possible. Forty wells will be drilled per year by CWA and another 10 will be accomplished by contract. Some 25 of these wells will be exploratory while 5 will be for various municipalities, 5 for agricultural projects, 5 for villages, 5 for village water systems, and 5 for desert installations. A foreign expert has been assisting CWA in its drilling program and this is to be continued for the first two years of the plan only.

Contract drillers will continue drilling various private and other wells under the licensing system recently established by CWA. These wells do not constitute a part of the CWA program although they are an important help to the five-year plan and no doubt should be given consideration. In all, there will be 250 wells drilled by the CWA during the period of the plan at a total estimated cost of JD 505,000 which includes the required casing.

THE PROGRAM FOR WATER

6) PUMP TESTS

At present there are no private individuals who are making well pump tests in Jordan and this task has been assumed by CWA. It is hoped however that the private sector will take this over and in a few years assume the full load leaving CWA to test only its own wells. At present the CWA is averaging about 10 tests per month but by 1966 it expects to stop all private testing. During the 5 years of the plan CWA expects to test about 320 wells at a cost of JD 16,000

7) DESERT AND VILLAGE LOAN PUMPS, PUMP HOUSES AND TANKS

Groundwater is available to a limited degree in the desert, and some individual villages desire drilled well installations. To assure use of drilled wells in the desert and at various village pumps, pump houses and storage tanks should be available and CWA intends to arrange for this. Such an installation costs approximately JD 4,000 and with 10 of these wells being drilled per year the cost will be JD 40,000. For the whole period some 50 installations will be built at a cost of JD 200,000.

8) UNDERGROUND WATER GEOLOGY

The proper mapping and analysis of geological structures and features is absolutely necessary in order to accomplish full exploitation of the underground water resource. The CWA has a well-established Underground Water Geology Section and while performing geological mapping itself is also supervising two mapping contracts at present.

It is estimated that some 21,000 square kilometers of Jordan must be geologically mapped for full water resource development. The rest of Jordan is desert area where such mapping can be less detailed and has a much lower priority. In order to expedite the required mapping, contract mapping will be emphasized for the first 3 years of the plan and the rest will be done by CWA personnel. The CWA staff can map about 500 sq. km. per year while it is expected to contract 8,000 sq. km. of mapping the first year, 6,000 sq. km. the second, and 4,000 sq. km. the third. In all a total of 20,500 sq. km. of geological mapping will be finished during the plan at a cost of approximately JD 510,000.

In addition to the mapping the Geology Section also makes specific locations for well drilling and conducts investigations of spring

CHAPTER VI

developments structure sites, and other special problems as required. A foreign geologist is working on the staff of this section and he will be continued for the first 3 years of the plan. The costs involved for these special investigations — 400 well sites and 700 spring and others — is assigned to General Overhead described in paragraph 17 and amounts to JD 36,000.

9) GROUNDWATER HYDROLOGY

Any intensive use of groundwater immediately poses the problem of how much water can be taken from the ground and still not deplete the resource. Already apparent overpumping in the Ghor and in the Amman-Zerka areas has effected the available water. As other well fields are discovered and pumped this problem will become more serious. CWA must start studies immediately on the groundwater hydrology involved and in order to do this foreign technicians must be hired and Jordanian engineers be trained. During the first 3 years of the plan 2 foreign technicians will be in Jordan to start on the problem and perform the studies while at the same time training the respective Jordan engineers. The last two years of the plan will see the complete takeover by Jordan personnel. It is estimated that the total cost of this program will be some JD 57,000 for the duration of the plan.

10) HYDROLOGY

In order to know how much water is available in Jordan and how the availability of surface water affects the underground water, a full-scale modern hydrological service must be established by CWA. Some previous attempts to collect and analyze hydrological data have been made but they have been largely uncoordinated and not effective. It is proposed to set up a complete hydrological service, employ foreign technicians, install automatic gauges, and establish the required measurements on all the perennial streams and several of the non-perennial streams to have the required stream flow data for proper engineering evaluation. This will involve some 13 man years of foreign technicians and an ultimate permanent Jordanian staff of 15 hydrologists with some 50 gauge readers. Twenty permanent gauging stations will be constructed on the main rivers and 30 on the more important springs. In addition some 100 regular observation wells will be read at the required intervals. The present rainfall stations will be extended to 150 and the data received from them co-ordinated with flow and water level measurements.

THE PROGRAM FOR WATER

It is expected that by the end of the five-year plan CWA will have a well established hydrological section properly integrated with the groundwater hydrology problems. The total cost during the five-year plan will be JD 216,000. The first year's cost will be JD 79,000. This will be scaled down to an annual cost of JD 17,000 for each of the last two years.

11) MUNICIPAL WATER SUPPLY

Practically none of the smaller municipalities in Jordan have proper modern safe water supplies. The CWA intends to investigate, plan, design and if required, direct construction to the end of obtaining proper water supplies for these municipalities. Work now is actually under way in North Shuneh and South Shuneh. The final designs are being prepared for Karak and investigations are being made for Madaba and Salt. Brown Engineers have completed studies for Hebron and Bethlehem.

The planning, investigation, and construction in the past have been mainly financed by the Municipal Loan Fund. During the five-year plan the financing will be from the Municipal Loan Fund, individual city financing, Development Loan Fund, private financing, and other sources. It is estimated that six of the projects will be worked on each year of the plan and that the total cost of the 30 city programs will amount to JD 1,800,000.

12) MAJOR CITY WATER SUPPLY

The five major cities of Jordan — Amman, Jerusalem, Nablus, Zerka, and Irbid — have initiated planning and designs for the construction of modern, safe water supply systems. It is anticipated that financing will be available from the International Bank for Reconstruction and Development but the local cities or Government of Jordan must put up 30% or more of the total costs.

The CWA's role in this program is one of Water Supply Advisor to the Government of Jordan with the responsibility of assuring that proper co-ordination is effected and that the water systems supplied are properly designed and constructed.

It is expected that the five cities will have essentially completed the systems and plants at the end of the 3rd year of the plan. Some JD 700,000 will be spent each of the first two years with JD 350,000 the third year. An estimated total of JD 1,750,000 will be spent on these five city water systems during the 5 year plan.

CHAPTER VI

13) VILLAGE WATER SUPPLY SYSTEMS

Many villages in Jordan have no water supplies of any kind or what they do have is entirely inadequate. During the summer it is necessary to haul water in tank trucks to them to sustain life. In many cases it is possible to develop a main source (spring, well, etc.) and through pumps and pipelines furnish water to several villages from the same system. This approach has not yet been tried in Jordan extensively and the CWA intends to explore it to the fullest during the next five years.

Beginning January 1, 1962, the Director, Central Water Authority (in cooperation with a Repr. of Jordan Dev. Bd.) shall start to prepare a project for the development of village water supplies.

It is estimated that each one these projects will cost approximately JD 30,000 and that as many as 6 of them can be completed during a year. Thus it is expected that 30 of these projects will be completed during the period of the plan at a total cost of JD 900,000.

14) MAJOR AGRICULTURE PROJECTS

The CWA has tentatively investigated some 25 major irrigation projects in Jordan and it is believed that it can improve the water sources — plan, design and carry out construction in order to put present irrigation systems in better condition and also to make water available for additional land. The average size of these projects is 4,000 dunums and the estimated cost of full development is JD 45,000.

With financing available, the CWA has just initiated work on the first project (Wadi Musa) and is starting detailed plans on others with the objective of performing work on 6 of the projects each of the first 3 years of the plan, 4 the fourth year, and 3 the fifth year, for a total of 25 projects during the plan. It is estimated that the total cost of the work will be JD 1,100,000, and that some 100,000 dunums will be affected.

15) WATER SPREADING

Considerable money has been spent on water spreading structures in the eastern desert with indifferent success for a variety of reasons. Observations of present structures in use and additional knowledge of hydrology should make possible a fresh approach to the water-spreading problem and assure a more efficient handling of it.

THE PROGRAM FOR WATER

CWA has been making investigations along this line and as it moves to conserve all surface water run-off there is a place for water spreading. The total effort will be minor but it will supplement other conservation efforts. About JD 10,000 per year is expected to be used for this item with a total use of JD 50,000 for the whole plan.

16) SPECIAL INVESTIGATIONS

No proper water resource development can be made without competent investigations. Many investigations have been carried out in the past in Jordan but unfortunately the results have not been actively used to implement water projects. CWA hopes to initiate, conduct, or contract for sufficient investigations to form a basis for the rapid utilization of the total water resource.

At present there is one contract in force on the West Bank which will extend into the first year of the plan. Also the pre-investment investigation must be carried out at Azrak, using some JD 300,000 of Special-Fund United Nations money and JD 180,000 of Jordan Government money. In addition CWA believes that studies should be carried on for the Wadi Zerka Dam, the Yarmouk Scheme, the Wadi Mujib Scheme, and at least one other. A sum of JD 50,000 each has been estimated for this work. At least JD 5,000 support will be required from CWA the last two years of the plan.

To finance adequately the studies mentioned above during the five years of the plan some JD 690,000 will be required.

17) ADMINISTRATION AND OVERHEAD

The direct costs to CWA for the work described in the previous paragraphs comes mostly from the sums stated as required for the respective item. In this manner the required finances will be available to operate and maintain the Construction Division, Design Division, Planning Division, Drilling Division, Hydrology Section and half of the Geology Section. If one or more of the items should be eliminated or reduced, careful examination would have to be made of its effect on the CWA's general structure as such deletion could deny the CWA necessary funds to operate in other fields.

CWA Administration and Overhead costs are not included in the above items as they are spread out unevenly throughout the

CHAPTER VI

entire scope of CWA activities. They include salaries for administrative and stores personnel as well as four geologists and the Director General and his deputy. One geologist and the Director General will be foreigners for the first three years of the plan. Also included are electricity, water, heat, rent, furniture, stationery, communications, etc. It is estimated that approximately JD 50,000 per year for the first three years of the plan will be expended on this item with JD 36,000 required for each of the last two years. Thus a total of JD 223,000 will be required for administration and overhead.

18) OPERATION AND MAINTENANCE

In general the CWA operates certain water projects where there are no organized facilities for doing so. This of course is in the desert and other areas that are not well-enough defined to be supported by a specific village or community. By 1 April, 1962, CWA should be operating 10 desert wells, and items 5 and 7 above call for the addition of 5 per year during the period of the plan. A labour force must be maintained for repair and maintenance of dams, cisterns, wells and other structures that for lack of repair and maintenance would quickly become unserviceable.

While most of the CWA vehicle and equipment fleet is taken care of within the items above it is estimated that at least 20 vehicles will have to be supported in this item and also arrangements will also have to be made in this item for 10 replacement vehicles per year.

The costs for this item will be JD 36,500 for the first year of the plan and will increase to JD 56,500 in the last year as the various elements to be maintained increase. It is estimated that JD 232,500 will be required for the five-year period.

19) TRAINING

With the anticipated expansion of the CWA's activities during the five-year plan, probably the most serious deficiency of the CWA is the lack of a sufficient number of properly-trained Jordanian personnel. This means that all types of training programs must be activated. Formal, « on the job training », must be started here in Jordan. Full advantage must be taken of training available in the neighbouring Arab Nations as well as Turkey, Greece, Cyprus and Iran. Some trainees will be sent to the U.S.A. and Western Europe to take practical training in their respective fields. As CWA

THE PROGRAM FOR WATER

is an operating engineering agency, academic training will be minimized but not precluded.

Training costs are expected to be JD 10,000 per year or a total of JD 50,000 during the plan period. This should allow 3 to 4 trainees per year to go to U.S.A. or Western Europe for periods less than one year and another 3 or 4 to train in adjacent countries.

SUMMARY

In outlining the water resource targets for the five-year plan it was not possible to state specifically the amount of water to be made available and the degree to which it is to be used. Where reasonably accurate estimates could be made numbers of people have been stated and dumums served indicated. The basic lack is the knowledge of just how much water can be made available and that is why heavy emphasis has been placed upon investigation and exploration activity. It is believed that by the 2nd or 3rd year of the Plan much information will be available and more specific targets can then be outlined.

Of course any plan must be based upon certain assumptions. This plan assumes that : CWA will be able to increase its staff of graduate engineers as required ; foreign personnel assistance will no longer be needed after April 1, 1965 ; CWA will be able to have on hand parts, supplies, and vehicles by the start of the Plan to service properly the elements involved ; contractors will be available at reasonable prices for contract work ; and that in general the expectation of finding and exploiting the water sources will be borne out by subsequent activities and discoveries.

An outline of the costs and proposed financing of individual CWA projects and activities is presented in Tables 6.1 through Table 6.7.

CHAPTER VI

TABLE 6.1
COST OF THE CWA FIVE-YEAR PLAN: COST BREAKDOWN BY FISCAL YEARS AND PROJECTS

Item No.	Description	Cost 1963		Cost 1964		Cost 1965		Cost 1966		Cost 1967		Total JD.
		JD.	JD.	JD.	JD.	JD.	JD.	JD.	JD.	JD.	JD.	
1.	Spring Development	60,000	80,000	80,000	80,000	80,000	80,000	80,000	80,000	80,000	80,000	380,000
2.	Small Irrigation Projects	48,000	48,000	48,000	48,000	48,000	48,000	48,000	48,000	48,000	48,000	240,000
3.	Chiem Construction	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	25,000
4.	Dam Construction	60,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	460,000
5.	Drilled Wells	101,000	101,000	101,000	101,000	101,000	101,000	101,000	101,000	101,000	101,000	505,000
6.	Pump Tests	5,000	4,000	3,000	3,000	3,000	2,000	2,000	2,000	2,000	2,000	16,000
7.	Desert & Village Loan Pumps, Pump House & Tanks	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	200,000
8.	Underground Water Geology	226,000	160,000	100,000	100,000	15,000	15,000	15,000	15,000	15,000	15,000	510,000
9.	Groundwater Hydrology	16,000	21,000	16,000	16,000	16,000	2,000	2,000	2,000	2,000	2,000	57,000
10.	Hydrology	77,000	59,000	44,000	44,000	17,000	17,000	17,000	17,000	17,000	17,000	216,000
11.	Municipal Water Supply	366,000	366,000	366,000	366,000	366,000	366,000	366,000	366,000	366,000	366,000	1,800,000
12.	Major City Water Supply	700,000	700,000	350,000	350,000	—	—	—	—	—	—	1,750,000
13.	Village Water Supply Systems	180,000	180,000	180,000	180,000	180,000	180,000	180,000	180,000	180,000	180,000	900,000
14.	Major Agriculture Projects	264,000	264,000	264,000	264,000	176,000	176,000	131,000	131,000	100,000	100,000	1,100,000
15.	Water Spreading	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	50,000
16.	Special Investigations	160,000	210,000	210,000	210,000	55,000	55,000	55,000	55,000	55,000	55,000	690,000
17.	Administration and Overhead	51,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	251,000
18.	Operation & Maintenance	36,500	41,500	46,500	46,500	56,500	56,500	56,500	56,500	56,500	56,500	231,000
19.	Training	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	50,000
TOTALS		2,405,500	2,443,500	2,017,500	1,288,500	1,249,500	9,404,500					

Note : Total Administration and Overhead is 223,000.

THE PROGRAM FOR WATER

TABLE 6.2

Item No.	Description	Total Cost JD.	C.W.A. Govt. Budget		Grant Foreign JD.		Loan Foreign JD.		Financed by Users JD.		Financed by Govt. Other than C.W.A. JD.	
			JD.	JD.	JD.	JD.	JD.	JD.	JD.	JD.	JD.	JD.
1.	Spring Development	60,000	6,000	54,000	—	—	—	—	—	—	—	—
2.	Small Irrigation Projects	48,000	5,000	43,000	—	—	—	—	—	—	—	—
3.	Chiem Construction	5,000	500	4,500	—	—	—	—	—	—	—	—
4.	Dam Construction	60,000	6,000	27,000	27,000	—	—	—	—	—	—	—
5.	Drilled Wells	101,000	10,000	55,000	—	—	—	—	36,000	—	—	—
6.	Pump Tests	5,000	500	1,500	—	—	—	—	3,000	—	—	—
7.	Desert & Village Loan Pumps, Pump House & Tanks	40,000	4,000	20,000	—	—	—	—	8,000	—	—	—
8.	Underground Water Geology	220,000	22,000	123,000	75,000	—	—	—	—	—	—	—
9.	Groundwater Hydrology	16,000	3,000	13,000	—	—	—	—	—	—	—	—
10.	Hydrology	79,000	10,000	49,000	20,000	—	—	—	—	—	—	—
11.	Municipal Water Supply	360,000	10,000	117,000	117,000	—	—	—	58,000	—	—	—
12.	Major City Water Supply	780,000	10,000	10,000	460,000	—	—	—	230,000	—	—	—
13.	Village Water Supply Systems	180,000	10,000	56,000	95,000	—	—	—	12,000	—	—	—
14.	Major Agriculture Projects	264,000	10,000	9,000	135,000	—	—	—	126,000	—	—	—
15.	Water Spreading	10,000	1,000	9,000	—	—	—	—	—	—	—	—
16.	Special Investigations	160,000	1,000	100,000	8,500	—	—	—	—	—	—	—
17.	Administration and Overhead	51,000	51,000	—	—	—	—	—	—	—	—	50,000*
18.	Operation & Maintenance	36,500	36,000	—	—	—	—	—	—	—	—	—
19.	Training	10,000	10,000	—	—	—	—	—	—	—	—	—
TOTALS		2,405,500	200,000	682,000	972,500	473,000	128,000					

* Special Azraq Budget of CWA of JD 50,000.

Note: Operation and Maintenance from C.W.A. Govt. Budget should read 36,500.

CHAPTER VI

TABLE 6.3

Item No.	Description	Total Cost JD.	C.W.A. Budget		Grant		Loan		Financed by Users JD.	Financed by Govt. Other than C.W.A. JD.
			JD.	JD.	Foreign	JD.	Foreign	JD.		
1.	Spring Development	80,000	8,000	72,000	—	—	—	—	—	—
2.	Small Irrigation Projects	48,000	5,000	43,000	—	—	—	—	—	—
3.	City Construction	5,000	500	4,500	—	—	—	—	—	—
4.	Dam Construction	100,000	10,000	45,000	45,000	—	—	—	—	—
5.	Drilled Wells	10,000	10,000	55,000	—	—	—	—	36,000	—
6.	Pump Tests	4,000	400	1,500	—	—	—	—	2,100	—
7.	Desert & Village Loan Pumps, Pump House & Tanks	40,000	4,000	30,000	—	—	—	—	8,000	8,000
8.	Underground Water Geology	160,000	20,000	65,000	75,000	—	—	—	—	—
9.	Groundwater Hydrology	31,000	3,000	18,000	—	—	—	—	—	—
10.	Hydrology	59,000	10,000	29,000	20,000	—	—	—	—	—
11.	Municipal Water Supply	360,000	10,000	117,000	117,000	—	—	—	58,000	58,000
12.	Major City Water Supply	700,000	10,000	—	—	—	—	—	460,000	230,000
13.	Village Water Supply Systems	180,000	10,000	56,000	—	—	—	—	90,000	12,000
14.	Major Agriculture Projects	264,000	13,000	—	—	—	—	—	125,000	126,000
15.	Water Spreading	210,000	1,000	9,000	—	—	—	—	—	—
16.	Special Investigations	210,000	1,500	100,000	—	—	—	—	—	50,000*
17.	Administration and Overhead	50,000	50,000	—	—	—	—	—	—	—
18.	Operation & Maintenance	41,500	41,500	—	—	—	—	—	—	—
19.	Training	10,000	—	10,000	—	—	—	—	—	—
TOTALS		2,443,500	207,900	645,000	990,300	472,100	—	—	—	128,000

* Special Azraq Budget of CWA of JD 50,000.

THE PROGRAM FOR WATER

TABLE 6.4

Item No.	Description	Total Cost JD.	C.W.A. Budget		Grant		Loan		Financed by Users JD.	Financed by Govt. Other than C.W.A. JD.
			JD.	JD.	Foreign	JD.	Foreign	JD.		
1.	Spring Development	80,000	8,000	72,000	—	—	—	—	—	—
2.	Small Irrigation Projects	48,000	5,000	43,000	—	—	—	—	—	—
3.	City Construction	5,000	500	4,500	—	—	—	—	—	—
4.	Dam Construction	100,000	10,000	45,000	45,000	—	—	—	—	—
5.	Drilled Wells	101,000	10,000	55,000	—	—	—	—	36,000	—
6.	Pump Tests	3,000	300	1,500	—	—	—	—	1,200	—
7.	Desert & Village Loan Pumps, Pump House & Tanks	40,000	4,000	20,000	—	—	—	—	8,000	8,000
8.	Underground Water Geology	100,000	20,000	5,000	75,000	—	—	—	—	—
9.	Groundwater Hydrology	16,000	3,000	13,000	—	—	—	—	—	—
10.	Hydrology	44,000	10,000	14,000	20,000	—	—	—	—	—
11.	Municipal Water Supply	360,000	10,000	117,000	117,000	—	—	—	58,000	58,000
12.	Major City Water Supply	180,000	10,000	—	—	—	—	—	460,000	230,000
13.	Village Water Supply Systems	180,000	10,000	56,000	—	—	—	—	90,000	12,000
14.	Major Agriculture Projects	264,000	13,000	—	—	—	—	—	125,000	126,000
15.	Water Spreading	210,000	1,000	9,000	—	—	—	—	—	—
16.	Special Investigations	210,000	1,500	100,000	—	—	—	—	—	50,000*
17.	Administration and Overhead	50,000	50,000	—	—	—	—	—	—	—
18.	Operation & Maintenance	46,500	46,500	—	—	—	—	—	—	—
19.	Training	10,000	—	10,000	—	—	—	—	—	—
TOTALS		2,017,500	212,800	585,000	757,500	354,200	—	—	—	128,000

* Special Azraq Budget of CWA of JD 50,000.

TABLE 6.
CWA FIVE-YEAR PLAN: COST BREAKDOWN BY SOURCE OF FINANCING: 1966

Item No.	Description	Total Cost J.D.	C.W.A. Govt. Budget J.D.	Grant		Loan		Financed by Users J.D.	Financed by Govt. Other than C.W.A. J.D.
				Foreign	J.D.	Foreign	J.D.		
1.	Spring Development	80,000	8,000	72,000	—	—	—	—	—
2.	Small Irrigation Projects	48,000	5,000	43,000	—	—	—	—	—
3.	Cistern Construction	5,000	500	4,500	—	—	—	—	—
4.	Dam Construction	100,000	10,000	45,000	45,000	—	—	—	—
5.	Drilled Wells	101,000	10,000	55,000	—	—	36,000	—	—
6.	Pump Tests	2,000	200	1,500	—	—	300	—	—
7.	Desert & Village Loan Pumps, Pump House & Tanks	40,000	4,000	20,000	—	—	8,000	8,000	—
8.	Underground Water Geology	15,000	15,000	—	—	—	—	—	—
9.	Groundwater Hydrology	2,000	2,000	—	—	—	—	—	—
10.	Hydrology	17,000	17,000	—	—	—	—	—	—
11.	Municipal Water Supply	360,000	10,000	117,000	—	—	58,000	58,000	—
12.	Major City Water Supply	180,000	10,000	56,000	90,000	—	12,000	12,000	—
13.	Village Water Supply Systems	176,000	13,000	—	82,000	—	8,000	8,000	—
14.	Major Agriculture Projects	10,000	1,000	9,000	—	—	—	—	—
15.	Water Spreading	35,000	10,000	10,000	35,000	—	—	—	—
16.	Special Investigations	55,000	36,000	36,000	—	—	—	—	—
17.	Administration and Overhead	31,500	51,500	—	—	—	—	—	—
18.	Operation & Maintenance	10,000	—	10,000	—	—	—	—	—
19.	Training	—	—	—	—	—	—	—	—
TOTALS		1,288,500	203,300	443,000	369,000	195,300	78,000	—	—

TABLE 6.6
CWA FIVE-YEAR PLAN: COST BREAKDOWN BY SOURCE OF FINANCING: 1967

Item No.	Description	Total Cost J.D.	C.W.A. Govt. Budget J.D.	Grant		Loan		Financed by Users J.D.	Financed by Govt. Other than C.W.A. J.D.
				Foreign	J.D.	Foreign	J.D.		
1.	Spring Development	80,000	8,000	72,000	—	—	—	—	—
2.	Small Irrigation Projects	48,000	5,000	43,000	—	—	—	—	—
3.	Cistern Construction	5,000	500	4,500	—	—	—	—	—
4.	Dam Construction	100,000	10,000	45,000	45,000	—	—	—	—
5.	Drilled Wells	101,000	10,000	55,000	—	—	36,000	—	—
6.	Pump Tests	2,000	200	1,500	—	—	300	—	—
7.	Desert & Village Loan Pumps, Pump House & Tanks	40,000	4,000	20,000	—	—	8,000	8,000	—
8.	Underground Water Geology	15,000	15,000	—	—	—	—	—	—
9.	Groundwater Hydrology	2,000	2,000	—	—	—	—	—	—
10.	Hydrology	17,000	17,000	—	—	—	—	—	—
11.	Municipal Water Supply	360,000	10,000	117,000	—	—	58,000	58,000	—
12.	Major City Water Supply	180,000	10,000	56,000	90,000	—	12,000	12,000	—
13.	Village Water Supply Systems	131,000	13,000	—	60,000	—	59,000	—	—
14.	Major Agriculture Projects	10,000	1,000	9,000	—	—	—	—	—
15.	Water Spreading	55,000	10,000	10,000	35,000	—	—	—	—
16.	Special Investigations	36,000	36,000	—	—	—	—	—	—
17.	Administration and Overhead	56,500	56,500	—	—	—	—	—	—
18.	Operation & Maintenance	10,000	—	10,000	—	—	—	—	—
19.	Training	—	—	—	—	—	—	—	—
TOTALS		1,249,500	208,300	443,000	347,000	173,300	78,000	—	—

CHAPTER VI

Table 6.7

SUMMARY OF COSTS AND FINANCING
(in thousands of dinars)

Fiscal Year Ending March 31	CWA Budget Jordan Govt. JD	Budget Jordan Govt. Other than CWA JD	External Sources			Total JD.
			Users - (1)			
			JD.	JD.	JD.	
1963	200	128	473	922.5	682	2,405.5
1964	207.9	128	472.1	990.5	645	2,443.5
1965	212.8	128	354.2	757.5	565	2,017.5
1966	203.2	78	195.3	369	443	1,288.5
1967	208.2	78	173.3	347	443	1,249.5
Total	1,032.1	-540	1,667.9	3,386.5	2,778	7,940.5

(1) The "Users" projects are self-liquidating.

Specific Proposal No. W.2

— a proposal for the completion of Stages I and II of the Yarmouk-Jordan Valley Project by the East Ghor Canal Authority.

— to be done :

Stage I

- 1) The Managing Director, East Ghor Authority (in cooperation with a Repr. of Jordan Dev. Bd.) shall immediately move to obtain a commitment from external sources for the financing of the construction of the remainder of Stage I of the Project. He shall then move expeditiously to finish it according to present plans by July 1, 1964.
- 2) The Managing Director, East Ghor Authority (with the assistance of a Repr. of Jordan Dev. Bd.) shall, prior to January 1, 1962, make an estimate of funds required on short-term by fiscal year to finance the land resettlement program

Stage II

- 1) The Managing Director, East Ghor Authority (working through the Ministry of Foreign Affairs and in cooperation with the Jordan Development Bd.) shall make cer-

THE PROGRAM FOR WATER

tain that there are no international road blocks to the undertaking of Stage II. This must be done prior to any additional work under this proposal.

- 2) The Managing Director, East Ghor Authority, will proceed during fiscal 1963 to prepare, using his own staff and consulting engineers, detailed plans and specifications for Stage II. These plans and specifications are to be ready within twelve months from the date of authorization.
- 3) During fiscal 1963 and simultaneous with the preparation of detailed plans and specifications, the Managing Director, East Ghor Authority (in cooperation with a Repr. of Jordan Dev. Bd.) shall apply for, and negotiate for external financing to cover the purchase of goods and services abroad. This financing should be in the amount of approximately JD 7,500,000. Other costs will be financed from the Budget, Government of Jordan.
- 4) If negotiations for funds as outlined above are successful, the Managing Director, East Ghor Authority, shall proceed with the construction of Stage II which should be completed about March 31, 1967.
- 5) In the meantime, and prior to June 1, 1962, the Jordan Development Board will explore the desirability of, and the sources of financing for, stages III, IV, and V and nothing herein shall bar undertaking them during the plan period if they prove desirable and feasible.

Summary of the Yarmouk-Jordan Valley Five-Year Project

STAGE I

Stage I, now under construction, includes an intake on the Yarmouk River, 70 kilometers of main conveyance canal, and distribution canals serving 120,000 dunums of irrigable land. This system will serve all potentially irrigable lands lying below the main canal on the East Ghor between the Yarmouk River and the Zerqa River.

CHAPTER VI

Water supply for Stage I comes from the unregulated flow of the Yarmouk River, the Wadis north of the Zerqa River and the Zerqa River itself.

Stage I has the lowest cost per dunum of land irrigated, as might be expected. The lands served are closest to the Yarmouk River, requiring the minimum length of main canal. With use of the natural flow of the Yarmouk River, without storage, Stage I is «skimming the cream» from the available water resources. While each subsequent stage must in itself be justified, the average cost of all land irrigated at any stage, including prior stages, should be the principal criterion for economic valuation.

The construction cost of Stage I is estimated to be JD 5.4 million or about JD 45 per dunum.

STAGE II

Stage II will provide irrigation for an additional 100,000 dunums in the East Ghor south of the Zerqa River. In this stage the main canal would be extended 43 kilometers from the Zerqa River to the Dead Sea. Distribution systems would be provided from the main canal for gravity supply to selected areas. Water supply available in Stage II would limit the new areas to about 100,000 dunums, which is considerably less than the total potentially irrigable area.

Construction on the Yarmouk River in Stage II will include the Adasiya diversion dam, Wadi Khalid Storage dam to elevation (—)40, and a 1000 kilowatt power-plant.

Wadi Khalid dam will provide an initial storage of 50 million cubic meters. This storage will regulate the Yarmouk River flow sufficiently to provide the water supply to Stage II lands.

Although the Wadi Khalid dam will be built initially for a reservoir level at elevation (—)40, it will be designed to be raised in future stages to a maximum reservoir level at elevation 32 with ultimate storage capacity of 500 million cubic meters.

It would not be practical to install a hydro-electric plant at Wadi Khalid dam in Stage II, because future raising of the dam would require abandonment or expensive conversion of the initial power plant. However a power plant downstream of the storage dam can be built to utilize the releases from the dam. For Stage II, the plant is proposed for an installed capacity of 3000 kilowatts, which

THE PROGRAM FOR WATER

is more power than could be generated at the initial dam. This amount of power should be sufficient to satisfy the obligations to Syria under the terms of the Yarmouk River Treaty until the dam is raised or until Maqarin dam is built. Because the power output will go to Syria as a form of compensation for the storage dam, the cost of the initial power plant has been included as an irrigation cost under Stage II.

The total construction cost of Stage II is approximately JD 12.1 million or JD 121 per dunum. The average cost of Stages I and II is about JD 80 per dunum.

Stage	Years	Area Irrigated		Construction Costs		Total Costs
		Per Stage	Total	Per Stage	Total	Per Dunum
I	1958-62	120	120	5.4	5.4	45
II	1962-67	100	220	12.1	17.5	80

COMPARISON WITH OTHER PLANS

Stages I and II of the Yarmouk-Jordan Valley Project are a common element in all known plans proposed for the water resource development of the Jordan River and its tributaries. The Project costs through Stage II are the minimum possible for the amount of land to be irrigated and for the benefits to be achieved.

Subsequent stages represent a continuing program for extension of irrigation in the Jordan Valley, utilizing the resources available to the Kingdom of Jordan. Again all of these subsequent stages are compatible with the known plans for basin development. The present plan for Yarmouk River storage does not require construction of the Maqarin and Wadi Khalid dams to their ultimate height. However, the dams will be designed so they can be raised to their maximum heights in the future.

IRRIGATION BENEFITS VS COSTS

The gross annual value of crops from irrigated land in the Jordan Valley is estimated to average JD 36 per dunum. Net annual return to the farm family after paying all expenses including wages and services of the farmer would be about JD 11 per dunum.

The construction costs of the proposed irrigation works will average about JD 80 per dunum in Stage II. Thus the gross value of crops will be 0.45 of construction cost, which ratios should be considered justifiable for a project of this nature.

CHAPTER VI

Annual costs of the irrigation works, if computed on the basis of U.S. Bureau of Reclamation practice with a 40-year repayment period after a 10-year development period, would be about JD 2.9 per dunum for Stage II. Net farm benefits would be about three times the annual costs. Indirect benefits, usually included in U.S. Bureau of Reclamation practice, would greatly increase this benefit-cost ratio.

Such a project would make a major contribution toward bringing Jordan closer to self sufficiency in agricultural products, for which at present the nation is to a great extent dependent on imports. The project is urgently needed since diversion works now in progress on the Yarmouk and Jordan Rivers, and the resulting increase of salinity in the waters remaining in these rivers, will cause land dependent on these rivers for irrigation water to become derelict in two to three years, if other sources of water are not found. The proposed project, in addition to irrigating the 100,000 dunums mentioned above, would also provide an alternative supply of water to 70% of the pumping stations now in danger.

The proposed plan is already provided for in the Yarmouk River Treaty with Syria of 1953.

— costs and financing : Estimated as follows with sources of financing suggested as shown (in millions of dinars).

	Budget	External Sources		Total
	Jordan Govt. JD.	Grants JD.	Loans JD.	JD.
Stage I				
Construction	—	—	2.2 (1)	2.2
Land Settlement	2.5 (2)	—	—	2.5
Stage II				
Plans and Specifications	—	0.2 (3)	—	0.2
Construction	—	—	11.9(4)	11.9
	2.5	0.2	14.1	16.8

- (1) In fiscal years 1963 and 1964 in equal amounts .
- (2) In fiscal years 1963 through 1966 in approximately equal amounts. Recoverable in future years out of proceeds of land sales.
- (3) In fiscal year 1963.
- (4) JD 1 million in fiscal year 1963, JD 3.1 million in fiscal year, 1964, JD 3.4 million in fiscal year 1965, JD 3.3 million in fiscal year, 1966, and JD 1.1 million in fiscal year 1967.

THE PROGRAM FOR WATER

The total cost breakdown and sources of financing by years for the rest of Stage I and for Stage II are as follows: (in million of Dinars).

	Budget	External Sources		Total
	Jordan Govt. JD.	Grants JD.	Loans JD.	JD.
1963	0.625	0.2	2.1	2.925
1964	0.625	—	4.2	4.825
1965	0.625	—	3.4	4.025
1966	0.625	—	3.3	3.925
1967	—	—	1.1	1.1
	2.5	0.2	14.1	16.8

THE PROGRAM FOR MINING

Jordan possesses known mineral resources adequate to support by 1967

- phosphate production and export sale of a minimum of 1,500,000 tons per year. Value added in Jordan (including that added in transportation) would then rise from 1961 levels by more than JD 3.3 million per year. Jordan's unfavorable balance of trade would be similarly reduced.
- potash production and export sale of 270,000 tons per year. Value added in Jordan (including that added in transportation) would then rise by more than JD 2.5 million per year and its unfavorable balance of trade be similarly reduced.
- marble production for domestic use and for export with a value of at least JD 200,000 per year.
- ceramics, glass, and increased cement production (to 400,000 tons per year) using Jordanian raw materials and adding JD 1,500,000 to national output.

In addition by 1967 :

- exploration and development should have been completed for continual expansion of phosphate production to 2,000,000 tons and a potential addition of a further JD 1,700,000 to Jordan exports.
- Bromine production and sale should have been started with a program aiming at expansion to JD 1,500,000 per year.
- Firm programs for the immediate commercial exploitation

CHAPTER VII

of other mineral resources discovered and assessed by a comprehensive geological mapping and a «crash» mineral surveys program should have been prepared.— Past studies indicate that copper, manganese, iron, sulfur and oil show some promise.

The anticipated economic results from the planned minerals development are summed up in the Program for Industry. It is worth noting, however, that while minerals exploitation offers great gains in production and in exports (or import substitution), it does not offer large, direct increases in employment. Thus

- the increase in production from exploitation of known minerals can be obtained with fewer than 3000 additional workers.
- if companies exploiting minerals are owned by only a few persons, these persons will receive very large incomes while employment and wage rates rise but slowly. This is a consequence fraught with social dangers.
- it is important that ownership of the companies exploiting natural resources be such as to distribute income therefrom as widely as possible.

Proposals for expanding minerals production in Jordan include :

- 1) Expanded exploitation of known mineral supplies. The following are suggested in this connection :
 - a) A program for expansion of phosphate production and export to 1,500,000 tons per annum by 1967.

Though the Jordan Phosphate Company is a predominantly private company, its activities are obviously of great public importance inasmuch as it offers very large increases in output, income, and exports. A program of government supervision and assistance is therefore desirable.

See Specific Proposal M 1

- b) The construction and operation of plants for the production and export of potash and bromine from Dead Sea brine.

THE PROGRAM FOR MINING

Potash and bromine together can add JD 4 million to Jordan's output, income, and exports. The industry, however, is both technically and economically difficult. Great care should be taken that design, construction, and early operation is in the hands of persons experienced in the industry. Since the industry is an international monopoly, careful attention should be given to the solution of marketing problems; perhaps by prior tying of the company into the international cartel by encouraging an existing company to invest in it and to provide management for it.

In any case, the production of potash and bromine are so important to Jordan that a maximum effort to establish production units soon is imperative. See Specific Proposal I 10 in «The Program for Industry».

- c) The establishment of production of (1) ceramics products, and (2) glass using clays and sand available in Jordan.

A feasibility study covering the potential production in Jordan of ceramics products and glass has been completed. Prompt action should be taken to establish the ceramics and probably a glass industry and thus to make fuller use of Jordan's known resources.

Anticipated results are summarized in «The Program for Industry».

- d) A program for expansion of marble production. The quarrying of marble has long been undertaken in Jordan. Methods of quarrying, however, can be improved and new markets can be identified and aggressively sought to the end that another of Jordan's resources can be made to yield an additional output and income.

See Specific Proposal M 2

- e) The expansion of cement production rapidly enough to meet growing domestic needs.

The Jordan Cement Company is a successful business venture now able to meet essentially all of Jordan's cement requirements. These requirements, however, will

CHAPTER VII

rise rapidly over the next five years. If costly imports are to be avoided, expansion of facilities in anticipation of growing needs is essential. This anticipation is provided for in «The Program for Industry».

2) A vigorous minerals exploration program.

a) A program of geological mapping and economic surveys.

A complete assessment of Jordan's mineral potential requires a geologic map of the country plus direct surveys of mineral deposits — actual or expected — uncovered by the mapping. Fortunately, the accomplishment of this task is now under way under agreement with the government of West Germany. It is summarized by **Specific Proposal No. M 3**.

b) «Crash» minerals survey programs.

Because potential gains from minerals findings are very large, a set of bold and ambitious surveys for specific minerals should be embarked upon immediately as suggested by (1) the geological mapping program as indicated under a., above, or (2) existing prior studies. Great risks here are justified by great possible returns.

See **Specific Proposal No. M 4**.

c) Maximum encouragement to private prospecting (including oil prospecting).

It is possible that either the geological mapping or «crash» mineral surveys programs will encourage private mineral sources development work. Or, in other cases, private prospectors' work can supplement work sponsored by the government. In either case, the addition of private effort to government effort is certainly to be encouraged.

Private activity will no doubt predominate in the expensive and technical effort to drill wells for oil prospecting. Private activity requires (1) an improved mining law, (2) systematic government encouragement, and (3) good government coordination. See **Specific Proposals Nos. M 5 and M 6**.

3) The creation of a Department of Mineral Wealth, Ministry of National Economy.

THE PROGRAM FOR MINING

An improved, permanent organization for the rational promotion of minerals development in Jordan is necessary. This can be done by improving and expanding the Division of Mining in the Ministry of National Economy.

See **Specific Proposal No. M 7**.

Geologic survey work requires mapping which can make fruitful use of aerial photographs and related photcartography work.

Other agencies also in need of this work include

- the Ministry of Agriculture (for land use surveys).
- the Department of Lands and Surveys (to assist in land settlement work).
- the Department of Forests (as it makes its catchment area studies).
- the Central Water Authority (as it strives to identify Jordan's ground water resources).
- the municipalities (for city planning purposes).
- the Jordan Arab Army.

There now exists a notable lack of knowledge by at least some of these agencies as to (1) what aerial photographs of Jordan now exist, (2) what facilities and personnel are now available for the development of maps from photographs, and (3) uses that can be made of aerial photographs.

There is inadequate coordination of effort in this area.

Specific Proposal No. M 8 provides for coordination of photcartography work.

Specific Proposal No. M 1

- a proposal for government supervision of, and assistance to, the Jordan Phosphate Company.
- to be done :

- 1) Prior to January 1, 1962, a Committee of three ((1) Repr. of Jordan Phosphate Co., (2) Repr. of Jordan Dev. Bd., and (3) Repr. or Min. of Nat' l. Econ - Chr.) shall be

CHAPTER VII

constituted to draw up a five-year program for the growth of the Jordan Phosphate Company.

- a) Setting realistic and achievable annual targets looking toward the production of 1,500,000 tons of phosphate per year by 1967 with the expansion and development work completed for expansion to 2,000,000 tons.
 - b) Forecasting, by year, needs for new capital facilities if targets are to be reached and by translating these needs into a schedule of financial requirements.
 - c) Developing a program for provision of the necessary funds from — in order of priority and depending upon availability — (1) retained earnings and depreciation allowances, (2) sale of additional shares to the public, (3) sale of additional shares to the government (through the — proposed — Industrial Development Corporation), and (4) borrowing from abroad (limited to purchases of equipment abroad).
 - d) Considering the company's needs for management improvements, if any, and assisting in meeting these needs.
 - e) Arranging all practical government assistance possible to the marketing of phosphate abroad.
- 2) By February 1, 1962, the Committee shall submit its findings (under 1., above) in writing to the Jordan Development Board, with copies to (1) the Ministry of National Economy, and (2) the Jordan Phosphate Co.
 - 3) Quarterly (prior to March 31, June 30, September 30, and December 31), the Committee shall meet to consider progress toward the meeting of targets by the Company. The Committee shall report its findings in writing to the Jordan Development Board. If targets are not being met, the Committee shall clearly state the reasons therefore and will recommend remedial action.
 - 4) In carrying out its duties as outlined above, the Committee shall (1) call upon the Planning Division, Jordan Development Board, for such research and analytical work as it may need, and (2) be given access to company

THE PROGRAM FOR MINING

records as reasonably required to set targets and check their attainment.

- costs : Costs of Committee activities can be carried out of budgets at present levels. Capital funds required by the Jordan Phosphate Company are to be specifically estimated under 1.b., above, but are roughly estimated for purposes of this document as follows (in thousands of dinars) :

For fiscal years ending March 31

	1963	1964	1965	1966	1967
(1) For "permanent" working capital	150	150	150	150	150
(2) For equipment purchased abroad		150	150	150	150
(3) For exploration and development	100	100	100	100	100
Total	250	400	400	400	400

- financing : For items (1) and (3) above, by sale of stock to general public or to the (proposed) Industrial Development Corporation. For item (2), by additional borrowing from external sources.

Specific Proposal No. M2.

- a proposal to improve and expand the production and sale of Jordan marble.
- to be done :
- 1) Prior to February 1, 1962, the Jordan Development Board shall have prepared and mailed invitations to tender for a technical and market study relating to the production and sale of Jordan's marble. It will require that the study include the following :
 - a) The identification of all present marble quarries in Jordan.
 - b) An observation and analysis of quarrying techniques now used in Jordan.
 - c) Market research designed to disclose the location and size of markets (present and potential, local and export) for Jordan's marble.

CHAPTER VII

- d) Recommendation of suitable quarrying techniques and estimation of capital costs to be incurred if they are to be used.
 - e) Recommendation of suitable transportation and marketing techniques and institutions.
 - f) Estimates of revenues and expenditures for the next ten years for quarry companies using optimum methods.
- 2) Prior to May 15, 1962, the Jordan Development Board shall have selected an agency to make the study outlined in 1., above, and shall have let the contract for it. The study shall be completed prior to January 15, 1963.
 - 3) After the study has been completed and in light of the conclusions thereof, the Jordan Development Board (with the advice of the Ministry of National Economy) shall decide among the following possible courses of action:
 - a) That no action is needed inasmuch as present companies are doing all that is required.
 - b) That the results of the study should be turned over to existing companies for their use, these companies applying for financial assistance (if required) to the (proposed) Industrial Development Corporation.
 - c) That a new company should be formed (with the assistance and support of the Ministry of National Economy) to implement the study proposals.

— costs : The costs of the feasibility study are estimated at JD 3,000. The capital costs of improved and expanded quarry operations will be estimated by the proposed study and are not here estimated.

— financing : Of feasibility study, out of funds now available for such studies. Of quarry expansion, out of private funds supplemented by borrowing from the (proposed) Industrial Development Corporation.

Specific Proposal No. M3.

— a proposal for a program of geological mapping and economic geology.

THE PROGRAM FOR MINING

— to be done:

- 1) By the agreement with the government of West Germany signed 29-4-1960 and the first complementary section date 10-4-1961, written in the official Gazette No. 1543 on 16-4-1961, the Government of West Germany is to furnish 3-6 geologists who will, over a three-year period, (1) train 3 Jordanian counterparts in geological mapping and economic geology, (2) establish and organize a geological survey for Jordan, (3) begin the process of geologic mapping in Jordan, (4) undertake some actual prospecting for minerals. Work under this agreement has already begun and will continue until approximately July 1, 1964. The relevant operating agency for the Government of Jordan is the Minerals Division, Ministry of National Economy.
- 2) Work under this on-going project must be quickly and accurately reported to many interested governmental agencies if (1) adequate arrangements are to be made for continued geologic work after this project is completed, and (2) findings are to be promptly translated into feasible commercial undertakings by proper commercial enterprises. The Chief of the Mining Division in the Ministry of National Economy and a representative from the Development Board shall review findings and recommend action based thereon. They shall present a written report to the agencies represented prior to March 1, 1962, and prior to each January 1 and July 1 thereafter. The Jordan Development Board, in view of these reports, shall recommend the implementation of projects based on them.

— costs : Estimated at JD 30,000 per year for each of the five years.

— financing : Estimated as follows (in thousands of dinars).

For fiscal years ending March 31

	1962-63	1963-64	1964-65	1965-66	1966-67
Government of Jordan	10.0	10.0	10.0	10.0	10.0
West German Government	20.0	20.0	20.0	20.0	20.0

The last three years assume the extension of the agreement. If is that not done the Government of Jordan should pay the bill.

CHAPTER VII

Specific Proposal No. M4.

- a proposal for «crash» mineral survey programs.
- to be done:

- 1) Prior to March 1, 1962, the Chief of the Mining Division, in cooperation with a Representative of Jordan Development Board, shall recommend in writing to the Jordan Development Board, mineral surveys designed to discover the commercial possibilities of key minerals.
- 2) Prior to April 1, 1962, the Jordan Development Board shall have prepared and mailed invitations to tender for a study of the availability of mineral deposits, together with technical and market characteristics related to the exploitation thereof, relating to one of the mineral surveys recommended under 1. above. It will require that the study include the following:
 - a) Detailed geologic work to establish the location and qualities of commercial quantities of the mineral resource under investigation.
 - b) Detailed market research designed to disclose the location and size of markets (present and potential, local and export) for the products of the resource under investigation.
 - c) A recommendation as to products actually to be produced in Jordan (i.e.: should the mineral be exported in a «raw» state or processed).
 - d) A recommendation as to the facilities needed in Jordan, and the costs thereof, for production of the products recommended in volume sufficient to meet market requirements.
 - e) A recommendation of suitable transportation and marketing techniques and institutions.
 - f) Estimates of revenues and expenditures for the next ten years for a company designed to exploit the mineral resource in an optimum way.
- 3) Prior to August 1, 1962, the Jordan Development Board shall have selected an agency to make the study outlined

THE PROGRAM FOR MINING

in 2. above, and shall have let the contract for it. Studies such as this may take quite some time. However, every effort should be made to have it completed prior to October 1, 1963.

- 4) After the study has been completed and in light of the conclusions thereof, the Jordan Development Board (with the advice of the Ministry of National Economy) shall determine on a proper course of action. Hopefully, if the project uncovers an economically feasible project it will recommend the formation of a new company to implement it.
- 5) Prior to March 1, 1963, and again prior to March 1, 1964, the process outlined in the preceding paragraphs will be repeated to allow two other similar programs.

- costs : costs of studies like that outlined above are very difficult to estimate. However, for purposes of this document JD 75,000 is allocated for such studies in the fiscal years of 1963-64-65-66.
- financing : Budget, Government of Jordan.

Specific Proposal No. M5.

- a proposal for the examination, and possible amendment, of statutes relating to minerals exploration and exploitation in Jordan.

- to be done:

- 1) Prior to March 1, 1962, the Chief, Minerals Division, Ministry of National Economy (with the cooperation of Rep. of Jordan Development Board) shall report in writing (1) an analysis of statutes and regulations as they bear upon minerals development in Jordan, and (2) specific recommendations for changes therein. This report shall be referred to the Jordan Development Board for its instructions to be given prior to September 1, 1962.
- 2) If the Board instructs that statutes and/or regulations should be amended or replaced, a drafting Committee shall be constituted to prepare the desired documents for submission to the Council of Ministers and to Parliament.

CHAPTER VII

The documents should be prepared prior to November, 1962.

- costs and financing : None not covered at present budget levels.

Specific Proposal No. M6

- a proposal for the attraction of petroleum prospectors.
- to be done:

1) Prior to March 1, 1962, the Chief, Minerals Division, Ministry of National Economy (in cooperation with Repr. of Jordan Development Board) shall prepare a campaign to attract one or more petroleum prospectors to Jordan. In the preparation of this campaign, he will review the possibilities of correspondence, advertising, efforts by Jordanian embassy personnel, attendance at petroleum conferences, and other techniques. He will consider contacts with major and minor petroleum companies and with «wildcaters». Campaign plans will be reported in writing to the Jordan Development Board.

2) Prior to June 1, 1962, a suitable person will be appointed in the Minerals Division to conduct the campaign. This person should be responsible, mature, and fully able to help the Chief of the Mineral Wealth Division in all his works and in negotiations with possible prospectors. He should spend necessary time in travel abroad contacting possible prospectors. He should report his progress in writing prior to January 1 of each year.

- costs : Salary of campaign head — JD 1,200 per year. Misc. expenses of campaign — JD 5,000 per year.
- financing : Budget, Government of Jordan.

Specific Proposal No. M7.

- a proposal to provide necessary staff, organization, overhead, and training for a proposed Department of Mineral Wealth, (as successor to the existing Mining Division) Ministry of National Economy.
- to be done:

THE PROGRAM FOR MINING

Prior to April 1, 1962, the Chief, Mineral Wealth Division, Ministry of National Economy (in cooperation with a Repr. of Jordan Development Board) shall examine — in light of experience to that date — his existing and potential programs consistent with the recommendations contained herein and shall formulate specific requests for meeting minimum staff, organization, overhead, and training needs of an expanded Department of Mineral Wealth. In formulating these requests, every effort will be made to secure the views of the U.N. Public Administration Advisor and to be guided by them.

- costs : Costs will be detailed later as indicated above. Rough estimates for purposes of this document envision expenditures beyond the current budget or for activities specially detailed in this «Program for Mining» as follows (in thousands of diners).

For fiscal years ending March 31

	1963	1964	1965	1966	1967
For staff and overhead	3.0	3.0	3.0	4.0	5.0
For training abroad	2.3	4.6	4.6	2.3	2.3
Total	5.3	7.6	7.6	6.3	7.3

- financing : For staff and overhead — Budget, Government of Jordan. For training abroad — external grants.

Specific Proposal No. M8.

- a proposal for expanding knowledge of, and for coordinating the use of, aerial photographs and their photocartographic applications.
- to be done:

1) Prior to February 15, 1962, the Planning Division, Jordan Development Board (with the cooperation of (1) Repr. of Lands and Surveys Dep't., (2) Repr. of Minerals Div., Min. of Nat'l Econ., and (3) Repr. of Program Office, USOM/J, for relevant USOM/J programs) shall prepare a written summary of aerial photocartographic activities, institutions, and applications to date. The Division shall also recommend future activities and the coordination thereof in relevant areas.

CHAPTER VII

- 2) The report of the Planning Division (prepared as outlined above) shall be referred to a Committee of eight ((1) Repr. of Min. of Nat'l. Econ., (2) Repr. of Min. of Agri., (3) Repr. of Dept. of Lands and Surveys, (4) Repr. of Dept. of Forests, (5) Repr. of Central Water Auth., (6) Repr. of Mun. Aff., Min. of Int., (7) Repr. of Jordan Arab Army, and (8) Repr. of Jordan Dev. Bd. — Chr.) for modification and approval. The committee shall report its findings in writing to the Jordan Development Board prior to April 1, 1962.
 - 3) With such modifications as it deems appropriate, the Jordan Development Board will order into effect on April 1, 1962, the conclusions of the Committee.
- costs and financing; None not covered at present budget levels.

CHAPTER VIII

THE PROGRAM FOR INDUSTRY

The rate of growth of industry (manufacturing and mining) in Jordan between 1954 and 1960 was impressive inasmuch as

- output and income produced by industry (plus mining) grew about 3½ times (from JD 2 million to JD 7.5 million).
- employment offered by industry (plus mining) grew about 2½ times (from 10,000 to 25,000 persons).

Yet, in 1960, manufacturing and mining produced only one-tenth of Jordan's gross domestic product and occupied an even smaller proportion of the Kingdom's employed labor force. And — at the same time — imports of manufactured goods (including processed agricultural commodities) exceeded JD 30 million per annum.

There are opportunities for a desirable expansion of industrial production:

- in the phosphate and marble industries (discussed in the Program for Mining) and in the potash industry with large export potentials.
- in food processing industries to go along with the expansion of agricultural production.
- in industries based on Jordanian materials: cement, ceramics, glass containers.
- in handicraft industries with the aid of increased tourism.
- in a wide range of light manufacturing industries, some already established and some whose feasibility is being established by individual studies.

CHAPTER VIII

Industrial expansion is not only desirable but necessary to contribute to higher output and incomes, to provide employment, and to reduce substantially the unfavorable balance of trade — directly by increased exports and substitution for current imports and indirectly by providing more domestic manufactured products with which the increased demand for goods accompanying growth may be met. The results envisaged from industrial expansion are presented in Table 8.2. At the end of 1967

- the value added to gross domestic product should approach JD 20,000,000 or an increase of about 20% per year.
- Industrial employment should reach 37,500, an increase of about 7½% per year.
- Increased exports and substitution for present imports should equal approximately JD 9,100,000.

What steps can be taken to encourage essentially private industrial development of this magnitude?

The specific proposals that follow are designed to answer this question. Many proposals in other programs that will contribute to a stronger economy will assist in attaining the results. Basically the strategy called for is that the Government of Jordan:

- Should provide a more adequate legal framework equitable both to enterprises and the general public through modernized company and industrial laws (Proposals 1, 2, 6).
- Should promote industry through judicious use of customs and other concessions, through information on feasible industrial opportunities, and through consideration in government purchases (Proposals, 2, 5, 7, 8).
- Should aid industry in securing adequate financial, managerial, technical and other resources (Proposals 4, 5, 8, 9, 10).

Proposals for encouraging the growth of output — and income — in industry include:

- 1) Encouragement of industrial investment — and development — by passage of a modern company law applying to the entire Kingdom.

Capital can be mobilized effectively via the sale of shares to many individuals only when the rights and responsibilities of all parties — shareholders (both majority and minority) ,

THE PROGRAM FOR INDUSTRY

directors, and officers (or managers) — are clearly defined and enforceable as a matter of right in the courts. Such rights and responsibilities are not now clearly defined in Jordan. Relevant statutes, regulations, and customs vary as between West and East Jordan and are, in both cases, frequently incomplete and/or outmoded. They should be standardized, modernized, and completed.

'See Specific Proposal No. II.

- 2) Encouragement of industrial investment — and development — by passage of an industrial law which will regularize government licensing, protection, and regulation procedures. That profitable operation of industrial firms in Jordan which attracts industrial investment — and development — frequently requires one or both of the following: (1) Protection against excessive local competition, particularly in those industries where the market is small when compared to the size of firm necessary to achieve reasonably low costs. (2) Protection against the competition of larger, better established foreign producers, particularly in those cases where foreign firms have cheaper access to raw materials or the benefits of long consumer familiarity with their products. This protection should be offered, however, to all firms on the same terms, known in advance, and subject to judicial interpretation. That is to say, protection should be offered within the provisions of a statute — the desired industrial law.

Unfortunately, however, two additional problems arise with respect to protection. First, protection may protect excessive (monopoly) profits and low levels of quality and efficiency as well as reasonable profits. This means that protected industries must be regulated as regards price, quality, and efficient techniques. But this regulation must be reasonable, that is, it must apply to like firms on the same terms, known in advance, and subject to judicial interpretation. Regulation should be imposed within the provisions of a statute — the desired industrial law. Second, protection may cost the community more than it yields in benefits. That is to say, the higher prices resulting from protection may reduce consumers' incomes by more than it increases incomes from business operations. If this is the case, the protection is socially undesirable and should not be offered. The statute

CHAPTER VIII

— the desired industrial law — should therefore spell out the limits of the protection to be afforded.

A procedure for formulating an industrial law is given by **Specific Proposal No. 12.**

- 3) Encouragement of industry by provision of vigorous, imaginative, feasibility (or pre-investment) studies.

Economic planning requires — among many other things — the continuous survey of the economy to discover possible industrial developments. These possible industries must then be carefully investigated to establish profitability and size and type of investment required. The investigation must establish (1) demand (market) for the product, (2) marketing procedures and costs for serving customers found, (3) size and characteristics of plant required together with the costs thereof, (4) probable costs of production, (5) estimated profits, and (6) likely return on investment.

The continuous survey of the economy is the responsibility of the Planning Division, Jordan Development Board (working closely with the proper ministries). The specific investigation of possible developments, however, requires experts in so many industrial areas that a small staff cannot handle them. Therefore, these specific developments are investigated by competent industrial consultants under contract with the Jordan Development Board (with contract provisions stipulated by the Planning Division thereof).

A program for continuing feasibility studies is contained in **Specific Proposal No. 13.**

- 4) Encouragement of industry by provision of an Industrial Development Corporation.

Expansion — whether via growth of existing firms or the establishment of new — requires financing frequently accompanied in under-developed areas by substantial amounts of engineering, marketing, and administrative advice and assistance. Such financing plus advice, when it is not available on reasonable terms elsewhere, must be provided by a governmentally-sponsored institution — and Industrial Development Corporation.

THE PROGRAM FOR INDUSTRY

See **Specific Proposal No. 14.**

- 5) Encouragement of industry by provision of training programs at all levels.

Dynamic industrial growth requires highly skilled manpower at all levels. It requires (1) top executives knowledgeable in all aspects of business operation, particularly in the science of administration, (2) good, top-level staff officers for accounting, marketing, personnel etc., (3) well-trained engineers with experience, (4) vigorous knowledgeable foremen and (5) skilled workers. Improvements at all levels are possible in Jordan by the introduction of well-planned seminars, courses, and training programs.

See **Specific Proposal No. 15.**

- 6) Encouragement of industry by provision of a National Standards Institution.

Industry must be assured that its inputs are of specified qualities if production is to be efficient and costs low. Consumers are better served — and demand and prices rise, particularly in export markets — if products regularly meet specific requirements. Economic activity generally is simplified when sizes, qualities, weights, etc. are standardized. An institution to define and to enforce standards is, therefore, essential to a developing society. Such an institution is recommended for Jordan to serve agriculture, forestry, health services, etc., as well as industry.

See **Specific Proposal No. 16.**

- 7) Encouragement of industry by a policy of Government preference for purchase of local products.

The Government of Jordan — and, in particular, the Jordan Arab Army — is a large purchaser of goods. In a relatively small country, its purchases frequently make that difference which allows the existence of firms for which the domestic market would otherwise be too small. Every effort should therefore be made to have the government show preference to Jordan producers in its purchases.

It is, of course, clearly recognized that purchases from domestic producers with higher costs than foreign rivals (be-

CHAPTER VIII

cause of location disadvantages, lack of experience, or small size) may be at higher prices than imported alternatives. Just, however, as high customs rates (or import quotas) are sometimes justified even though they mean higher prices to consumers when products are produced locally, so also higher prices to government are justified provided that income produced (earned) in the new activity substantially exceeds the additional cost of products to government.

See **Specific Proposal No. 17.**

- 8) Encouragement of industry by provision of an expanded and improved Ministry of National Economy.

See **Specific Proposal No. 18.**

- 9) Establishing a small Crafts Service Institute.

See **Specific Proposal No. 19.**

- 10) Aiding large-scale commercial development of the potash resources of the Dead Sea.

See **Specific Proposal No. 110.**

Specific Proposal No. 11.

— a proposal for the provision of a modern company law for Jordan.

— to be done:

- 1) Prior to August 1, 1962, the Planning Division, Jordan Development Board, shall review the company law provisions within the draft «General Commercial Law», that has been presented to the Prime Minister, and where necessary shall supply adequate provisions for:

- a) Designating the government agency to receive applications for, to grant, and to renew corporate status.

- b) Establishing taxes and fees for the granting and/or renewals of corporate status.

- c) Indicating standards which must be met by applicants prior to granting of corporate status.

- d) Establishing general procedures for the selection of directors and officers for the corporation.

THE PROGRAM FOR INDUSTRY

- e) Establish the rights and responsibilities of shareholders (both majority and minority), in particular their rights to a proper accounting for the company business and their rights with respect to directors and/or officers disposing of the assets of the business improperly

- f) Establish the rights and responsibilities of directors as respects both shareholders and officers of the corporation.

- g) Establish the rights and responsibilities of officers as respects both shareholders and directors of the corporation.

- 2) The revised draft law referred to above shall be submitted for comment to a Committee of five (1) an eminent business executive representing the Chamber of Industry and Commerce, (2) an eminent lawyer, (3) Repr. of Ministry of Justice, (4) Repr. of Jordan Dev. Bd. and (5) Repr. of Min. of Nat'l. Econ. — Chr.). This Committee shall submit its comments in writing prior to September 1, 1962. The draft law plus the Committee's comments on it shall immediately thereafter be submitted to the Jordan Development Board for its action and recommendation for passage by Parliament.

— costs and financing: No additional costs.

Specific Proposal No. 12.

— a proposal for the provision of an industrial law for Jordan.

— to be done:

- 1) Prior to February 1, 1962 the Planning Division, Jordan Development Board, shall review «The 1955 Encouragement of Industry Law» and «Foreign Investment Law» and shall draft an industrial law establishing procedures and standards for the licensing, foreign trade protection, and regulation of manufacturing firms, that shall include desirable provisions from present legislation and shall:

- a) Specify procedures which an applicant must follow

CHAPTER VIII

in applying for a license. These procedures will include:

- (1) The furnishing of a feasibility study as a part of each application. The detail required of this study should vary with the size of the proposed firm.
 - (2) Conference with the licensing authority for purposes of advice and guidance. However, the licensing authority should be required to arrange for this conference within 30 days of the filing of the application.
- b) Specify the situations in which monopolistic protection will be granted a successful licensee. The situations will include:
- (1) Those in which licensees (1) must be assured of substantially the entire production for the domestic market if they are to build and operate reasonably low cost plants, and (2) will provide substantial increases in output and employment. Such licensees should receive monopolistic concessionary status for periods not to exceed 15 years (but subject to renewal at the option of the government).
 - (2) Those in which licensees (1) must be assured of substantially the entire production for the domestic market for a limited period during which they perfect difficult and/or risky processes or market contacts, and (2) will provide substantial increases in output and employment. Such licensees should be assured that no additional licensees in the area of their operations will be licensed for a fixed period not to exceed five years.
 - (3) Those in which licensees (1) can demonstrate that volume saleable at reasonable prices can support only a given (small) number of firms, and (2) will provide substantial increases in output and employment. Such licensees should be assured that not more than the given (small) number of licensees will be extended during a fixed period not to exceed five years.

THE PROGRAM FOR INDUSTRY

- (4) No limits will be set on the number of licenses granted except as indicated above.
- c) Outline desired (model) provisions for monopoly concessions.
- d) Specify circumstances and procedures for obtaining customs advantages including:
- (1) Giving consideration to excluding all imports of capital goods from customs charges.
 - (2) Allowing increases in customs rates (or import quotas) on competing products only upon demonstration that additional incomes generated in Jordan as a result thereof exceed the aggregate increase in product prices stemming therefrom by at least two times.
 - (3) Viewing reductions in customs duties on imported materials and supplies as undesirably revenue reducing when similar advantages as against imports can be obtained by higher duties (or import quotas) on finished products.
- e) Develop procedures whereby the government can require reasonable price, quality, and efficiency standards from companies given monopoly status. The (proposed) Public Service Commission should be responsible for this.
- 2) Prior to February 1, 1962, a Committee of seven (1) Repr. of Min. of Fin., (2) Repr. of Customs Div., Min. of Fin., (3) Repr. of Jordan Dev. Bd., (4) (5) two leading industrialists, and (6) (7) two Repr. of Min. of Nat'l. Econ. — one as chairman) shall be constituted to receive, review, modify, and approve the draft law prepared under 1., above. This shall be done prior to March 15, 1962.
 - 3) The draft law as approved by the Committee shall be transmitted through the Jordan Development Board to the Council of Ministers for review and submission to Parliament.
- costs and financing: None not covered in current budgets.

CHAPTER VIII

Specific Proposal No. 13.

- a project to provide feasibility and economic desirability studies.
- to be done:

- 1) The Jordan Development Board is responsible for (1) preparing work programs for (i.e., specifying the desired content of) feasibility studies, (2) extending invitations to tender for feasibility studies, (3) selection of, and letting contracts to, consulting firms for the study, (4) supervision as required of firms doing the studies, (5) receipt and analysis of studies, and (6) assignment for implementation to ministries, authorities, or private agencies as appropriate.

Feasibility (and economic desirability) studies are called for in other sections of this report. This is not simply a program for industry.

- 2) Feasibility studies have been, or will be, undertaken in the industrial area as follows. It is contemplated that additions and some amendments to this list will be made.

Industry	Contracted (or to be contracted)	Finished (or to be Finished)
Cardboard	July, 1960	April, 1961
Ceramics	July, 1960	September, 1961
Glass containers	July, 1960	September, 1961
Fertilizers	July, 1960	December, 1961
Builders hardware	September, 1961	April, 1962
Electrical fittings	September, 1961	April, 1962
Truck and bus assembly	September, 1961	April, 1962
Water and sewage pipe	September, 1961	April, 1962
Cotton textiles	December, 1961	September, 1962
Wool textiles	December, 1961	September, 1962
Starch and glucose	December, 1961	July, 1962
Hand and farm tools	February, 1962	September, 1962
Sheet metal furniture and products	February, 1962	September, 1962
Dairy products	February, 1962	November, 1962
Fruit and vegetable processing	February, 1962	November, 1962
Sugar refining	March, 1962	December, 1962
Apparel items	March, 1962	December, 1962

THE PROGRAM FOR INDUSTRY

- 3) The Jordan Development Board is responsible for maintaining continuing surveillance of the economy and for identifying and supervising additional studies as required. In discharging this responsibility it shall work closely with the Ministry of National Economy and the proposed Industrial Development Corporation. The Jordan Development Board in planning the studies, and the Ministry of National Economy and the I.D.C. in implementing them shall take into account the possibilities of required economic cooperation within the Arab League.

- costs: For fiscal 1962, estimated at JD 100,000. For subsequent years, estimated at JD 25,000 per year.
- financing: For fiscal 1962, from funds presently made available with the cooperation of USOM/J. For subsequent fiscal years — External Grant (USOM/J).

Specific Proposal No. 14.

- a proposal for the establishment of an Industrial Development Corporation.
- to be done:

- 1) The need for an Industrial Development Corporation — together with suggested articles of incorporation developed by the Planning Division, Jordan Development Board — is indicated in detail in «The Program for Financial Institutions». Prior to March 15, 1962, and after discussions with the Ministry of National Economy concerning possible revisions (including possible participation by commercial banks in the capital and administration of the corporation), the draft charter will be submitted through the Jordan Development Board to the Council of Ministers for review and approval prior to presentation to Parliament.
- 2) Assuming approval by Parliament, the following shall be done.
 - a) Prior to June 1, 1962, the very senior staff of the Industrial Development Corporation shall be selected and the Corporation shall come into being.

CHAPTER VIII

- b) Prior to July 1, 1962, the senior staff shall (1) develop by-laws for corporate operation, and (2) work out the necessary staffing pattern therefor. Incidentally, it is recommended that staffing costs be covered by annual grant from the government budget to free corporate funds for maximum investment in private economic development.
- c) Prior to September 1, 1962, sufficient staff shall be recruited to allow preparation for beginning of operations
- d) Prior to October 1, 1962, the government shall transfer (1) shares held in industrial companies in Jordan, (2) if USOM/J approval can be obtained, the assets of the existing Industrial Development Fund, and (3) a small amount of working capital as its immediate contribution to the capital of the Industrial Development Corporation. It is anticipated that the Corporation will (1) administer the government's share holdings in industrial companies, and (2) sell portions of these shares as required to provide funds needed for its own financing of private ventures.
- e) The Corporation should begin business on October 1, 1962.

- 3) In developing staff needs, the Industrial Development Corporation will take into account the needs for (1) foreign technical assistance during the period of organization and early operation, and (2) specialists in administration, marketing, accounting, and engineering if it is to actively participate in assisting the effective organization and operation of firms which it helps, directly or indirectly, to finance. After gaining experience but prior to July 1, 1963, the Corporation shall specifically consider a possible program with the I.L.O. for a small business advisory and extension service.

— costs : Staff costs are to be developed as indicated under 2.b. above. They are estimated for purposes of this document at JD 25,000 per annum. Funds requirements for investment are estimated at JD 500,000 for 1962/3 and at JD 1,100,000 for subsequent years.

THE PROGRAM FOR INDUSTRY

- financing; Staff costs — JD 18,000 per year from Budget, Government of Jordan; JD 7,000 per year (for foreign expert) from external grant.

Funds for investment — JD 50,000 per year from Budget, Government of Jordan, as a capital contribution to the Corporation.

— JD 400,000 per year from long-term developmental loans from external sources starting in 1963-64.

— From sale of industrial shares, (to be turned over to the Corporation from the government) plus interest, dividends, repayments and subsequent sale of equity interests:

1963 —	370,000
1964 —	250,000
1965 —	250,000
1966 —	300,000
1967 —	400,000

Specific Proposal No. 15.

- a proposal for the systematic development of a program to meet training needs in Jordan.

— to be done:

- 1) Prior to February 1, 1962, the Ministry of National Economy (in cooperation with a Repr. of Jordan Dev. Bd.) shall detail in writing plans for the systematic development of a program to meet training needs in Jordan. It is suggested that this plan follow the sequence indicated below:

- a) By June 1, 1962 — the organization of a very small Training Group in the Ministry of National Economy.
- b) By July 1, 1962 — the obtaining of a top-level management consultant with experience (preferably in under-developed countries) in small industry and executive development programs.

CHAPTER VIII

- c) By September 1, 1962 — the conduct of a study (by the Training Group) and the making of plans (with the advice of the management consultant) for technical training for engineers and foremen. These plans should emphasize training in Jordan as far as possible. Participant training abroad may be used when objectives and programs are clearly defined.
- d) October 1, 1962 to June 1, 1963 — the holding of meetings and seminars with top management to develop interest in management science.
- e) January 1, 1963 to September 1, 1963 — the conduct of a study and the making of plans for courses of training in the management specialties of marketing, accounting, production management, personnel management, etc.
- f) October 1, 1963 to end of program period — the holding of high-level executive development programs (or courses) as appropriate.
- g) October 1, 1963 to end of program period — the holding of middle-management programs (or courses) in the management specialties as appropriate.
- h) October 1, 1962 to end of program period — the holding of technical training programs (or courses) for engineers and foremen as appropriate.
- 1) As appropriate — phase additional consultants into the program.
- expand the staff of the Training Group.
 - establish a Jordan Management Association to serve as a focal point of contact with industrialists.
 - turn responsibility for courses over to appropriate institutions of higher education as they develop.
- 2) Plans as developed under 1, above, shall be implemented by the Ministry of National Economy.
- costs: Costs will be detailed under procedures established under 1., above. Rough estimates for purposes of this pro-

THE PROGRAM FOR INDUSTRY

gram are as follows (in thousands of dinars):

For fiscal years ending March 31

	1963	1964	1965	1966	1967
Foreign consultants	10.0	20.0	26.0	26.0	26.0
Jordan staff and misc.	15.0	17.5	20.0	22.0	24.0
Total	<u>25.0</u>	<u>37.5</u>	<u>46.0</u>	<u>48.0</u>	<u>50.0</u>

— financing: Foreign consultants — External grants. Jordan staff and misc. — Budget, Government of Jordan.

Specific Proposal No. 16.

— a proposal for the establishment of a National Standards Institution in Jordan.

— to be done:

- 1) The Industry Institute of Lebanon has submitted to the Jordan Development Board and to the Ministry of Economy recommendations for the establishment of a National Standards Institution and a draft law therefor. These recommendations see the National Standards Institution as the focal point through which all national standards are drafted, tested, and adopted. It is to be the coordinator of standards activities undertaken by various government and private agencies which would participate with the Institution in establishing standards in their fields of competence. The Institution is not seen as having regulatory powers over mandatory standards. Enforcement would be by relevant government agencies.

The functions of the Institution shall be (1) to draft and adopt national standards for local products and produce and for imported goods, (2) to draft and adopt national codes of safety, (3) to supervise the application of standards and control the use of a national stamp of quality, and (4) to represent Jordan in the field of standards, both regionally and internationally.

CHAPTER VIII

It is recommended that use should be made of existing government laboratories.

- 2) The Ministry of National Economy has submitted these recommendations and its comments to the Council of Ministers for approval and submission to Parliament.

Assuming relevant parliamentary approval, the National Standards Institution shall be constituted and commence operations on April 1, 1962.

— costs: Costs are estimated as follows (in thousands of dinars):

For fiscal years ending March 31

	1963	1964	1965	1966	1967
Staff and misc. cost	7.5	12.5	15.5	19.0	25.0
Foreign experts	7.5	7.5	7.5	—	—
Equipment	15.0	10.0	—	—	—
Total	30.0	30.0	23.0	19.0	25.0

— financing: Staff and misc. costs — Budget, Government of Jordan. Foreign experts — Government of Germany suggested. Equipment — Government of Germany suggested.

Specific Proposal No. 17.

— a proposal for the development of a government policy giving preference to the purchase of local manufactured products.

— to be done:

- 1) Prior to April 1, 1962, the Planning Division, Jordan Development Board, shall conduct a study of the purchasing patterns of all governmental agencies and shall estimate based thereon (1) the volume of manufactured goods not now produced in Jordan but which potentially might be so produced, and (2) the costs — and hence prices — for such additional domestic production.
- 2) The written report summarizing the study outlined under 1., above, shall be submitted prior to April 1, 1962, to a

THE PROGRAM FOR INDUSTRY

Committee of five ((1) Repr. of Ministry of Public Works, (2) Repr. of Ministry of Defence, (3) Repr. of Ministry of Finance, (4) Repr. of Jordan Dev. Bd., and (5) Repr. of Ministry of National Economy — Chairman). This Committee, prior to June 1, 1962, shall draft a statement of Government Policy regarding governmental purchases of local manufactured products. If this statement of policy requires for its implementation new legislation, drafts thereof shall also be prepared by the Committee.

- 3) Prior to June 15, the Committee's draft policy statement and legislation shall be submitted through the Jordan Development Board to the Council of Ministers for revision, approval and possible submission to Parliament.

— costs and financing: None not covered at present budget levels.

Specific Proposal No. 18.

— a proposal to reorganize and expand the staff of the Ministry of National Economy.

— to be done:

- 1) Prior to February 1, 1962, the Minister of National Economy (in cooperation with a Repr. of Jordan Dev. Bd.) shall, in light of responsibilities imposed by this program and experience, formulate specific plans for meeting the minimum staff, organization, overhead and training needs of the Ministry of National Economy. In formulating these plans, he shall:
 - a) Take into account the dual nature of the Ministry's activities — regulatory and promotional. These two activities should be clearly differentiated and made the responsibility of separated divisions within the Ministry.
 - b) Recognize the roles that will be played by (1) the (proposed) Industrial Development Corporation in the promotion of new enterprises, and (2) the (proposed) Public Service Commission in administering concession terms including the regulation of prices of industrial

CHAPTER VIII

monopolies. (See «The Program for Electricity», Specific Proposal El. 2).

c) Inform himself of the results of the feasibility study for a proposed Jordan Industry Institute and recommend action based thereon.

2) In formulating these plans, every effort will be made to secure the views of the U.N. Public Administration Advisor and to be guided by them.

— costs: To be specified under plans developed under 1., above. Estimated for purposes of this document at JD 10,000 per annum.

— financing: Budget, Government of Jordan.

Specific Proposal No. 19.

— a proposal to establish a small Crafts Service Institute.

— to be done:

The Ministry of Development and Reconstruction has a plan to establish a small Crafts Service Institute to teach craftsmen better methods of working olive wood, mother of pearl, and other tourist crafts, and to give them better designs. The I.L.O. agreed verbally to send three experts to supervise instruction in this new institute for the coming three years. (See Program of Social Welfare for financing of Urban Cooperatives concerned with crafts).

— costs : (excluding the foreign experts)

1962-63	1963-64	1964-65	1965-66	1966-67
4,000	4,000	4,000	4,000	4,000

— financing :

1962/63 funds are already allocated.

1963/64 funds from UNRWA.

1964-67 funds from G.O.J. budget.

Specific Proposal No. 110.

— a proposal for encouraging commercial development of the Potash Resources of the Dead Sea.

THE PROGRAM FOR INDUSTRY

The Arab Potash Company, Ltd. has secured the services of Western Knapp Engineering Company, which is currently engaged in the preliminary engineering for a potash plant of 250,000 tons capacity.

The tentative design, construction and operations schedule proposed for the plant can be summarized as follows:

	Estimated starting date	Estimated completion date		
Preliminary Engineering (Phase A)	September 1961	May 1962		
Pan Design & tenders	January 1962	May 1962		
Review by Arab Potash Ltd.	May 1962	June 1962		
Village Construction	May 1962	July 1963		
Plant Design, Specifications & tenders (Phase B)	June 1962	July 1963		
Carnallite Pan Construction	June 1962	April 1963		
Brine Pumps & Lines Construction	June 1962	December 1962		
Carnallite Salt Bottoms Build-Up	July 1962	March 1964		
Salt Pans Construction	August 1962	April 1964		
Brine to Salt Pans	December 1962	Continues		
Liquor to Carnallite Pans	March 1964	Continues		
Plant Construction & Test Period	April 1963	October 1964		
Plant Start-up by Engineers	October 1964	February 1965		

The implementation of this program would lead to commercial production by January 1, 1965. On the basis of 1961 prices, the total value of production at the planned capacity of 250,000 tons would be over JD 2,500,000. In view of the importance of the project to Jordan's economic development it is vital that the ministries and the Jordan Development Board give prompt encouragement to the facilitating services of needed transportation and finance.

Transportation — Karak-Safi road improvements sufficient for the bringing in of construction equipment should be completed by May, 1962. The Western Knapp Engineering Company has submitted a preliminary evaluation indicating that the Wadi Araba road from Safi to Aqaba has a decisive economic advantage over alternative routes. The production of potash on the schedule shown above is contingent on the prompt start of survey and design work in February 1962. (See the Program for Transportation, Specific Proposal Tran. 10 for cost and finance estimates on the road).

CHAPTER VIII

Finance — The Jordan Development Board should immediately give such assistance as necessary to the Arab Potash Co., Ltd. in obtaining the necessary financing estimated below.

Costs and financing: — The plant equipment, and working capital needs of the program above are given in the estimates below for fiscal years 1963, 1964 and 1965. The capital requirements for 1966 and 1967 are for expansion into by-product production such as pure salt, bromine and magnesia:

	Estimated Capital Required	Estimated financing from external loans	Estimated financing from Jordanian source ⁽¹⁾
1963	1,800	1,300	500
1964	2,500	2,000	500
1965	2,800	2,300	500
1966	200	—	200
1967	500	—	500
	<u>7,800</u>	<u>5,600</u>	<u>2,200</u>

(1) Jordan funds are estimated to come from existing capital of corporation (JD. 700,000); new shares (JD. 800,000), and reinvestment of gross earnings (JD. 700,000)

CAPITAL REQUIREMENTS

Industrial development, planned primarily from private initiative but encouraged by governmental activities, has been specified in the preceding pages. Estimates of capital requirements are shown in Table 8.1 on pp. 157-8.

THE PROGRAM FOR INDUSTRY

TABLE 8.1
ESTIMATED CAPITAL REQUIREMENTS FOR MANUFACTURING DEVELOPMENT
(in thousands of Dinars)

Industrial Category	1963	1964	1965	1966	1967	Total	Source of funds
Manufacturing firms in which the government holds a stock interest (1); (2)	104	115	75	130	210	634	Internal sources except for JD 75,000 required by the vegetable oil refinery.
All other presently existing manufacturing firms (2)	600	650	700	750	800	3,500	Internal sources plus I. D. C.
Potash	1,800	2,500	2,800	200	500	7,800	As negotiated, but potentially including loan of 5,000 from I. D. A.
New industries already determined feasible:	368	281	—	—	—	649	
Chocolate and Confectionary	61	60	—	—	—	121	Private sources (3)
Biscuits	50	50	—	—	—	100	Private sources (3)
Cardboard	76	70	—	—	—	146	Private sources (3)
Carbonated Beverages	31	31	—	—	—	62	Private sources (3)
Ceramics	150	170	—	—	—	320	Private sources (3)
New Industries probably feasible:	175	369	217	100	—	861	
Hand tools	—	12	12	—	—	24	Private sources (3)
Builders hardware	13	14	—	—	—	27	Private sources (3)
Paints	16	15	—	—	—	31	Private sources (3)
Concrete pipe	—	100	100	100	—	300	Private sources (3)
Concrete block	36	60	60	—	—	156	Private sources (3)
Detergents	36	36	—	—	—	72	Private sources (3)
Sheet metal products	—	48	45	—	—	93	Private sources (3)
Electrical fittings	13	14	—	—	—	27	Private sources (3)
Glass	71	70	—	—	—	141	Private sources (3)
Total estimate for industries probably feasible taken at 2/3 above amounts	117	246	145	67	—	575	

CHAPTER VIII

TABLE 8.1 (Cont.)

Industrial Category	1963	1964	1965	1966	1967	Total	Source of funds
New industries possibly feasible	(17)	(576)	(915)	(1,175)	(1,585)	(4,268)	
Superphosphate	—	63	60	—	—	123	Private sources (3) ¹
Radios	17	18	—	—	—	35	Private sources (3)
Rubber tires	—	—	150	—	350	500	Private sources (3)
Woolen textiles	—	150	150	150	210	660	Private sources (3)
Cotton textiles	—	150	150	150	150	600	Private sources (3)
Truck and bus assembly	—	—	—	200	200	400	Private sources (3)
Starch and glucose	—	20	30	—	—	50	Private sources (3)
Dairy products	—	50	50	—	—	100	Private sources (3)
Fruit & vegetable proces.	—	50	50	—	—	100	Private sources (3)
Apparel items	—	75	75	75	75	300	Private sources (3)
Sugar Refining	—	—	200	600	600	1,400	Private sources (3)
Total estimate for industries possibly feasible taken at 1/3 above amounts	6	192	305	392	528	1,423	
Unplanned opportunities developing with growth	—	50	150	300	400	1,000	
Total Estimated Requirements (Underlined figures without brackets)	2,895	4,034	4,175	1,839	2,438	15,381	
Estimated Sources of Funds							
External Loan for Potash	1,300	2,000	2,300	—	—	5,600	
Industrial Develop. Corp.	237	307	275	328	388	1,535	
Private Jordan	1,358	1,727	1,600	1,511	2,050	8,146	

- (1) Includes (1) petroleum refinery, (2) leather tannery, (3) vegetable oil refinery, and (4) cement company.
 (2) Total estimated assistance via personal interviews with management of all large companies. Yearly investment allocated for expected growth.
 (3) Plus possible assistance from Industrial Development Corporation.

THE PROGRAM FOR INDUSTRY

Table 8.2
ESTIMATED ECONOMIC RESULTS FROM INDUSTRIAL DEVELOPMENTS

	Approximate Value Added to National Output (thousands of JD.)	Additional Employment	Increased Exports and Substitution for current Imports (thousands of JD.)
Mining and Quarrying (1)	3,400	1,750	3,400
Manufacturing firms (2) in which the Government holds a stock interest	1,600	750	500
Potash (3)	2,200	600	2,400
Other new industries listed in Table 7.1 (4)	1,350	2,000	1,500
All other presently existing manufacturing industries	3,000	6,650	1,000
Unplanned opportunities developing with growth	600	1,000	300
	12,150	12,750	9,100 (5)

- Notes: (1) Phosphates, marble, with small allowances for clay and sand. The possibility of manganese, copper, or iron is not taken into account.
 (2) Cement, Vegetable Ghee, Oil Refining, Tannery.
 (3) Assumes production of 200,000 to 250,000 tons of potash but no development of bromine in five years period.
 (4) Two-thirds of potential of probably feasible industries and one-third of the potential possibly feasible industries are included in these estimates.
 (5) This includes allowance for increased exports of JD 3,300,000 for phosphates, JD. 2,400,000 for potash and JD. 200,000 in other categories.

Comparison of Results with 1959 Base

The best benchmark for appraising these economic results for manufacturing and mining come from the industrial census for 1959. Value added in manufacturing and mining was estimated at JD 7,340,000 so that the increase in value added for the five years amounts to over 150% of this base figure or approximately 20% a year compounded for the years of the plan.

CHAPTER VIII

The employment increase of 12,750 represents over 50 % of employment in the industrial sector in 1959, or about a 7.5% increase per year for the five years from 1963 to 1967.

The direct effect on the unfavorable trade balance of JD 9,100,000 amounts to over one-quarter of the 1959 trade deficit.

CHAPTER IX

THE PROGRAM FOR TOURISM

1) Within the boundaries of Jordan is to be found what many experts would agree is the most interesting group of historical and religious sites in the world. Yet the wealth of places of interest here is remarkably little known to the average tourist from Europe, North and South America, and other parts of the world. Under the circumstances it is reasonable to conclude that tourism is one of Jordan's most unexploited resources.

2) Even though tourism is in a relatively underdeveloped state, more foreign currency is spent for Jordan's tourist services than for any of its exports. Under the five-year program for economic development the annual rate of spending by tourists is expected to increase from the present level of JD 3 million per year to an annual rate of JD 9 million by 1967. A tripling of the annual income from tourism in a period of five years is by no means an unreasonable goal. To accomplish it will require a doubling of the number of tourists, an increase in the average length of stay per tourist, and an increase in the daily rate of tourist spending.

3) An expansion of tourist spending will yield particularly attractive returns since they will accrue from inexhaustible natural resources — Jordan's history, geography, scenery, and climate. Indeed, far from depreciating with use, these assets will become increasingly valuable as international travellers become more aware of their attractiveness and as they are made more accessible and convenient for foreign visitors.

4) A large proportion of tourist expenditures are for internally produced commodities and services. This results in highly favorable income effects for Jordan since only a small part of tourist expenditures are made for purchases requiring offsetting imports from

CHAPTER IX

abroad. It also means that increases in such expenditures will contribute importantly to the closing of the balance of payments gap.

5) Tourist spending provides unusually favorable employment effects. Since tourists require extensive personal services in hotels, in restaurants, from guides, from drivers, from producers of craft items, etc., increased expenditures from this source will be reflected in relatively large gains in employment.

- 6) A tripling of tourist expenditures by 1967 should mean:
 - a) an automatic increase in «world-of-mouth» advertising abroad;
 - b) an increase in value added, and in income, in Jordan by 1967 of approximately JD 4.5 million per year;
 - c) an increase in employment of from 10,000 to 15,000 persons;
 - d) an improvement of JD 5 million in the balance of payments position of the Kingdom.

It is worth noting that similar gains in value added and in income in potash and bromine will require capital expenditures exceeding JD 7 million and will yield much smaller employment increases. Substantially smaller capital expenditures in Jordan will yield larger returns when they are devoted to the development of tourism.

7) The program for tripling tourist expenditures requires activities as follows:

- 1) The provision of additional, attractive hotel facilities:

A doubling in the number of tourists and the lengthening of the period of stay in Jordan will both require an increase in the number of hotel rooms. If increases in daily expenditures are also realized, they imply tourists with higher incomes who will prefer more luxurious (though higher-priced) accommodations. Therefore, additional rooms — some of them of a luxury type — are required.

A program of hotel expansion requires (a) a study by the Tourism Authority to establish the volume, type, location, and timing of required hotel facilities and expected revenues and costs therefor. (b) the provision of sound advice from a trained hotel architect on such items as location,

THE PROGRAM FOR TOURISM

design, construction, and decoration, and (c) «stand-by» loan facilities when private funds available fall short of needs.

It is important that good, additional hotel facilities be built at a rate that exceeds immediate actual requirements; for the availability of such accommodations will provide a strong inducement for tourists who like their comfort to come to Jordan. 1/ Such tourists who like their to come in large numbers until they know that hotel accommodations of the standard which they demand are available. To provide for construction at a rate somewhat in excess of immediate demand may well require substantial governmental assistance to private undertakings in the form of extensive loans on favorable terms and the furnishing of technical advice on hotel design and construction. It is most important that the possibilities for expansion in the area of tourism should be fully appreciated and that the government should take all necessary steps to maximize the benefits from this source.

See Specific Proposal No.T. 1.

- 2) The provision of adequate rest house, cafe, wash room, and gift and souvenir-purchasing facilities.

Many of Jordan's most attractive tourist sites are at substantial distances from hotel facilities. The tourist needs rest, cafe, and toilet facilities as well as convenient shops for buying gifts and souvenirs. All of these facilities should be provided on a systematic basis.

A program for the provision of these facilities requires (a) a study by the Tourism Authority to establish revenues, costs, and capital required at alternative locations so that methods of operation (e. g., public or private) can be worked out and locations established, (b) good design work, (c) if privately constructed and operated, «stand by» loan facilities when private funds fall short of needs, and (d) if publicly constructed and operated, the provision of

1/ — An interesting discussion of this point is contained in International Tourism Today, Vol. 1, May 1961, prepared under an agreement with the Jordan Development Board by Program Research, Part I, pp. 26-27; and Part II, pp. 4-6.

CHAPTER IX

funds, construction, and management by appropriate government agencies.

In making certain that these facilities are made available in adequate quantities and at levels of sanitation and comfort which will be pleasing to tourists from more highly developed countries, the government must be prepared to play an active part. In the case of needed facilities which private enterprise is not prepared to provide because of the absence of profit possibilities, the government should be prepared to undertake their construction and operation. Though some of the ancillary tourist facilities may never become directly profitable, such as clean and sanitary public toilets, they will provide immense indirect dividends. Tourists, if they encounter comfortable and pleasing facilities will take home much more favorable impressions and will be a source of good advertising for Jordan. They will encourage their friends to visit this country, and some of them will do so. If the tourist at every turn encounters dirty, uncomfortable, and unsanitary facilities he will take back a poor impression of the country in spite of the outstanding sites of interest which he has seen; and he will be a source of much less favorable advertising. In the final analysis, the provision of proper facilities for the physical comfort of tourists is one of the cheapest form of advertising which Jordan can undertake in its efforts to promote tourism.

In catering to the comfort of tourists it should also be emphasized that improved standards of retail marketing in gift and souvenir shops should be imposed. Most tourists do not like to be badgered by high-pressure salesmanship tactics. Also, the process of haggling over prices is alien to many western tourists. Though some visitors may find this procedure an entertaining novelty, most will be made to feel uncertain by it and will find it irritating. Adequate steps should be taken to provide retail-selling conditions for gifts and souvenirs which will be attractive and pleasant for tourists.

See Specific Proposal No. T. 2.

- 3) A vigorous advertising and promotion campaign.

Tourists have many options as to areas to be visited. These

THE PROGRAM FOR TOURISM

areas compete vigorously with one another. Jordan must enter this competition effectively if the unequalled drawing power of «The Holy Land» is to be fully realized. An advertising and promotion campaign involves (a) a market study (which is now being done by Fistere and Associates); (b) attractively printed promotional materials; (c) a prompt, efficient inquiry-answering service; (d) slides and movies for use abroad (particularly by Jordanian nationals abroad); (e) representation at fairs and expositions; (f) magazine and newspaper advertising; (g) contacts with travel agents, airlines, and ship companies, and the furnishing of advertising material to them so that they may serve as sales agents for Jordan; and (h) the conclusion of agreements with specialized companies in international tourist markets for the organization and conduct of public-relations activities.

This campaign must not be on too modest a scale. The stakes are large and the effort made must be appropriate thereto.

See Specific Proposal No. T. 3.

- 4) A program for the preservation and restoration of historical sites, buildings, and monuments, and for museums. Jordan's major tourist attractions are historical. They are manifest in ruins, old building, monuments, sites, and collections of artifacts, all of which should to as well-maintained and as attractively presented as possible. Every effort should be made to do so.

See Specific Proposal No. T. 4.

- 5) The development of special programs and festivals for tourists.

Tourists can be persuaded to say longer, or be tempted to come in off-seasons, by specially-arranged and well-promoted programs such as (a) sound and light presentations at well-known sites; (b) cultural festivals in ancient amphitheaters; (c) special archaeological «digs», or tours, for interested persons.

Care must, of course, be taken to make certain that special programs and festivals are appropriate to the «Holy

CHAPTER IX

Land» concept.

See Specific Proposal No. T. 5.

6) The improvement of hotel and restaurant management. Good hotel and restaurant buildings are not enough. They must be used to provide a maximum of comfort, convenience, and quality for the tourist while holdings costs low for owners and operators. To these ends, one or more experts should be provided to consult with, and provide information and training for, hotels and restaurants.

See Specific Proposal No. T. 6.

7) The imaginative recommendation of sample tours.

Experts in the area of tourism should be called upon to prepare sample tours to meet a wide variety of tourist interests. These tours should provide the basis for advertising and promotional activities.

See Specific Proposal No. T. 7.

8) The provision of direct, international flights to Jerusalem.

Jordan, as «The Holy Lands», is the major tourist attraction for western tourists in the Middle East. Unfortunately for Jordan, there are now no direct flights to Jerusalem — the tourist center — from Western Europe and the United States. Tourists fly to Beirut and Cairo and change planes there. Having stopped, they spend time and money which would otherwise be available for Jordan. This situation requires (1) an international airport in the Jerusalem area, and (2) the encouragement of international airlines to provide direct flights thereto using modern, jet equipment. As an interim measure the runway at the Amman airport should be lengthened quickly so that it could accommodate the largest international jet transport planes. These measures are recommended in «The Program for Transportation».

9) Tourism education in the schools.

Tourism brings foreigners in direct contact with the people of Jordan. This offers an opportunity and a challenge to educators. It gives an opportunity to direct the study of history and geography to discussions of why tourists are

THE PROGRAM FOR TOURISM

interested in Jordan and from what countries they come. It is a challenge in that it requires that students, and ultimately the public generally, be educated to assume that attitude of friendliness and understanding which is so important to the generation of tourist satisfaction.

A recommendation for the cooperative development of educational projects relating to tourism is contained in «The Program for Education», Specific Proposal No. Ed 8. It is also contemplated that vocational work in the schools should include the training of hotel and restaurant personnel and guides. See «The Program for Education».

Specific Proposal No. Ed. 3.

10) A program for the improvement of legislation and regulations relating to tourist matters.

See Specific Proposal No. T. 8.

11) A program for improved coordination among the various governmental agencies and among governments in matters concerning tourism.

See Specific Proposal No. T. 9.

12) The provision of the necessary authority, staff, organization, and training for the Tourism Authority.

The foregoing programs will require much of the Tourism Authority. To be able to carry out its responsibilities effectively it must truly be an Authority in fact as well as in name. It should be empowered to operate as an autonomous body reporting to the Government directly through the Prime Minister. Once its budget has been approved, it should not be required to submit individual expenditures for approval before making them, but should only be help fully responsible for the proper use of the funds which have been allocated to it.

Careful attention must be given to the staffing, organizational, and training needs of this Authority; for it must play an important role in Jordan's future economic development.

CHAPTER IX

Specific Proposal No. T. 10 establishes procedures for meeting these needs.

Specific Proposal No. T.1

— a proposal to provide additional hotel facilities.

— to be done:

- 1) In order to determine the volume, type, location, and timing of required hotel facilities, the expected revenues and costs therefor, and the trained-personnel requirements for efficient operation of the new facilities:
 - a) Prior to February 1, 1962, the Tourism Authority, in cooperation with a member of the Planning Division of the Jordan Development Board, shall undertake a study covering the following points:
 - 1) Estimates by year to 1967, of the potential number of tourists and the expected average duration of their stay.
 - 2) Estimates of the national origin of anticipated tourists and the types of facilities which they will require.
 - 3) Determination of the number, size, types, and proper locations of new hotels to be constructed during each year of the period 1962-67.
 - 4) Estimates of revenues and costs for the hotels to be constructed.
 - 5) Estimates of the specialized personnel to be required by the new hotels and recommendations concerning the most appropriate means for providing the training that new hotel employees will require.
 - b) Prior to February 1, 1962, the Tourism Authority shall obtain the services on a retainer basis of an outstanding architectural firm specializing in hotel design. The services of this firm shall be called upon by the Tourism Authority in carrying out the study described in 1 (a), above.
- 2) The results of the study called for in point 1., above, shall

THE PROGRAM FOR TOURISM

be made freely available to all groups potentially interested in constructing new hotel facilities.

- 3) The Industrial Development Fund or its successor shall be specifically empowered to make loans on favorable terms for hotel construction. Such loans shall only be extended, however, for those projects which are consistent with needs as indicated by the Tourism Authority study called for in 1., above.

— costs : The retainer fee for the services of an outstanding firm specializing in hotel design is estimated at JD 15,000 per annum.

For purpose of this document the total cost of constructing additional hotel accommodations and comfort facilities for tourists (See Specific Proposal No. T. 2) is estimated by year as follows: JD 1,022,800; 1966, JD 1,078,800; 1963, JD 1,344,300; 1964, JD 1,660,700; 1965, and 1967, JD 993,400.

— financing : Retainer fees for architectural consultants, Budget, Government of Jordan.

Construction costs for additional hotel accommodations and comfort facilities for tourists as follows (in thousands of J.D.'s):

Fiscal year to March 31 :	1963	1964	1965	1966	1967
Industrial Development Corp.	139.3	207.3	122.8	178.8	143.4
Budget, Government of Jordan	80.0	183.4	150.0	100.0	50.0
Private Jordanian Sources	500.0	650.0	750.0	800.0	800.0
Private foreign sources	615.0	265.0	—	—	—
Total	1,344.3	1,660.7	1,022.8	1,078.8	993.4

Specific Proposal No. T.2

— a proposal for developing adequate rest house, cafe, wash-room and gift and souvenir-purchasing facilities.

— to be done:

- 1) Prior to February 1, 1962, the Tourism Authority in cooperation with a member of the Planning Division of the Jordan Development Board and the help of consulting ar-

CHAPTER IX

chitect in Proposal No. T.1, shall undertake a study of the needs at tourist centers for additional rest house, café, and wash-room facilities, and for improved gift and souvenir-purchasing outlets. This study should include the following:

- a) An indication of the sites which should receive these facilities and an indication of the kind of facilities required at each.
 - b) Estimates of receipts and expenditures of facilities at each site selected.
quired at each site.
 - c) Estimates of costs of construction for facilities re-
 - d) Recommendations as to whether facilities at each site should be governmentally or privately owned, and if governmentally owned, whether or not they should be operated by private persons.
 - e) Recommendations of rules and regulations for the operation of these facilities. This should include legislation which would empower the Tourism Authority to set standards of behavior for merchants of gifts and souvenirs in close proximity to sites of tourist interest; and if necessary, permit the Tourism Authority to establish and operate emporiums in order to obtain adequate standards of merchandising behavior. In this connection it should be pointed out that highly successful governmental emporiums catering to tourists have been established in India and Ceylon.
- 2) A consulting architect as called for in **Specific Proposal T. 1**, shall supervise the building of the rest houses which have already been scheduled for Madaba, Sabastia, Aqaba and Qumran.
 - 3) In determining the facilities needed in the Old City of Jerusalem, the Committee called for in 1. , above, in addition to the advice of its consulting architect, should also solicit the views of the International Union of Official Travel Organization in drawing up its plans.
 - 4) After the study called for in 1. , above has been completed:

THE PROGRAM FOR TOURISM

- a) In those cases where private operation are indicated, every effort will be made to stimulate formation of a private company, or companies. This company, or companies, should be permitted to draw upon the resources of the Industrial Development Fund, or its successor for assistance.
 - b) If public operation is indicated, the Tourism Authority shall move expeditiously to have detailed drawings prepared, to work with the Ministry of Public Works in letting contracts for construction, and, after construction, to equip and operate the facilities.
 - c) In the design of facilities, whether done under private or public auspices, the services of the consulting architect shall be made available as appropriate.
- costs: The costs of construction and of consulting architectural services have been taken into account in **Specific Proposal No. T.1**.
- financing : (Included in **Specific Proposal No. T.1**)

Specific Proposal No. T.3

- a proposal for a vigorous advertising and promotion campaign.
- to be done:
- 1) Within three months after the receipt of the final report on tourism publicity now being prepared by Doherty, Clifford Setters, and Shenfield, the Director, Tourism Authority (in cooperation with a Repr. of Jordan Dev. Bd.), shall prepare a detailed program for an expanded advertising and promotion campaign. This program shall include the following:
 - a) Continuation of the distribution of the types of promotional materials called for by Jordan's tourism clientele. Such distribution is currently being supported by USOM/J, and it should be continued.
 - b) Provision of a prompt and efficient tourist-enquiry answering and public relations service in major foreign cities. This service is presently provided in Beirut and New York.

CHAPTER IX

- c) The preparation of slides and movies for use abroad. In this connection, recommendations shall be made for providing each Jordanian going abroad as a student, or for training, with a suggested speech to be used along with slides or movies when he is invited to speak to religious, commercial, and civic groups abroad.
- d) Provision for the representation of Jordan's Tourism Authority at all major international fairs and expositions. Careful attention should be given to the development of Jordan's facilities at these fairs and expositions.
- e) The continuation of a magazine and newspaper advertising campaign which recognizes the great expense involved in mass circulation media and which therefore emphasizes campaigns in selected media such as religious publications. This is currently being supported by USOM/J and such advertising should be continued.
- f) The further development of a program of written and personal contacts with travel agents, airlines, and ship companies. Recommendation should also be made for the furnishing of effective advertising material to them for their use.
- g) Estimates of costs by area of activity and by year.
- 2) The program prepared under 1. , above, shall, when approved by the Board of Directors of the Tourism Authority, be implemented as expeditiously as possible.

— costs : To be detailed under the procedures specified under 1. , above. Rough estimates for purposes of this document are as follows (in thousands of dinars):

Fiscal year to March 31 :	1963	1964	1965	1966	1967
Fairs and expositions	10.0	15.0	20.0	20.0	20.0
Publicity and advertising	40.0	70.0	102.5	142.5	150.0
Total	50.0	85.0	122.5	162.5	170.0

— financing : Budget, Government of Jordan.

THE PROGRAM FOR TOURISM

Specific Proposal No. T.4.

— a proposal for an expanded program of preservation and restoration of historical sites, buildings, and monuments and for museums.

— to be done:

- 1) To encourage additional archaeological exploration in Jordan:
 - a) The budget of the Department of Antiquities will be increased to cover a portion of the labour costs of foreign archaeological groups proposing to work in Jordan.
 - b) This budget increase will be allocated so as to maximize the amount of archaeological exploration in the Kingdom. It will be allocated by a Committee of three ((1) Repr. of Tourism Auth. , (2) Repr. of Jordan Dev. Bd. , and (3) Repr. of Dept. of Antiquities — chairman).
 - c) The Committee will notify the principal archaeological associations in the world of the terms of award of monies from this fund and will place small announcements thereof in the principal archaeological journals.
- 2) To preserve and restore historical buildings and monuments in Jerusalem and Bethlehem.
 - a) The Director, Department of Antiquities (with the cooperation of a Repr. of Jordan Dev. Bd.) shall prepare (prior to December 1, 1961) a request to UNTAB for the services of one or more experts to advise on the preservation of buildings and monuments in the cities of Jerusalem and Bethlehem. The expert should, if possible, have had experience in the preservation and restoration of mediaeval European cities. He should be available, if possible, by June 1, 1962.
 - b) The expert shall prepare a comprehensive report on the activities which should be undertaken by the municipalities and other groups, including religious orders and private organizations, to preserve and

CHAPTER IX

restore the historic buildings and monuments of Jerusalem and Bethlehem. The report should give detailed consideration to the choice of restoration techniques, to costs, and to legislation required. The report may also give incidental consideration to such matters as the flood lighting and landscaping the Old City. It should be completed prior to July 1, 1963.

- c) The expert will also be available for consultation with groups planning to restore buildings in Jerusalem and Bethlehem.
- d) Not later than September 1, 1963, a Committee of five ((1) Repr. of Mun. of Jerusalem, (2) Repr. of Mun. of Bethlehem, (3) Repr. of Dept. of Antiquities, (4) Repr. of Jordan Dev. Bd., and (5) Repr. of Tourism Authority — Chairman) shall be constituted to develop a detailed program for implementing the recommendations of the expert.
- 3) To preserve and restore historical sites:
- a) Prior to February 1, 1962, the Director, Department of Antiquities (in cooperation with a Repr. of Tourism Authority and a Repr. of Jordan Dev. Bd.) will, taking into consideration the recommendations of Dr. Stockwegh and the funds allocated in this project, prepare a five-year plan for the improvement of major archaeological and historical sites in order to make these more attractive for tourists. This plan will:
- (1) Designate specific locations to be improved and the nature of the work to be done at each.
 - (2) Set times for beginning and completing work.
 - (3) Estimate costs by year.
 - (4) Recommend such consultants as may be necessary.
- b) The Director, Department of Antiquities, shall be responsible for the implementation of the plan prepared under 1, above. He shall, however, (in cooperation with a Repr. of Jordan Dev. Bd.) review actual progress each year prior to December 31. The plan shall be revised as necessary in the light of this review.

THE PROGRAM FOR TOURISM

- 4) To construct and improve museums:
- a) Prior to February 1, 1962, the Director, Department of Antiquities (with the cooperation of a Repr. of Jordan Dev. Bd.) shall request from USOM/J the services of an expert in museum design, it is hoped that this expert will be available July 1 — Dec. 31, 1962. It is hoped that he will (1) identify the sites at which museums are required, (2) design museums as required, including a wax museum in which historical stories and national costumes can be represented, and (3) prepare recommendations for improvement of existing museums.
- b) Prior to February 1, 1963, and in light of the expert's recommendations, the Director, Department of Antiquities (in cooperation with a Repr. of Jordan Dev. Bd.) shall prepare a program of museum improvement and implement it (using the construction services provided by the Ministry of Public Works as appropriate).

— costs : Costs are estimated as follows (in thousands of dinars):

Fiscal year to March 31 :	1963	1964	1965	1966	1967
(1) Add. funds for archaeological work	2.5	3.0	3.5	4.0	4.5
(2) To pres. and restore bldgs and mon. in Jerusalem & Bethlehem.					
Expert	3.5	3.5	—	—	—
Actual work	—	—	25.0	50.0	75.0
(3) To pres and restore historical sites	20.0	20.0	20.0	20.0	20.0
(4) To construct and improve museums					
Expert	4.0	—	—	—	—
Actual work	—	10.0	15.0	20.0	20.0
Total	30.0	36.5	63.5	94.0	119.5

— financing: For experts — external sources, grants (JD 11,000). All other — Finance campaign through religious groups, service clubs, and civic groups in other countries (will generate additional tourist interest as a by-product).

CHAPTER IX

Specific Proposal No. T.5

- a proposal for the development of special programs and festivals for tourists.
- to be done:

1) Prior to January 1, 1962, the Director, Tourism Authority (in cooperation with the Director, Department of Antiquities and a Repr. of Jordan Dev. Bd.) shall make every effort to secure from UNTAB the services of an expert experienced in organizing special events of cultural interest at historic sites. It will be particularly helpful if this expert has had experience in sound and light presentations or in the organization of festivals such as that held at Ba'albak. It is hoped that the expert's report can be made available not later than September 1, 1962.

2) Prior to December 1, 1962 the Director, Tourism Authority (in cooperation with the Director, Department of Antiquities, and a Repr. of Jordan Dev. Bd.) shall prepare — in light of the expert's recommendations — a plan for festivals and special events in Jordan. This plan shall specifically consider:

- a) sound and light presentations at well known sites.
- b) lectures by visiting archaeologists and tours of active archaeological sites.
- c) cultural festivals in ancient amphitheatres using both Jordanian and foreign attractions. In this regard, every effort will be made to persuade the various foreign governments represented in Amman to provide attractions therefor as a part of their cultural programs.

3) The Director, Tourism Authority, shall be responsible for implementing the plans developed under 2. , above. He shall develop requests for funds therefor beginning with fiscal 1964.

- costs : Cost data will be developed by the Director, Tourism Authority, under 2. , above. Estimated costs (rough) for purposes of this document are as follows (in thousands of dinars):

THE PROGRAM FOR TOURISM

For fiscal years ending March 31

	1963	1964	1965	1966	1967
Expert consultant	5.0	—	—	—	—
Allocated for expenses	—	5.0	7.5	10.0	12.5
Total	<u>5.0</u>	<u>5.0</u>	<u>7.5</u>	<u>10.0</u>	<u>12.5</u>

- financing : For expenses — Budget, Government of Jordan, by admission fees.

For expert — external sources, grant (JD 5,000).

Specific Proposal No. T.6

- a proposal for the improvement of hotel and restaurant management.
- to be done:

Prior to January 1, 1962, the Director, Tourism Authority, (in cooperation with representatives of Ministry of National Economy and Jordan Dev. Bd.) shall make every effort to secure the assistance of one of the countries in which tourism is highly developed in providing a highly qualified expert on hotel and restaurant management. Every effort will be made to secure the services of this expert over a period of at least three years. It is intended that this expert should:

- a) Be available for consultation by groups operating, or intending to operate, hotels or restaurants which serve the tourist trade.
- b) Advise the Tourism Authority on the operation of rest houses and cafés to be provided under **Specific Proposal No. T.2.**
- c) To supervise and/or conduct special courses in hotel or restaurant management (or in any phase thereof).

- costs : JD 7,000 per year.

- financing : To be requested from one of the countries in which tourism is highly developed.

CHAPTER IX

Specific Proposal No. T.7

- a proposal to recommend and publicize sample tour of Jordan.
- to be done:
 - 1) Prior to September 1, 1962, the Director, Tourism Authority, in cooperation with experts contracted for as required, shall prepare a number of sample tours designed to appeal to tourists of varying nationalities and interests. Every effort will be made to publicize these sample tours both locally and internationally (using promotion techniques outlined in **Specific Proposal No. T3**). The Beirut office for the encouragement of tourism in Jordan has already designated seven different tours covering various periods of time.
 - 2) Prior to March 1, 1962, a committee composed of (1) Repr. of the Jordan Development Board, (2) Repr. of the Ministry of National Economy, (3) Repr. of the Tourism Authority, Chairman, with the help of the experts called for in 2., above, shall undertake a study of the feasibility of establishing a large tourist agency to provide regular tourist trips for large groups.
- costs : For consultants, estimated at JD 5,000.
- financing : Budget, Government of Jordan.

Specific Proposal No. T.8

- a proposal for the improvement of legislation and regulations relating to tourist matters.
- to be done:
 - 1) Prior to June 1, 1962, a Committee of seven ((1) Repr. of Dept. of Antiquities, (2) Repr. of Min. of Nat'l Econ., (3) Repr. of Passports Dept., (4) Repr. of Min. of Health, (5) Repr. of Jordan Dev. Bd., (6) Representative of private tourist agencies, and (7) Repr. of Tourism Authority — Chairman) shall be constituted to prepare recommenda-

THE PROGRAM FOR TOURISM

- tions for necessary adjustments in laws and regulations to foster the tourist trade. When required, draft laws and regulations will be prepared.
- 2) The recommendations of the committee in 1., above, shall be reviewed by the advisory Committee of the Tourism Authority.
 - 3) Immediately after the Advisory Committee of the Tourism Authority has prepared its recommendations and draft laws and regulations, it shall submit them through the Jordan Development Board to the Council of Ministers for modification and approval and for submission to Parliament.
- costs and financing : Can be carried by staffs and budget at current levels.

Specific Proposal No. T.9

- a proposal for improved coordination among various governmental agencies and among governments in matters related to tourism.
- to be done:
 - 1) Prior to August 1, 1962, the Director, Tourism Authority, shall have prepared a summary statement indicating the relationships of his authority with all other governmental ministries and agencies. This statement shall be made available to the Jordan Development Board.
 - 2) Prior to October 1, 1962, the Director, Tourism Authority (in cooperation with a Repr. of Jordan Dev. Bd.) shall prepare recommendations leading to improved coordination of the various governmental agencies related to tourism. These recommendations shall be referred for advice and comment to a Committee of eleven (that constituted under **Specific Proposal No. T.8**, plus one representative from the Security Department, one from the Currency Control Department, one from the Ministry of Foreign Affairs, and one from the Ministry of Finance.) This Committee shall render its advice in writing within 15 days. The Director, Tourism Authority, shall modify his recommendations in light thereof.

CHAPTER IX

- 3) The Committee shall recommend measures in the following fields:
- reduction of time required for the clearance of tourists at the airports and border frontiers;
 - the giving of visas of different kinds;
 - customs and exceptions;
 - taxes and fees to be paid by tourists;
 - currency exchange matters.
- 4) The Committee shall also explore the possibilities of establishing a coordinated tourist area composed of Lebanon, Syria, and Jordan.
- 5) Recommendations stemming from the Committee's work shall be submitted through the Jordan Development Board to the Council of Ministers for appropriate action.

— costs and financing : Present staffs and budgets are adequate.

Specific Proposal No. T.10

— a proposal for providing necessary authority, staff, organization, and training for the Tourism Authority.

— to be done:

Prior to March 15, 1962, the Director, Tourism Authority (in cooperation with a Repr. of Jordan Dev. Bd.) shall examine this program for tourism and formulate specific requests for meeting the minimum staff, organization, and training needs of the Tourism Authority. In formulating these requests, he shall include requests for the necessary tourist guides and police. He shall attempt to secure the views of the U.N. Public Administration Advisor on staffing and organization, and he shall take them into consideration. A request shall also be made that the Government clearly define the Tourism Authority as an independent Authority reporting to the Government directly through the Prime Minister.

— costs and financing: From present budgets.

CHAPTER X

THE PROGRAM FOR ELECTRICITY

Expanding production of electricity in Jordan

- is a pre-requisite to economic progress. Industrial, agricultural, and mineral developments — as well as levels of rural and urban living — depend upon adequate and reasonably priced supply of electrical energy.
- is a result of economic progress. With economic development and resultant higher incomes, business firms and consumers alike buy more electrical appliances and require more electrical energy.

Electricity capacity and production has been growing rapidly in recent years. Capacity has grown at the rate of approximately forty per cent per year.

Capacity and production have been, and will continue over the next five years to be, based on the use of petroleum fuels. It is, however, worth noting that.

- existing plants use more expensive diesel oil but can be converted to lower cost fuel oil when the refinery begins to produce de-sulphurized fuel oil in December, 1962.
- hydro-electric power will become available after the program period if there is a maximum development of the Yarmouk-Jordan Valley Project.

Expansion of capacity and production is expected to continue at a very rapid rate. This is clear from the table below:

CHAPTER X

Table 10 1
EXPANSION IN ELECTRICAL CAPACITY AND PRODUCTION
PLANNED FOR 1967

Company Location	Plant Capacity (KW) June, 1960	Anticipated in 1967 (1)			
		Plant Capacity (KW)	Maximum Load (KW)	Sales (Mil. Kwh)	Utilization Factor (2)
Amman	9,325	19,450	10,100	42.6	30.5
Jerusalem	2,850	7,785	5,200	22.0	23.5
Zerqa	4,600	6,040	4,300	25.0	49.2
Ajloun	3,440	4,300	2,500	11.0	30.5
Nablus	1,500	3,600	2,600	16.0	53.0
Hebron	300	1,418	736	2.0	16.0
Salt	400	—	—	—	—
Tulkarm	280	700	700	3.3	56.0
Jenin	200	500	320	*	—
Talleh	125	350	350	*	—
Karak	200	330	180	*	—
Ma'an	170	300	250	*	—
Salit	160	180	180	*	—
All other		1,098	2,263	1,394	6.8
Total	22,548	47,516	29,280	128.7	—

(1) Based on estimates submitted by the companies.

(2) Utilization factor = $\frac{\text{Sales Kwh}}{\text{Capacity (Kw)} \times 350 \text{ days}}$

* Estimates included in "All other".

The expansion in capacity indicated above is estimated to require the capital expenditures shown in table 10.2:

Table 10 2
CAPITAL EXPENDITURES FOR PLANNED EXPANSION, IN
ELECTRICAL CAPACITY (in thousands of dinars)

Fiscal year to March 31:	1963	1964	1965	1966	1967
Generating equipment	350	230	250	115	165
Feeder wires	135	70	155	50	60
Distribution networks	180	420	65	120	60
	<u>665</u>	<u>720</u>	<u>470</u>	<u>285</u>	<u>285</u>

THE PROGRAM FOR ELECTRICITY

Funds for this capital expansion will come from (in order of desirability to companies):

- retained earnings and depreciation allowances.
- sale of shares to private individuals and/or municipalities.
- sale of shares to, or borrowing from, the Industrial Development Corporation.
- borrowing from abroad, the Development Loan Fund, for example.
- borrowing from equipment suppliers.

There is, at present, no interconnection of Jordan's electrical utility enterprises. (Irbid central station will, however, very shortly take over the Ajlun and Mafraq stations). Such interconnection would

- reduce required capacity when energy requirement peaks differ as between companies.
- allow larger, lower-cost, generating stations.

Combinations of companies (via mergers) would lower costs by

- encouraging interconnection.
- reducing technical overhead costs (e. g. , a smaller number of engineers and accountants would be required and they could be more effectively used).

Each utility operates under a unique charter and concession while

- municipal utilities are essentially unregulated as to rates.
- for private utilities, diversity of concessions, nonuniform accounting systems, and the absence of a specialized regulatory group spell ineffective supervision.

Programs for electric utilities include:

- 1) The provision of adequate financial facilities for the intended expansion of electrical companies.

The past record of expansion of electrical companies in Jordan is good. Their plans for future expansion are large. These plans should not be frustrated by the absence of needed funds. At the same time, as sound, established commercial enterprises, the electric utilities should claim most of their funds via (1) depreciation allowances and retained earnings,

CHAPTER X

(2) sale of shares, or (3) borrowing (perhaps abroad), not from the government. The Industrial Development Corporation does, however, provide a stand-by source of funds. This Corporation is discussed in «The Program for Industry» and «The Program for Financial Institutions».

2) The further study and specification of an optimum electrical generating and distribution system for Jordan.

A British consulting firm (Kennedy and Donkin) elaborated in 1958 a 30-year development program for the electric power industry in Jordan. Partly because there has been substantial expansion since that report and partly because the German Government has evidenced an interest in rendering assistance to Jordan in the area of electric utilities, there are current plans for a re-examination of the industry. This re-examination will again look toward the establishment of an integrated system going beyond the present isolated companies and to the preparation of the plans and designs for implementation.

See Specific Proposal No. EI. 1.

3) The establishment of a central governmental agency for the regulation and development of the electric utility industry in Jordan.

If service standards are to be observed, rates maintained at reasonable levels, necessary interconnections and combinations promptly enforced, and overhead costs reduced, adequate regulatory authority must be lodged with a specialized governmental agency. The confusion caused by the diversity, weakness, and imprecision of the concessions must be eliminated. Accordingly, a Public Service Commission is proposed which is to be clothed with full regulatory powers, regardless of the terms of the concessions, to act in the public interest. Only with such a centralization and clarification of controls can efficient, low-cost electrical utilities provide the necessary energy base for the economic expansion envisaged by this program.

See Specific Proposal No. EI. 2.

THE PROGRAM FOR ELECTRICITY

Specific Proposal No. EI. 1

— a proposal for the study and specification of an optimum electrical generating and distribution system.

— to be done:

1) Prior to January 1, 1962, the Ministry of National Economy shall award a contract to a consulting firm (under the Jordan-West Germany Technical Cooperation Agreement) to undertake the following:

a) A complete survey of all existing and planned municipal and company-owned electricity systems in Jordan.

b) A complete study of the present and future electrical power requirements by the general public and industry in the country.

c) A plan for central systems of generation and transmission in the four major districts mentioned in the Kennedy and Donkin Report (i.e., The Amman, Irbid, Nablus and Jerusalem districts, where it is considered to be technically feasible and economically justifiable).

d) A study of the ways and means for electrically integrating the above four major areas and designing the most economical system of establishing a National Electricity Grid for them.

e) A careful study and choice of the kind of prime movers to be installed in the main central power stations, giving particular attention to the comparison between gas and steam turbines with diesel and a proposed free piston gasifier.

f) A careful study and selection of the voltage to be used for generation.

g) A study of the technical and economic usefulness of the mutual coupling of electric power stations by means of high tension lines (with particular reference to the two existing power stations and the third planned power station in the Amman-Zerka region).

h) The drawing of a five or ten year National Electrifica-

CHAPTER X

tion Plan with details of the annual phases for the whole country, together with proposals for ways and means of financing this plan.

- 1) The making of suggestions for the improvement and extension of existing individual systems of generation and distribution in areas where central and integrated systems are not envisaged.
- 2) The presentation of a detailed and comprehensive report containing surveys, studies, proposals, suggestions, recommendations, cost estimates, and all the necessary information relevant to the projected National Electrification Plan for Jordan, together with all the necessary plans, designs and drawings.

Bids in accordance with the foregoing have been under review by the Ministry of National Economy and he will shortly reach an agreement to undertake the study detailed above.

- 2) The above study shall be completed by September 31, 1962 and turned over to the (proposed) Public Service Commission.

- costs : Estimated at JD 11,000 in fiscal 1963.
- financing : West German Government — JD 4,500. Budget, Government of Jordan — JD 6,500.

Specific Proposal No. EI. 2

- a proposal to create a Public Service Commission.
- to be done:

- 1) Prior to February 1, 1962, the Planning Division, Jordan Development Board (in cooperation with a Repr. of Min. of Nat'l. Econ.) shall prepare a draft law for a Public Service Commission for Jordan. This draft law include:
 - a) An indication of the areas and activities to which it is to apply. These areas will include (1) electric utilities, (2) truck, bus, and taxi operations, (3) railway operations, and (4) all other companies given monopoly status.

THE PROGRAM FOR ELECTRICITY

- b) The specification of the Commission's organization. It will provide for (1) three commissioners who will give their full-time attention to the Commission's affairs, (2) three separate sections (for electric utilities, for transportation, and for monopoly companies), each with its own operating chief and technical staff, and (3) an adequate number of trained personnel (in engineering, law, accounting, economics, marketing, etc.).
- c) With respect to utilities, the investing of the Commission with:
 - (1) Regulatory powers superseding and over riding any concession provision and extended to municipal utilities.
 - (2) Power to prescribe a uniform system of accounts and statistical reports.
 - (3) Power to review rates as to reasonableness and to lower them if found excessive. Reasonable rates shall be those which allow a fair return on the depreciated prudent investment in utility property with allowance made for the needed generators of capital for expansion.
 - (4) Power adequate to require physical interconnection and/or company amalgamation upon a showing of substantial savings or improved services thereby. Terms of all amalgamations shall be subject to Commission approval.
 - (5) Ability to prescribe and enforce service standards; including the extension of lines and service.
 - (6) Authority to require from it certificates of convenience and necessity for new firms.
 - (7) Authority, should the situation demand it, (1) to acquire existing plants at no more than their depreciated cost plus net working capital plus 10 per cent, (2) to build and operate generating, transmission, and distribution systems, and (3) to purchase and sell electricity.

CHAPTER X

- (8) Capacity to offer technical, accounting, and financial advice on a cost basis to electric utilities.
- d) With respect to transportation enterprises, the investing of the Commission with :
- (1) Regulatory powers superseding and overriding any concession provision or existing agreement and extended to government operations insofar as they relate to rates and conditions of service.
 - (2) Power to prescribe a uniform system of accounts and statistical reports.
 - (3) Power to review rates as to (1) reasonableness, and (2) absence of discrimination as among users of transport facilities. It shall have the power to reduce rates found excessive and to require that like users be charged like rates.
 - (4) Ability to prescribe and enforce service standards, including the extension of service.
 - (5) Authority to restrict numbers of operators via appropriate licensing provisions.
 - (6) Capacity to offer technical, accounting, and financial advice on a cost basis to transport firms.
- e) With respect to companies granted monopoly status, the investing of the Commission with:
- (1) All powers to regulate under existing concessionary agreements.
 - (2) Capacity to draw a model concessionary agreement under which future concessions will be granted.
 - (3) Authority to regulate price, quality, and efficiency standards of all companies operating in industrial areas in which the number of authorized licensees is limited.
- 2) Prior to March 15, 1962, the draft law (prepared as indicated under 1., above) will be submitted through the Jordan Development Board to the Council of Ministers for revision, approval, and submission to Parliament. It

THE PROGRAM FOR ELECTRICITY

is anticipated that the Public Service Commission will begin operations prior to July 1, 1962.

— costs: Costs are estimated as follows (in thousands of dinars)

Fiscal year to March 31 :	1963	1964	1965	1966	1967
Commissioner's salaries	5.4	5.8	6.3	6.7	7.2
Staff salaries and misc.	10.8	11.6	12.8	13.8	14.8
Training abroad	4.6	4.6	4.6	—	—
Foreign experts (1)	21.0	21.0	7.0	7.0	7.0
Total	<u>41.8</u>	<u>43.2</u>	<u>30.7</u>	<u>27.5</u>	<u>29.0</u>

(1) Assumes 3 experts, one for each section, during the first 2 years of operation.

— financing: Commissioner's and staff salaries and misc. — Budget, Government of Jordan. Training abroad and foreign experts — USOM/J.

THE PROGRAM FOR TRADES AND SERVICES

More than 21 per cent of all income produced in Jordan in 1959 was produced in wholesale and retail activities. An additional 3 per cent was produced in the provision of other personal services.

Income produced by wholesale and retail trade is exceptionally large for a country of relative low incomes because approximately one-third of all goods used in Jordan is imported (thereby reducing the importance of the «basic» production areas of agriculture, mining, and manufacturing while increasing the importance of the «non-basic» trading enterprises moving imports to users).

Wholesale firms in Jordan are characterized by

- orientation to imports. Since not more than one-fourth of consumers goods purchased in Jordan are produced in the country, wholesalers must primarily be importers as well.
- needs for substantial capital. Jordan's importers characteristically pay 25 per cent upon order (opening of letter of credit) and the remainder upon shipment of goods. This means the tying up of capital normally for from two to four months.
- importance of exclusive agency contracts. Jordan's import wholesalers protect themselves against «cut-throat» competition where possible by obtaining exclusive agencies for goods of a particular type or brand.
- large size relative to market. Fairly large capital requirement plus exclusive agencies alike tend to concentrate imports

CHAPTER XI

into the hands of a few of a large total number of importers. Margins — and profits — therefore tend to be high.

Retail firms in Jordan are characterized by

- orientation to imports.
- very small size. Free entry into retailing is not restrained — as it is in wholesaling — by high capital requirements of by exclusive agency contracts. Indeed, entry is encouraged by poor employment opportunities elsewhere.
- underemployment of retail workers. Free entry means over-capacity and much idle time for retail proprietors.
- high costs. Firms with over-capacity in both equipment and men have high costs and high prices — even though earnings are low.

The trade sector also includes a large number of commission agents who represent foreign producers in Jordan, selling to both wholesalers and retailers. These agents are

- frequently only part-time in this activity, carrying it on in addition to another job.
- sometimes non-Jordanians who have a «territory» including, but not limited to, Jordan.

Trades and services are traditionally in the area for private enterprise in Jordan. Nevertheless, the following seem reasonable proposals for improvements relating thereto, or for anticipating changes which seem to be in prospect.

- 1) The speeding-up of unloading and customs procedures at Aqaba.

Savings of two types are possible if time between placement of order abroad and delivery of goods to Jordan's markets can be shortened. They are (1) savings related to shortening the period for which money must be borrowed between placement of order and sale of the goods in Jordan, and (2) savings via inventory reductions as deliveries become faster and more dependable. Some savings of this type can be realized if goods are handled faster at Aqaba without fully-offsetting increases there.

See **Specific Proposal No. Trades 1.**

THE PROGRAM FOR TRADES AND SERVICES

- 2) The study of import-wholesaler margins.

As already noted, import wholesalers are in some measure protected by (1) large capital requirements for entry into the industry, and (2) exclusive agency contracts. As a result, it is sometimes contended that margins are excessively high whether or not this should prove to be the case. Certainly it would be relevant to know whether high earnings are promptly reinvested in Jordan industry or used to finance a high level of consumption. In any case, a study is indicated and provided for by **Specific Proposal No. Trades 2.**

- 3) The improvement of management of trade firms

Specific Proposal No. 1. 5. in «The Program for Industry» proposes a program to meet business training needs in Jordan. It is herewith specified that this program extends to the trades as well as to manufacturing.

Willingness of many retail proprietors to accept low incomes work to slow down the development of margin-reducing cost and price-reducing retail establishments. Indeed, from a social point of view, lower costs — and prices — for retailing may even be undesirable if they come at the expense of reduced overall employment. Yet, it is not certain that this is the choice for lower costs — and prices — may reduce labour required per unit of output while volume increases so rapidly as to yield growing employment.

Since retail trade is so important to Jordan, it is here suggested that opportunities for reducing costs be sought out and their employment consequences anticipated. See **Specific Proposal No. Trades 3.**

- 4) A law setting standards for the operations of middlemen requiring that commission agents selling in Jordan be Jordanian nationals.

Commissions paid to foreigners on goods sold in Jordan are a potential source of income to Jordanians and a potential source of foreign exchange to Jordan. It is therefore recommended that all commission agents in Jordan be required to be Jordanians. See **Specific Proposal No. Trades 4.**

Specific Proposal No. Trades 1

- a proposal for a management study of unloading, handling and customs procedures at Aqaba.

CHAPTER XI

— to be done:

1) The Port of Aqaba handles most of Jordan's imports and exports. Delays and/or inefficiencies there raise the costs of goods to Jordanians or the prices of Jordan's exports in foreign markets. Additional physical facilities are provided for by Specific Proposal No. Tran. 4 (in «The Program for Transportation»). This proposal is for an investigation leading to the improvement of methods of operation.

2) Prior to March 1, 1962, a Committee of four ((1) Repr. of Jordan Dev. Bd. (2) Repr. of Min. of Natl. Econ. (3) Repr. of Customs Department, and (4) Repr. of Aqaba Port Auth. Chairman) shall formulate the terms of reference and modes of procedures for a management study of the Port and customs operations. It is anticipated that the Committee will provide for study of all technical and business operations at the Port with a view toward cutting costs and — even more importantly — cutting time required for moving goods from ship to markets in Jordan's major centres.

3) Within the terms as under 2., above, the Committee shall prior to May 15, 1962 — designate the study group and make every effort to arrange for the necessary consultants. This study group shall conduct its work between June 1, 1962 and Dec. 1, 1962, making its final report to the Committee by Dec. 31st, 1962.

It is anticipated that the study group will include at least one senior person from the Aqaba Port Authority and one from Customs Department. Budget will be increased to provide replacements therefor.

4) The Director, Aqaba Port Authority, shall act on the final report of the study group prior to June 1, 1963, asking such changes and additional budget support as is thereby made necessary. Proposed action shall be submitted through the Jordan Development Board to the Prime Minister for appropriate action.

— costs : Costs are estimated as follows:

Consultant (from June 1, 1962 to April 1, 1963) JD 5000

THE PROGRAM FOR TRADES AND SERVICES

Additional staff costs — JD 1,500 to replace two seniors persons for work on the study committee.

— financing : Consultant — UNTAB. Staff costs — Budget, Government of Jordan.

Specific Proposal No. Trades 2.

— a proposal for the study of import-wholesaler activities and margins.

— to be done:

Prior to July 1, 1962, the Planning Division, Jordan Development Board (in cooperation with a Repr. of Ministry of Nat'l. Economy) shall prepare a report summarizing the activities of import-wholesalers in Jordan. This report will specifically examine the price policies of such wholesalers and summarize the results as they effect margins. It will also see the estimates on the reinvestment of earnings in Jordanian enterprise by the importers or wholesalers.

— costs and financing: Within budget at current level.

Specific Proposal No. Trades 3.

— a proposal for examination of the retail trade sector to uncover opportunities for reducing costs therein.

— to be done:

1) Prior to Sept. 1, 1962, the Ministry of National Economy (in cooperation with a Repr. of Jordan Dev. Bd.) shall make every effort to secure the services of a competent expert to analyse the retail trade sector of Jordan's economy to uncover opportunities for reducing costs, lowering prices, and hence for increasing the real income and total volume of trade in Jordan.

2) It is intended that this expert shall conduct his work between Sept. 1, 1962 and Aug. 30, 1963, rendering his final report thereon prior to November 1, 1963. It is specifically requested that the final report include a summary of the

CHAPTER XI

employment consequences of changes suggested.

- costs : Of expert — JD 8,000; Miscellaneous — JD 1,000.
- financing : Recommended for application to a private foundation.

Specific Proposal No. Trades 4.

- a proposal for a law setting standards for the operations of middlemen.
- to be done:

Prior to April 1, 1962, the Department of Customs (in cooperation with a Repr. of Currency Control Department, a Repr. of the Ministry of National Economy, and a Repr. of Jordan Development Board) shall develop a law setting standards for the operations of middlemen, giving proposals for effectively requiring that all commission agents selling in Jordan be Jordanian nationals. This law shall be submitted through the Jordan Development Board to the Council of Ministers for approval and appropriate action.

- costs and financing : within current budget.

CHAPTER XII

THE PROGRAM FOR TRANSPORTATION

Jordan requires:

- 1) Adequate air transport services to
 - bring tourists quickly, comfortably and directly to tourist centers in the Kingdom.
 - potentially move Jordan's exports — particularly fruits, vegetables, and poultry from the Jordan Valley — directly and quickly to markets abroad.
 - afford convenient movement of Jordanians abroad, of foreigners to Jordan, for the quick, effective conduct of their business.
- 2) Adequate port facilities of Aqaba to
 - allow the expeditious and low-cost movement of imports into Jordan.
 - facilitate and reduce the cost of Jordan's exports, particularly phosphate and (potential) potash.
- 3) Adequate road transport facilities to
 - allow the expeditious and low-cost movement of imports from port to population centers.
 - facilitate and reduce the cost of Jordan's exports.
 - afford the convenient, low-cost movement of goods and people within Jordan.

CHAPTER XII

- 4) Adequate rail facilities to ultimately move Jordan's bulky exports, particularly phosphate, to Aqaba.

The following seem necessary to provide transportation services to meet the needs:

- 1) The provision of an international airport to serve Jordan's most important tourist center — Jerusalem.

Tourists visit Jordan primarily to visit the holy places in the Jerusalem area. Jordan has an economic stake in having them come directly, not through Cairo and Beirut where they spend time and money otherwise available to Jordan. Jordan therefore has a stake in the provision of an international airport for Jerusalem able to receive the largest jets (and, therefore, direct flights from Western Europe).

Since (1) the present airport site near Jerusalem can be extended only perilously and at great expense to receive present day jet aircraft, (2) urban growth and traffic congestion toward the present airport is increasing time taken to go to the center of the city, (3) the new Dead Sea-Jerusalem road will reduce driving time from the Dead Sea to Jerusalem to not more than thirty minutes, (4) tourists will appreciate seeing the Jordan Valley and the Dead Sea, and (5) fruits and vegetables marketed by air will come from the Jordan Valley, it is herein suggested that Jerusalem will be best served by a new international airport near the Dead Sea. This new international airport for Jerusalem is indicated by **Specific Proposal No. Tran. 1.**

- 2) To avoid postponing the arrival of the largest international jet planes until the new Jerusalem airport can be constructed, the Amman runway should be lengthened immediately and some improvements should be made in the terminal facilities.

See **Specific Proposal No. Tran. 2.**

- 3) The making of vigorous efforts to stimulate further direct flights from Western Europe to (now) Amman and (in the future) Jerusalem.

Jordan's economic interest in direct, international flights is specified above. Every effort to stimulate such flights by international carries should be made. Procedures for doing so are laid out in **Specific Proposal No. Tran. 3.**

THE PROGRAM FOR TRANSPORTATION

It is, of course possible also to encourage direct flights to Jordan by equipping Jordan's present airlines (or a successor) to do so. However, government funds are not recommended for such a project in view of (1) the intense airline competition and low profit rates now existing, (2) the very large investment required, and (3) the fact that net foreign exchange savings would be small in view of the large imports required (for aircraft, fuel, and skilled pilots and mechanics).

- 4) The provision of ground (meteorological) services of high quality. See **Specific Proposal No. Tran. 4.**

- 5) The meeting of port expansion needs by Aqaba.

This program assumes the rapid expansion of phosphate production to 1,500,000 tons by 1967. It also assumes the production of 270,000 tons of potash by 1967. Both products will move primarily for export through Aqaba. The meeting of targets of this magnitude will require substantial expansion of phosphate — and the provision of potash — loading facilities at Aqaba. These facilities should be provided well in advance of need. See **Specific Proposal No. Tran. 5.**

The provision of a second deep-water berth at Aqaba would allow a substantial proportion of the 200,000 tons of dry cargo discharged at anchorage through lighters to be unloaded direct from ship to shore. This should allow lower costs, reduced damage, and better service. It may attract additional traffic (i.e., UNRWA transports or transit traffic to Iraq). It will provide additional gross income to the port from increased traffic, additional wharfage charges, and perhaps — from slightly higher rates. Arrangements for the financing of a second deep-water berth have now been completed and steps should be taken as quickly as possible to contract for and carry out the actual construction of this project. See **Specific Proposal No. Tran. 6.**

Some additional facilities are now needed to make the port more efficient. They include new cranes, forklift trucks, tug boat, and office building. They are provided for by **Specific Proposal No. Tran. 7.**

- 6) The construction — if and when economically feasible — of the railway extension to Aqaba.

CHAPTER XII

Experts supplied by the West German government have recently completed a feasibility study relating to the extension of the railroad at Aqaba. Assuming that this study will demonstrate significantly lower costs of transporting large quantities of phosphate by rail rather than by truck, it is tentatively included in this document as **Specific Proposal No. Tran. 8.**

- 7) The study and regulation of the Hedjaz Railway rehabilitation. The Government of Jordan has already committed itself to the project for the rehabilitation of the Hedjaz Railway to Medina. At the same time, on study of potential revenues and costs in the operation of the line has been made, a study which is essential to intelligent acquisition of equipment, to rate making, or to assessing the magnitude of probable future deficits. Such a study should be made immediately and is called for by **Specific Proposal No. Tran. 9.**

It is clear that major tonnage in the railway will be Jordan's phosphates moving from Ruseifa to (with the extension) Aqaba. It is imperative that rates on this product be held low to allow its effective competition in export markets. Holding rates on this — and on other products — at reasonable levels is the responsibility of the Public Service Commission. See **Specific Proposal No. El. 2** in «The Program for Electricity».

- 8) The provision of additional roads as required.

In the past six years, Jordan has built a good road network. Approximately 1,600 km. of roads were developed — 510 km. of main roads, 300 km. of secondary roads, and 790 km. of village and agricultural roads. Not many new main or secondary roads of high priority remain, therefore, to be built. Village roads remain a greater need. The program for road construction is contained in **Specific Proposal No. Tran. 10.**

- 9) The provision of adequate road maintenance.

The very magnitude of Jordan's road building program in recent years will require increasing maintenance costs in future years. These costs are estimated and a program for meeting needs is contained in **Specific Proposal No. Tran. 11.**

- 10) The building of unified organization for road construction and maintenance.

THE PROGRAM FOR TRANSPORTATION

The Ministry of Public works has many responsibilities, including road construction and maintenance. It handles very large projects now and will, within the terms of this program, be assigned responsibility for many more. A management study of the Ministry should provide it with the basis for increased efficiency. See **Specific Proposal No. Tran. 12.**

- 11) The regulation of truck, bus, and taxi companies in Jordan. Road transport facilities are generally in excess supply in Jordan. The result is over-capacity, high costs and rates, and low returns to operators. (For example, Jordan's 4,000 trucks are well in excess of needs, many make only 3 trips a month to Aqaba, fixed costs per ton hauled are high, and truck rates are unduly high). There is, therefore, a sound basis for restricting the importation and/or licensing of additional trucks, buses, and taxis in the near future.

As demand for transport catches up to a reduced supply, over-head costs will decline and a foundation for reduced rates will be laid. Furthermore, rates should be standard for like users so that there is no unfair discrimination.

Limitation of competition (by restrictions on importation or licensing) should be accompanied by standards of service requirements.

All of the above regulatory actions are the responsibility of the (proposed) Public Service Commission. See **Specific Proposal No. E. 2** in «The Program for Electricity».

- 12) The provision of additional organization, staff, and training facilities to the Civil Aviation Department. See **Specific Proposal No. Tran. 13.**
- 13) To improve the safety of air transportation, a remote receiver station should be established at Amman. See **Specific Proposal No. Tran. 14.**

Specific Program No. Tran. 1.

— a proposal for an international airport to serve Jerusalem.
— to be done:

- 1) Prior to March, 1, 1962, the Director, Civil Aviation Department (in cooperation with a Repr. of Jordan Dev. Bd.

CHAPTER XII

and a Rep. of Ministry of Public Works) shall have asked for invitations to tender for the preparation of detailed designs for the construction of an international airport near the Dead Sea approximately 5 kilometres south-east of Jericho.

- 2) Prior to January 1, 1963, the contract for such detailed designs shall have been let and the design work shall have been completed and submitted to the Director, Civil Aviation Department.
- 3) Immediately subsequent to the availability of designs and specifications, the Director, Civil Aviation Dept. (in cooperation with a Repr. of Jordan Development Bd.) shall seek outside sources of financing for as large a proportion as possible of the cost of the project. The remainder of the funds will come from the budget, Government of Jordan.
- 4) Assuming that satisfactory financial arrangements have been made, contracts for construction shall be let and construction begun as soon as practicable.

— costs : Costs are estimated at JD 2.5 billion

— financing : External sources, loans and Government of Jordan Budget.

Specific Proposal No. Tran. 2.

— a proposal for the immediate extension of the terminal facilities at the Amman airport.

— to be done:

- 1) Prior to February 1, 1962, the Director of the Department of Civil Aviation shall have prepared the plans and specifications for the lengthening of the Amman Airport runway to accommodate the largest international jet transport planes, and for the improvement of the terminal facilities. These projects should be put out to tender by February 15, 1962, and construction should be started not later than May 1, 1962.

THE PROGRAM FOR TRANSPORTATION

— costs : Total costs of the runway extension and the improvement of terminal facilities are estimated at JD 200,000.

— financing : External sources (loans) and Government of Jordan Budget.

Specific Proposal No. Tran 3.

— a proposal for vigorous efforts to stimulate further direct international flights from Western Europe.

— to be done:

- 1) Prior to January 1, 1963, a Committee of three ((1) Repr. of Ministry of National Economy, (2) Repr. of Jordan Development Board and (3) Repr. of Civil Aviation Department — Chairman) shall be formed to make a vigorous and coordinated effort to encourage further direct international flights by international carriers from Western Europe. This Committee shall recommend trips abroad for relevant officials as necessary to arrange therefor.

- 2) The Committee shall report semi-annually (first report due July 1, 1962) on the success of its efforts. Reports shall be made to all agencies represented on the Committee.

— costs and financing : Financial and staff needs can be met from present budgets except allocation of JD 1,000 per year (to Civil Aviation Dept.) to finance trips abroad.

Specific Proposal No. Tran. 4.

— a proposal for the development of meteorological services.

— to be done:

- 1) Improvement of meteorological services in Jordan will contribute to:
 - a) the safe, regular and efficient conduct of national, international, and military air navigation.
 - b) the safe water navigation in the Gulf of Aqaba.
 - c) the general economic development of the country, with

CHAPTER XII

special emphasis on its agricultural and hydrological needs.

These services will require:

- a) The recruiting and training of additional staff.
 - b) The procurement and installation of necessary meteorological instruments and equipment.
 - c) the acquisition of an adequate library.
 - d) The establishment of good working relations with all interested governmental and private agencies.
- 2) The Civil Aviation Department now possesses detailed plans for the satisfactory development of necessary meteorological services. Beginning April 1, 1962, the Director, Civil Aviation Department, shall proceed to the implementation of this plan. However, in order to provide necessary communication with related and interested governmental agencies, a Committee of five ((1) Repr. of Ministry of Agriculture, (2) Repr. of Central Water Authority, (3) Repr. of Aqaba Port Authority, (4) Repr. of Jordan Dev. Bd., and (5) Repr. of Civil Aviation Department — Chairman) shall be constituted to review the plan and to receive semi-annual reports of progress thereunder. This Committee shall be constituted prior to January 1, 1962 to review existing plans prior to February 1, 1962. It shall receive reports thereafter each July 1 and January 1.

— costs : Costs are indicated in existing plans as follows:

Fiscal 1963	— JD	17,100
Fiscal 1964	— JD	7,500
Fiscal 1965	— JD	19,500
Fiscal 1966	— JD	4,500

— financing: External sources, grants.

Specific Proposal No. Tran. 5.

- a proposal for expansion prior to need of phosphate and potash loading facilities at Aqaba.
- to be done:

THE PROGRAM FOR TRANSPORTATION

- 1) Prior to April 1, 1962, the Director, Aqaba Port Authority, shall establish contact with the Committee constituted under **Specific Proposal No. M1** (in «The Program for Mining») and with the management of the Arab Potash Company shall ascertain schedules for the expansion of phosphate and potash production which will be exported through the Port of Aqaba. He shall make at least semi-annual contacts with them thereafter to obtain revisions of estimates.
- 2) The Director, Aqaba Port Authority (in cooperation with a Repr. of Jordan Development Bd.) shall review schedules of phosphate and potash export each six months to determine when construction of new dry cargo loading facilities should begin. He is responsible for anticipating needs therefor.
- 3) As soon as the Director, Aqaba Port Authority, determines that additional dry cargo loading facilities are to be required he will immediately proceed (in cooperation with a Repr. of Jordan Dev. Bd.) to arrange for financing, design, and the construction thereof. He will call upon, as required, the assistance of all governmental ministries and departments.

— costs : Estimated at JD 250,000 to be spent during fiscal 1964 and 1965.

— financing : Borrowing abroad by Aqaba Port Authority. Interest and principal to be paid from port revenues.

Specific Proposal No. Tran. 6.

- a proposal for a second deep-water berth at Aqaba.
- to be done:

- 1) Prior to March 1, 1962, the Director, Aqaba Port Authority (in cooperation with a Repr. of Jordan Dev. Bd.) shall have submitted international tenders for the construction of a second deep-water berth at Aqaba.

— costs: Costs are estimated at JD 1,350,000.

— financing: German Government.

CHAPTER XII

Specific Proposal No. Tran. 7.

- a proposal for the provision of additional equipment and building at Aqaba.
- to be done:

1) The Aqaba Port Authority now has plans for the acquisition of cranes, forklifts, and a tug boat for use at the Port of Aqaba. It is also preparing detailed plans and specifications for additional buildings for use as port offices and by banks, clearing agents, ship agents, and so forth, at Aqaba. These facilities seem to be required and should be available as rapidly as Port revenues will allow.

2) The Director, Aqaba Port Authority, shall acquire equipment and arrange for the construction of buildings as required within the limits of available funds from Port revenues.

- costs : Estimated at JD 278,000 over the 5 year period.
- financing : Revenues, Port of Aqaba.

Specific Proposal No. Tran. 8.

- a proposal for consideration and possible construction of the extension of the railway to Aqaba.
- to be done:

1) Prior to January 1, 1962, a Committee of three ((1) Repr. of Railway Department, (2) Repr. of Jordan Dev. Bd. , and (3) Repr. of Ministry of National Economy — Chairman) shall be constituted to receive and to evaluate the economic feasibility study recently completed by German experts relating to the extension of the Railway to Aqaba.

2) Assuming that this study will call for the extension of the Railway to Aqaba when phosphate production comes to equal approximately 1,000,000 tons per annum, the Committee will determine a course of action designed to make the railway extension ready for operation at the appropriate time. The Committee will therefore

THE PROGRAM FOR TRANSPORTATION

recommend to the Jordan Development Board a sequence of action therefor.

- costs : Construction costs are very roughly estimated at JD 8 million. Timming, if construction is to be undertaken will be determined by the Committee.

- financing : External sources, loans.

Specific Proposal No. Tran. 9.

- a proposal for an economic study of the Hedjaz Railway rehabilitation.

- to be done:

Capital costs involved in the rehabilitation of the road-bed for the Hedjaz Railway to Medina are now reasonably known. Not known are the operating revenues and expenses which can be expected from the operation of the road and which will strongly influence decisions as to the acquisition of the equipment and expectations as to the size of the probable operating losses involved. Therefore, prior to April 1, 1962, the Planning Division, Jordan Development Board, (in cooperation with the Railway Department) will make detailed estimates of operating revenues and expenses. These estimates will be forwarded through the Jordan Development Board to the Council of Ministers for their information.

- costs and financing : From present budgets.

Specific Proposal No. Tran. 10.

- a proposal for the construction of roads in Jordan.

- to be done:

1) With regard to the construction of main roads:

a) Prior to February 15, 1962, and within the limits of available finance as indicated below, the Ministry of Public Works (in cooperation with a Repr. of Jordan Dev. Bd.) shall develop a program for the construction of

CHAPTER XII

main roads over the next five years. This program shall:

- 1) Identify roads to be constructed and dates of construction for each.
 - 2) Estimate costs by road and by year.
- b) Prior to January 1, 1962, a Committee of four ((1) a Repr. of Ministry of Public Works, (2) a Repr. of the Ministry of Defense, (3) a Repr. of the Arab Potash Company, and (4) a Repr. of Jordan Dev. Bd.) shall be constituted to consider promptly the Safi-Aqaba Road and reach a decision on what further survey and design work is necessary to justify the authorization of its construction.
- c) Within the framework of the program developed under a. , above, the Ministry of Public Works will proceed to construction. However, prior to January 1, 1963, and each year thereafter, the Minister of Public Works (together with a Repr. of the Jordan Dev. Bd.) will meet to review progress and to modify the program accordingly.
- 2) With regard to the construction of secondary roads:
- a) Prior to March 15, 1962, and within the limits of available finance as indicated below, the Ministry of Public Works (in cooperation with a Repr. of Jordan Dev. Bd.) shall develop a program for the construction of secondary roads over the next five years. This program shall:
 - 1) Identify roads to be constructed and dates of construction for each.
 - 2) Estimate costs by road and by year.
 - b) Within the framework of the program developed under a. , above the Ministry of Public Works will proceed to construction. However, prior to January 1, 1963, and each year thereafter, the Ministry of Public Works (together with a Repr. of Jordan Dev. Bd.) will meet to review progress and modify the program accordingly.

THE PROGRAM FOR TRANSPORTATION

- 3) With regard to the construction of village and feeder roads:
- a) Prior to April 15, 1962 and within the limits of funds available to the Ministry of Public Works for the construction of village and feeder roads as indicated below, the Ministry of Public Works shall prepare (in cooperation with a Repr. of Rural Development Dept. and a Repr. of Jordan Dev. Bd.) a program for construction of village and feeder roads. This program shall include:
 - 1) An indication of the location of roads to be constructed and of the dates of construction for each.
 - 2) Estimates of costs of construction for each road and by year
 - 3) Recommendations as to the contributions of villages to the construction of these roads.
 - 4) Estimates as to the funds that will be made available for road construction by the Village Loan Fund.
 - b) Within the framework of the program developed under a. , above, the Ministry of Public Works will proceed to construction. However, prior to January 1, 1963, and each year thereafter, the Ministry of Public Works (together with a Repr. of Jordan Dev. Bd.) will meet to review progress and to modify the program accordingly.

— costs : Funds are allocated for road construction as follows (in thousands of JD's):

Fiscal year to March 31 :	1962	1964	1965	1966	1967
Main roads	450	1,200	950	400	1,000
Secondary roads	150	150	150	150	150
Village and feeder roads					
From Min. of Public Works Funds	150	150	150	75	75
By villages (incl.					
Village Loan Fund contributions)	50	50	50	25	25
	800	1,550	1,300	650	1,250

— financing : External and internal sources.

CHAPTER XII

Specific Proposal No. Tran. 11

— a proposal for an increase in road maintenance activities in Jordan.

— to be done:

1) Prior to March 15, 1962, the Ministry of Public Works (in cooperation with a Repr. of Jordan Dev. Bd.) shall prepare a program for the development of a maintenance organization and for a schedule design to keep Jordan's road network in an adequate state of repair. This program shall:

- a) recommend modification in Jordan's road maintenance organization and procedure as appropriate.
- b) provide a schedule of road maintenance operation and estimate the costs thereof by year.

2) The Ministry of Public Works will undertake maintenance activities within the framework of the program developed under 1. , above.

— costs : The following is the estimate of maintenance costs above those provided for in the present budget:

Fiscal 1963	— JD 200,000
Fiscal 1964	— JD 250,000
Fiscal 1965	— JD 300,000
Fiscal 1966	— JD 350,000
Fiscal 1967	— JD 400,000

— financing : Budget, Government of Jordan.

Specific Proposal No. Tran. 12

— a proposal for a management study of the Ministry of Public Works.

— to be done:

1) The Ministry of Public Works is one of the largest organizations in Jordan. It has grown rapidly. Its staff is well qualified to determine — with expert assistance — the optimum organization of the Ministry to provide increased

THE PROGRAM FOR TRANSPORTATION

effectiveness and lower costs. Therefore, prior to March 1, 1961, a Committee of six ((1) a Repr. of Jordan Dev. Bd. (2) Repr. of Civil Service Commission, (3) the U.N. Public Administration Advisor, or his designate, (4) (5) and (6) Reprs. of Ministry of Public Works — one as Chairman) shall formulate the terms of reference and modes of procedure for a management study of the Ministry of Public Works. It is anticipated that this Committee will ask that the study

- a) Examine the existing activities of the Ministry and recommend expansions or contractions as are appropriate.
- b) Suggest an overall organization of the Ministry.
- c) Yield detailed job description and salary schedules.
- d) Recommend appropriate staffing patterns.

2) Within the terms of reference and modes of procedures developed as under 1. , above, the Committee shall — prior to June 1, 1962 — designate the study group and make every effort to arrange for the necessary consultants. It is anticipated that not fewer than three senior members of the staff of the Ministry of Public Works shall be members of the study group and that the budget of the Ministry shall be increased to allow their replacement for the period of the study.

3) The study group (constituted as arranged under 1. ,above) shall conduct its work between June 15, 1962 and June 15, 1963, making reports each 6 months (on December 1 and June 1 of each year) to the Committee. The Committee shall comment in writing to the Ministry of Public Works on each of these reports within 15 days of the receipt thereof.

4) The Minister of Public Works shall prepare action on the final report of the study committee prior to July 1, 1963, asking for additional budget support as is thereby made necessary. The Minister shall, of course, make final decisions on reorganization, but shall report in writing prior to August 1, 1963, his reasons for not imple-

CHAPTER XII

menting any recommendations of the study committee. These written reasons shall be submitted to the Council of Ministers through the Committee.

- costs : Consultants — JD 14,000 (two consultants for one year) Additional staff costs — JD 4,500 (to replace three senior staff members serving in the study committee for one year).
- financing : External sources, grants.

Specific Proposal No. Tran. 13

- a proposal to provide necessary additional staff organization and training for the Civil Aviation Department.

— to be done:

Prior to February 1, 1962, the Director, Civil Aviation Department (in cooperation with a Repr. of Jordan Dev. Bd.) shall examine his responsibilities in view of this program and formulate specific requests for meeting the minimum staff, organization, and training needs of the Civil Aviation Department. In formulating these requests, he will make every effort to secure the views of the U.N.Public Administration Advisor and to be guided by them.

- costs : Costs will be detailed as indicated above. Rough estimates for purposes of this document are, however made as follows (in thousands of dinars):

Fiscal year to March 31	<u>1963</u>	<u>1964</u>	<u>1965</u>	<u>1966</u>	<u>1967</u>
For staff and overhead	2.5	3.0	3.5	4.0	4.5
For training abroad	13.0	13.0	13.0	13.0	13.0
Total	15.5	16.0	16.5	17.0	17.5

- financing : External sources — grant.

Specific Proposal No. Tran. 14.

- a proposal for the construction of a remote receiver station near Amman Airport.

THE PROGRAM FOR TRANSPORTATION

— to be done:

- 1) Prior to March 31, 1962, the Director, Civil Aviation Department shall have secured tenders for the construction of a remote receiver station at the Amman Airport.
- 2) The Director, shall take into consideration the specifications mentioned in the report prepared by Mr. Graham of the Civil Aviation Department.

— costs : JD 40,000 in 1962/63.

— financing : External sources, loans.

CHAPTER XIII

THE PROGRAM FOR MUNICIPAL DEVELOPMENT

A survey of municipalities suggests intentions to make capital expenditures roughly as follows over the next 5 years:

Table 13.1
PRELIMINARY ESTIMATES OF CAPITAL EXPENDITURES BY MUNICIPALITIES

Expenditures for	Expenditures (in thousands of JD's)		
	Ammon	Jerusalem	All other
Water distribution systems	700	1,750 (1)	1100
Sewage Systems	2,500	110	450
Street and Roads	750	70	350
Government building	45	175	350
Bus depots	120	—	80
Vegetable markets	500 (2)	—	130
Parks and playgrounds	55	215	30
Slaughter houses	—	—	40
All other	500 (3)	375 (4)	350 (5)
Total	4,215	2,695	2,880

(1) Assuming Ein Fashkha as the source. (2) Includes a municipal parking lot.
(3) Ammon Sports City. (4) Slum clearance. (5) Includes slum clearance of JD 15,000

Intended capital expenditures thus exceed JD 9 million.

CHAPTER XIII

Municipal capital expenditures can be financed

- out of current funds available to the municipalities.
- with funds realized from the sale of land and buildings not used for municipal purposes.
- with funds borrowed from private individuals and banks.
- with funds borrowed from the Municipal Loan Fund.
- with funds borrowed from foreign governments or from international lending agencies.
- out of grants from the Government of Jordan.

It is the general view of this program document that

- in general, the municipalities are, and should be free to undertake any project for which they use their own current funds, funds realized from the sale of assets, or for which they choose to borrow from private individuals and banks.
- funds will be made available from the Municipal Loan Fund only for projects of high priority serving a clear public need, and then only when the municipality makes a contribution to the project from its own resources.
- the Government of Jordan should act as the agency to secure loans from foreign governments or from international lending agencies.
- grants will be made to municipalities only rarely and then only to activities (1) serving a clear public need, while (2) yielding no direct revenue.

Consistent with these general policies table 13.2 gives a suggested pattern for financing municipal needs.

THE PROGRAM FOR MUNICIPAL DEVELOPMENT

Table 13.2
SUGGESTED SOURCES OF FUNDS FOR FINANCING MUNICIPAL NEEDS
(in thousands of JD's)

	Current funds Private borrowings, or Sales of assets	Municipal Loan Fund	External Sources including IDA	Other
Water Distribution systems (1)				
5 major municipalities	573	—	1147	30(2)
All others	580	—	1170	50(2)
Sewage systems	960	450 (3)	1650	—
Streets and Roads	850	320	—	—
Government buildings	570	—	—	—
Bus depots	200	—	—	—
Vegetable markets	630	—	—	—
Parks & playgrounds	150	50	—	100(4)
Slaughter houses	40	—	—	—
All other :	545	180	—	500
Amman Sports City	—	—	—	500(5)
Slum clearance	200	175(6)	—	—
Miscellaneous	345	5(6)	—	—
Total	5098	1000	3967	680

- (1) Figures for water have been included in the chapter for water. (2) Funds come from CWA. (3) Represents 80 pct. of anticipated needs for all systems other than that of Amman. (4) Matching grants from Government of Jordan to encourage park and playground development. (5) Out of donations. (6) Up to 50 pct. of slum clearance projects.

Intended expenditures of JD 770,000 from municipalities own sources (current funds, sale of assets, or private borrowings) — almost JD 1 million per year — will be very difficult to reach unless

- new sources of revenue are made available to municipalities.
- municipalities vigorously move to obtain private loans for income-producing projects.
- municipalities are willing to ruthlessly sell present assets not used for municipal purposes.

Programs suggested for municipal development include:

CHAPTER XIII

- 1) The provision of a dynamic, new organization — the Municipal Development Authority — to assist in the development of municipalities.

The present Municipal Affairs Department, Ministry of Interior, is primarily inhibiting and regulatory in outlook and in operation. It is not equipped to offer that kind of positive assistance which can stimulate and aid municipal development. It is not well-located (in the Ministry of Interior primarily pre-occupied with political, police, and administrative matters) to develop in the desired direction.

It is therefore recommended that aspects of the economic and social development of municipalities be made the responsibility of a Municipal Development Authority reporting directly to the Prime Minister. See **Specific Proposal No. Mun. 1.**

- 2) Increasing the capital of the Municipal Loan Fund.

Table 13.2 indicates that funds will be required from the Municipal Loan Fund beyond those which can be made available from interest and principal payments. **Specific Proposal No. Mun. 2** asks for such an increase.

- 3) An expert study of municipal administration in Jordan.

The place of municipalities in the total governmental structure of Jordan is, in many ways, obscure and ambiguous. It should be clarified. At the same time, sources of revenue to municipalities need to be expanded while budgeting and accounting systems need to be improved. A detailed study by experts is required. Such a study is recommended by **Specific Proposal No. Mun. 3.**

- 4) The place of village government in the total fabric of government in Jordan is, in many ways, also obscure and ambiguous. It needs to be examined and clarified. A study of village programs and of village government is therefore necessary. It is called for by **Specific Proposal No. Mun. 4.**

Specific Proposal No. Mun. 1.

— a proposal for the creation of a Municipal Development Authority.

THE PROGRAM FOR MUNICIPAL DEVELOPMENT

— to be done:

- 1) Prior to March 1, 1962, a Committee of five ((1) Repr. of Municipal Affairs Dept., Ministry of Interior, (2) Repr. of Municipal Loan Fund, (3) Repr. of Civil Service Commission, (4) the U.N. Public Administration Advisor or his designate, and (5) Repr. of Jordan Dev. Bd. — Chairman) shall prepare plans for the organization of a Municipal Development Authority. In preparing these plans, the Commission shall:

- a) Leave the supervision of the political affairs of the municipalities to the Municipal Affairs Dept., Ministry of Interior.

- b) Provide the proposed authority with personnel and funds adequate to make it an effective stimulator of sound municipal development. Specifically, the Municipal Development Authority shall include:

- (1) A small, expert, city planning unit to provide city planning services to smaller municipalities.

- (2) A small, expert, group of engineers to design and to supervise the construction of municipal facilities.

- (3) An expert in market research able to anticipate with reasonable accuracy the market potential for various municipal services.

- (4) The Municipal Loan Fund to provide necessary funds not available from other sources.

- 2) The recommendations of the Committee shall be submitted through the Jordan Development Board to the Council of Ministers for modification, approval, and submission to Parliament.

— costs: The budget for the new Authority shall be set by the Committee referred to in 1., above. For purposes of this document, it is estimated as follows (in thousands of dinars):

CHAPTER XIII

Fiscal year to March 31	1963	1964	1965	1966	1967
Staff and misc.	10	15	15	15	15
Consultants (1)	-	14	14	-	-
Training abroad	-	5	5	5	5
Total	10	34	34	20	20

(1) Two consultants.

- financing : Staff and misc. , Budget, Government of Jordan
- Others — external sources.

Specific Proposal No. Mun. 2.

- a proposal to expand the lending facilities of the Municipal Loan Fund.
- to be done:

The Municipal Loan Fund will require approximately JD 200,000 per year in new capital to meet the high priority needs of Jordan's municipalities. Prior to January 1, 1962, the Director, Municipal Loan Fund, shall make every effort to obtain a commitment from USOM/J for additional funds in this amount. It would seem appropriate that these funds should be borrowed on a long-term basis if grants are not available.

- costs: JD 200,000 per annum.
- financing: External grants.

Specific Proposal No. Mun. 3.

- a proposal for the expert study of municipal affairs in Jordan.
- to be done:

1) Assuming the early organization of the (proposed) Municipal Development Authority, immediately upon its organization (but in no event later than April 1, 1963), the Director, Municipal Development Authority (in coopera-

THE PROGRAM FOR MUNICIPAL DEVELOPMENT

tion with the U.N. Public Administration Advisor and a Repr. of Jordan Development Board) shall make every effort to secure the services of three experts to study the administrative, fiscal, and accounting aspects of Jordan's municipalities. These experts will be asked to:

- a) Examine the place of municipal government in the total fabric of central, district, and municipal administration in Jordan.
 - b) Examine the sources of revenue now available to municipalities and to estimate future yields therefrom without change in rate or structure.
 - c) Examine the budgetary procedures of municipalities.
 - d) Examine the accounting systems of the municipalities and of the agencies of the Government of Jordan supervising them.
 - e) Recommend changes in all administrative, fiscal and accounting aspects of Jordan's municipal affairs.
- 2) It is anticipated that these experts shall work in Jordan for a period of six months as soon as possible after their services have been arranged for and that they shall submit a detailed report immediately upon the completion of their tour. The Director, Municipal Development Authority, shall prepare a plan of action based on the report of the experts within three months after its submission. This plan of action shall be submitted through the Jordan Development Board to the Council of Ministers for modification, approval, and submission to Parliament as appropriate.

- costs: Estimated at JD 12,000 (probably in fiscal 1964).
- financing: External grants.

Specific Proposal No. Mun. 4.

- a proposal for the examination of village needs.
- to be done:

1) Specific Proposal No. Mun. 3. provides for three experts

CHAPTER XIII

(one each in municipal administration, fiscal affairs, and accounting), to examine the structure of municipal government in Jordan. Immediately upon the completion of their assignment under that proposal, it is herewith recommended that they proceed in the following six months to a similar examination of village administration and Jordan's programs relating thereto.

- 2) The expert's report shall be referred to a Committee of three ((1) Repr. of Jordan Dev. Bd., (2) Repr. of Village Loan Fund, and (3) Repr. of Rural Development Department — Chairman). This Committee shall prepare within three months — based on the experts' report — a program of action. This program of action shall be submitted through the Jordan Development Board to the Council of Ministers for appropriate modification, approval, and submission to Parliament.

— costs: Estimated at JD 12,000 (probably in fiscal 1964).

— financing: External grants.

CHAPTER XIV

THE PROGRAM FOR EDUCATION

Citizens of the Hashemite Kingdom of Jordan consider the provision of educational opportunities to be of great importance; and they firmly believe in the necessity of developing education in the country as an effective instrument for economic, social, and cultural progress. The emphasis accorded education in Jordan is evidenced by:

- a) a tripling over the past decade of the school population, of the number of teachers, and of schools.
- b) the allocation of 33 per cent of the government's ordinary budget (excluding that of the army and the security forces) for education.
- c) enrollment figures which indicate that almost all boys and more than half of the girls have the opportunity to receive at least a primary education.
- d) the extensive participation of UNRWA and private schools in the provision of educational opportunities.

This program takes into consideration the important objectives of expanding and improving educational opportunities in the future. The following proposals are designed to contribute to the realization of these objectives.

- 1) The provision of schools and teachers for a larger number of girls.

Jordan accepts the view that at least a primary education should be available to all. However, while substantially

CHAPTER XIV

all boys have this opportunity, 40% of the girls are denied it because of shortages of schools and teachers. A substantial start in making up this deficit is one of the goals of this program.

See **Specific Proposal No. Ed. 1.**

- 2) The careful examination of curricula, texts, and materials and the recommendation of changes therein.

Curricula texts, and materials in Jordan are centrally prescribed and emphasize academic training. They do not seem sufficiently to take account of (1) individual differences in children, (2) varying community needs, (3) the need for an understanding of the resources and of the economy of Jordan and the Middle East, and (4) the new skills and new attitudes required for the economic development of the country. Stated positively, curricula, texts, and materials must be geared to meet the individual needs of the children and the local needs of their communities. Subject matter has to be more related to life. Education rather than instruction, diversity rather than uniformity, and practical rather than theoretical studies, must be emphasized.

The development of curricula and of policy regarding texts and materials requires citizen participation of the highest order as well as the work of specialists. Although the Supreme Board of Education offers advice on these problems whenever such advice is sought, it is important that such matters receive the attention of a Royal Commission. A Royal Commission on Public Education is therefore suggested by **Specific Proposal No. Ed. 2**

- 3) The provision of additional opportunities for vocational training.

The need for additional opportunities for vocational training is well recognized. Much additional work, however, remains to be done and it should be begun immediately.

Vocational training as it is conceived here is not restricted to «shop» courses requiring great manual skills and a type of apprenticeship program. It includes a wide variety of programs fitting students for many different types of positions. Specifically, it includes but is not limited to: (1) A program

THE PROGRAM FOR EDUCATION

of foreign languages, history, geography, archaeology, first aid, etc. for tourist guides. (2) A program of foreign languages, typing, shorthand, filing, office machine operation, etc. for secretaries. (3) A program of bookkeeping, business law, office management, salesmanship, personnel management, etc. for persons entering trade and business. (4) A program of foreign languages, salesmanship, personnel management, etc., plus practical work, for those going into hotel and restaurant employment.

It is possible to provide much vocational training within the secondary school curriculum. In fact a number of the courses needed for vocational development are the same as those required in an academic curriculum, and the remainder are of a similar level of difficulty and importance. This means that the distinction between «academic» and «vocational» courses is frequently not great. It is also to be understood that vocational work is not inferior work and that it should occupy a respected position in the curriculum. What is required, in short, is that secondary schools provide more flexibility in the curriculum and become, as a result, more comprehensive in nature. Consistent with this development, it is important that determined efforts be made to reduce preferential treatment accorded academic work by not limiting in effect, the matriculation to those who pursue it or limiting important positions or college entrance to matriculates. To continue such preferential treatment will simply prolong the situation in which thousands of secondary school graduates wait idly for white-collar jobs while there is a critical shortage of agricultural, commercial, industrial, and repair skills.

A program for expanded vocational training is contained in **Specific Proposal No. Eg. 3.**

- 4) The development and application of certification standards for teachers.

Fruitful education requires teachers with (1) command of the material to be taught, (2) knowledge of, and interest in, the widely variant capacities and motives of individual students and how they can be tied to maximum learning experience, and (3) an ability to relate education to life. Certification requirements should be designed to establish and

CHAPTER XIV

require at least the formal educational prerequisites for teachers of this type. These educational prerequisites can be met either by pre-service or in-service work. Since many teachers have been employed after obtaining the secondary school certificate and without a previous knowledge of educational psychology, educational methods, or practical training, it is therefore essential that reasonable standards for teacher education be set immediately. This action will allow an assessment of the teacher training job which must be done and the recruitment and salary policies which must be instituted. In regard to salaries it can be stated that a policy should be established which safeguards the prestige of the profession and contributes to good morale conditions. This policy should be based upon the following considerations:

- a) appointment on merit at grade and salary commensurate with educational attainments;
- b) promotion on merit to grade and salary commensurate with performance, experience and additional educational attainments;
- c) provision of a level of remuneration and opportunities for promotion reasonably commensurate with those in competing lines of employment.

It is reasonable that teachers below the standard should continue to be employed so long as they are making reasonable progress toward attaining the standard required. They should so far as possible be provided with in-service training facilities.

See Specific Proposal No. Ed. 4.

- 5) The provision of additional post-secondary teacher-training opportunities.

The setting of certification requirements will no doubt lead to a large expansion in the pre-service training of teachers:

- a) in two-year training colleges;
- b) by scholarships in colleges and universities outside the country;

THE PROGRAM FOR EDUCATION

- c) in the university colleges which may be instituted in Jordan.

Decisions as to where these opportunities are to be provided will depend in part on the number to be trained and the kind of training required (i.e., on certification standards). These should be specified as soon as possible.

See Specific Proposal No. Ed. 5.

- 6) The provision of newly-constructed school buildings to replace inadequate, rented facilities.

A large proportion of the buildings used for schools are now rented. Rents are high and buildings not intended for the purpose are most inadequate for school use. They should be replaced by newly-constructed buildings as soon as possible.

See Specific Proposal No. Ed. 6.

- 7) The provision of improved facilities at existing schools. It is wrong to think that a teacher and a textbook are sufficient to realize the sound goals of education without other assisting facilities. School gardens, workshops, home economics rooms, handicraft facilities, laboratories, libraries, gymnasiums, and athletic fields — all with necessary equipment and supplies — are also needed. Details of these needs should be formulated as soon as practicable, and they should be met systematically through a well conceived program.

See Specific Proposal No. Ed. 7.

- 8) The systematic cooperation of related governmental ministries and agencies in developing instructional materials for the schools.

The Ministry of Education should be solely responsible for the content and supervision of the educational program in the public schools. For this reason all elementary, preparatory and secondary public schools should belong to the Ministry of Education in their administration, financing and curricula. This will result in uniformity of procedures, and in savings in administration and costs. No Ministry should be allowed to run schools of its own unless such schools have a particular kind of education and training which is required in the interest of the operation of the Ministry

CHAPTER XIV

concerned such as nursing, police, military, and religious guidance schools, the curricula of which follow one of the stages of general education.

At the same time, the Ministry of Education should recognize that the educational program can frequently be improved via the use of specialized knowledge and personnel in other government agencies to assist in the development of course plans and instructional materials. Thus it would seem *prima-facie* desirable to enlist the cooperation of the following ministries and departments:

- a) the Ministry of Health in developing units on personal hygiene and village sanitation and the matter of health inspection services;
- b) the Ministry of Agriculture in developing units describing Jordan's agriculture and its potential and in setting up pre-vocational or vocational courses in agriculture;
- c) the Department of Forests in work emphasizing conservation of natural resources;
- d) the Department of Tourism in units in geography and history which are of prime importance to tourism and its development;
- e) the Ministry of Social Affairs in strengthening the ties between the home and the school and in studying the social conditions of students and the problems which affect their general school behaviour;
- f) the Jordan Development Board in courses presenting material on various aspects of Jordan's economy;
- g) other agencies and ministries as appropriate.

Needs and opportunities for cooperative work should be aggressively explored as indicated in **Specific Proposal No. Ed. 8.**

- 9) A re-examination of the organization of the Ministry of Education.

The Ministry of Education operates a large, complex, and important humanitarian enterprise. Its organization must

THE PROGRAM FOR EDUCATION

be one which will provide maximum effectiveness. It should therefore be periodically examined. Such an examination is called for by **Specific Proposal No. Ed. 9.**

- 10) The provision of closer coordination with UNRWA

While UNRWA schools enroll a little more than one-sixth of all students in Jordan, refugees represent more than a quarter of the total population. The expansion and improvement of educational opportunities by UNRWA is therefore important for Jordan and should be carefully coordinated with the efforts of the Ministry of Education.

See **Specific Proposal No. Ed. 10.**

- 11) The development of a university or university colleges in Jordan.

Jordan has reached the point at which immediate basic decisions must be made in regard to the future development of higher education in the country. There is at present urgent need for a four-year program of teacher training; a four-year agricultural training program; and a three-year technology program. There is no doubt that these and other specific vocational needs such as those for civil servants trained in public administration, businessmen trained in business administration, and social workers trained in sociology and psychology can be met effectively by the development of a high-quality university or university colleges. The need for persons having general social science and liberal training can also be met through this development.

In addition, the development of a university framework could meet the following needs:

- 1) It could provide for Jordan those well-educated young men and women who in some measure create economic and social opportunities and thus justify facilities beyond demonstrable vocational needs.
- 2) It could hold in or bring back to Jordan faculty members with skills and capacities which the country needs.
- 3) It could serve as a focus for research, as well as teaching.

CHAPTER XIV

- 4) It could provide for the continuing education of adults (e.g. for executive training courses for refresher work for professional men, etc.).
- 5) It could save foreign exchange by providing locally a service for which Jordanians go abroad.

Since the most appropriate development of higher education in Jordan is a highly technical matter, the subject should receive careful and expert study before final decisions are made. It is recommended, therefore, that a Royal Commission on Public and Higher Education study Jordan's higher-education needs and make recommendations concerning the most desirable ways of meeting them.

See Specific Proposal No. Ed. 11.

Specific Proposal No. Ed. 1

- a proposal to expand primary school facilities to accommodate 21,000 additional girls gradually during the next six years. This expansion is to be completed by September 1968.
- to be done:

- 1) Prior to January 15, 1963, the Ministry of Education (in cooperation with a Repr. of Jordan Dev. Bd.) shall prepare a plan whereby an estimated 3,500 additional girls per year can be enrolled in the first grade beginning in September, 1963. This plan will include the following:
 - a) The recommendation of specific communities for expansion each year. This recommendation shall take into consideration (1) the number of girls in the compulsory school age not now in school, (2) the cultural readiness of the community for expanded female education, (3) the availability of building space in which operations can be begun, and (4) ability to recruit teachers for the area.
 - b) The development and amendment of plans in various communities for providing the classroom space for additional girls when girls are promoted from one grade to another. Plans may include:

THE PROGRAM FOR EDUCATION

- 1) Use of unused space, in, or the addition of rooms to, existing girls' primary schools.
- 2) Use of unused in, or the addition of room to, existing boys' primary schools, thus providing co-educational facilities, at least through age ten.
- 3) Rental of facilities as required for three years, then construction of girls' primary school buildings.
- 4) Continued use of rented facilities.
- c) The estimation of additional teacher requirements by year and plans for their recruitment.
- d) The estimation of costs each year for buildings, teachers, and equipment.
- 2) The Ministry of Education is responsible for the implementation of the program developed under 1., above. However, prior to December 31, 1963, and each year thereafter, the Ministry of Education (in cooperation with a Repr. of Jordan Dev. Bd.) shall review actual progress and revise the program as necessary in the light of experience gained.

— costs : Costs will be detailed by the use of procedures specified above. Rough estimates for purposes of this document are as follows (in thousands of dinars).

Fiscal year to March 31 :		1964	1965	1966	1967
Additional teachers' salaries	(1)	23.0	46.0	69.0	92.0
Additional classrooms - rentals	(2)	7.5	15.0	15.0	15.0
Additional classrooms - construction	(3)	30.0	30.0	90.0	90.0
Equipment costs		13.5	13.5	13.5	13.5
Miscellaneous		5.0	10.0	15.0	20.0
Total		79.0	114.5	202.5	230.5

(1) For 90 additional teachers each year. (2) For 60 rooms in 1964, 120 rooms thereafter. (3) For 30 rooms in 1964 and 1965, for 90 rooms per year thereafter.

— financing : Suggested as follows (in thousands of dinars).

Fiscal year to March 31 :		1964	1965	1966	1967
Budget, Government of Jordan		49.0	84.5	112.5	140.5
External sources (Loans)		30.0	30.0	90.0	90.0
Total		79.0	114.5	202.5	230.5

CHAPTER XIV

Specific Proposal No. Ed. 2.

— a proposal for a Royal Commission on Public and Higher Education.

— to be done:

- 1) As previously indicated, curricula, texts, and materials used in Jordan's schools should be examined, and where necessary, modified to serve more effectively the needs of Jordan's young people in a time of dynamic social and economic development. Therefore, it is respectfully requested that His Majesty appoint a Royal Commission on Public and Higher Education to sit beginning April 1, 1962.
- 2) The Royal Commission on Public and Higher Education should be provided with the service of one or more eminent foreign consultants as required. The Minister of Education (in cooperation with a Repr. of Jordan Dev. Bd.) shall arrange for the services of these consultants.
- 3) This report of the Royal Commission on Public and Higher Education should be made available not later than September 15, 1962.
- 4) This same Royal Commission should also make the study of higher education called for in **Specific Proposal No. Ed. 11.**

— costs: Estimated costs of the two studies are as follows (in thousands of dinars):

Consultants	JD	20,000
Miscellaneous	JD	2,000
Total	JD	22,000

— financing: Suggested for application to a foundation.

Specific Proposal No. Ed. 3

— a proposal to provide additional opportunities for vocational training.

— to be done:

THE PROGRAM FOR EDUCATION

1) Prior to May 1, 1962, the Ministry of Education (in cooperation with a Representative of The Jordan Development Board) shall prepare a program for further expansion of opportunities for vocational training in Jordan. Taking a comprehensive view of vocational training, this program shall:

- a) Proceed from an inventory of vocational needs to be provided prior to February 1, 1962, by the Planning Division, Jordan Development Board.
- b) Recognize the fact that vocational training is more suitable than academic training for persons who will not go to a college or university.
- c) Specify institutions to provide each type of training, making full use of the possibilities for converting existing facilities from academic to vocational uses.
- d) Estimate equipment and teacher requirements for the implementation of the program.
- e) Estimate costs per year for the program.

2) The Ministry of Education shall make the program proposal prepared under 1, above, available to the Royal Commission on Public and Higher Education.

3) Prior to November 1, 1962, the Ministry of Education (in cooperation with a Representative of the Jordan Development Board) shall revise its program in light of the recommendations of the Royal Commission. It shall then submit budget requests based on it and proceed to its implementation. Prior to December 31, 1964, and each year thereafter, the Ministry of Education (in cooperation with a Representative of the Jordan Development Board) shall review actual progress under the program and make revisions as necessary.

costs : Program development is to be done by existing staff within current budgets. The program will itself develop cost estimates. Very rough estimates for purposes of this document are:

CHAPTER XIV

	Government of Jordan Budget	External Sources	Total
Fiscal 1964	10	40	50
Fiscal 1965	20	80	100
Fiscal 1966	40	160	200
Fiscal 1967	60	240	300
	130	520	650

financing : Construction and equipment, External sources — loans (JD 520,000). Other costs, Budget, Government of Jordan (JD 130,000).

Specific Proposal No. Ed. 4

- a proposal to develop certification standards for teachers.
- to be done:
 - 1) Prior to March 1, 1962, the Ministry of Education (in cooperation with a Repr. of Jordan Dev. Bd.) shall prepare estimates of teachers to be required by Jordan's government schools in 1967. These estimates will be broken down by fields of specialization. Reasonable standards of educational preparation for each specialty shall be indicated. Proposal for the time schedule according to which teachers will be certified and hence allowed to teach only in accordance with these standards shall be prepared.
 - 2) The Ministry of Education shall make the proposals prepared under 1. , above, available to the Royal Commission on Public and Higher Education.
 - 3) Prior to March 1, 1963, certification standards as recommended by the Royal Commission on Public and Higher Education shall be promulgated for Jordan.
 - 4) Prior to January 1, 1962, a Committee of three ((1) Repr. of Civil Service Commission, (2) Repr. of Jordan Development Board, and (3) Repr. of Ministry of Education — Chairman) shall be constituted to develop recommendations for remuneration of teachers and promotion opportunities for them equal to the opportunities open to other officials in the public service. This Committee shall render

THE PROGRAM FOR EDUCATION

its report and formulate necessary draft rules and regulations prior to February 1, 1963.

In formulating its proposals, the Committee will make every effort to secure the view of the U.N. Public Administration Advisor.

- 5) The report of the Committee shall serve as the basis for revised budget requests by the Ministry of Education for the fiscal years ending March 31, 1964 and following.
- costs and financing: To be carried by staff and budgets at present levels.

Specific Proposal No. Ed. 5.

- a proposal to provide additional, post-secondary, teacher-training opportunities.
- to be done:
 - 1) There can be no doubt that teacher education at the college, or university college, level must be provided for growing numbers of prospective teachers. It will certainly be required (1) to prepare teachers to meet the expanding enrolment of girls (See **Specific Proposal No. Ed. 1**), (2) to prepare specialized vocational teachers (see **Specific Proposal No. Ed. 3**), and (3) to allow up-grading of teachers with the development of a certification program (See **Specific Proposal No. Ed. 4**). Therefore, prior to April 15, 1962, the Ministry of Education (in cooperation with a Repr. of Jordan Dev. Bd.) shall prepare a document detailing the following:
 - a) The number of teachers who must be trained in each speciality each year, this number being consistent with all proposals contained in this document.
 - b) An analysis of all alternatives for meeting this need (i.e., (1) in Jordan, in two-year teacher training college, (2) by scholarships, in colleges and universities outside the country, and (3) in Jordan, at newly-created, degree-granting, university colleges).
 - c) Establishment of new colleges of the standard of the

CHAPTER XIV

existing male teachers and female teachers training colleges, or addition of new classes to these colleges.

- d) The provision of adequate accommodations for day students in institutions of higher learning (college or university level).
 - e) The provision of night classes in institutions of higher learning for the benefit of the male and female teachers who come from the neighbouring areas;
 - f) The conducting of a general examination supervised by the Ministry of Education. The subjects to be covered by the examination should be of the same nature as the subjects prescribed in the institutions of higher learning. Male and female teachers and others should be permitted to take the examination for the purpose of lifting their educational and professional levels;
 - g) The expansion of summer sessions in institutions of higher learning and the development of a formula for certification based upon the subjects covered by the examination.
- 2) The document prepared under 1., above, shall be submitted prior to April 15, 1962, to the Royal Commission on Public and Higher Education (see **Specific Proposal No. Ed. 11**). The Royal Commission will itself consider the document as a part of its deliberation.
 - 3) Immediately subsequent to the submission of the report of the Royal Commission on Public and Higher Education, but certainly prior to November 1, 1962, the Ministry of Education (in cooperation with a representative of the Jordan Dev. Bd.) shall prepare a program for additional post-secondary, teacher-training opportunities in Jordan. This program should be consistent with the recommendations of the Royal Commission.
 - 4) The Ministry of Education shall be responsible for the implementation of the program prepared by procedures outlined above.
- costs and financing: The development of the program planning can be carried by staffs and budgets at current levels.

THE PROGRAM FOR EDUCATION

The program itself will specify additional expenditures which are not here estimated.

Specific Proposal No. Ed. 6.

- a proposal for a building program to replace inadequate rented facilities.
- to be done:

- 1) Ministry of Education has prepared a list of 90 schools which should be constructed to replace rented facilities. (This list is made a part of this proposal). On the basis of this list and prior to March 1, 1962, a Committee of four ((1) Repr. of Jordan Dev. Bd., (2) Repr. of Min. of Pub. Wks., (3) Repr. of Min. of Fin., and (4) Repr. of Min. of Educ., chairman) shall develop a detailed program for construction. This program will include:
 - a) Specific places for construction at specific times. Priority in time should be given to replacement of buildings least satisfactory educationally, then to those for which rental savings will be greatest.
 - b) Preparation of architects drawings for typical schools.
 - c) Estimates of rental savings by year.
 - d) Estimates of construction costs by year.
 - 2) Prior to July, 1962, detailed drawings for schools first to be constructed shall be prepared by the Ministry of Public Works, bids will be asked and opened, and construction contracts let. This process will be repeated at times indicated by the program prepared under 1., above. On July 1, 1962, and each three months thereafter, the Committee referred to in 1, above, shall meet to inform itself of all actions taken and to submit comments thereon in writing to the Minister of Education.
- costs: Costs are estimated at approximately JD 250,000 per year

CHAPTER XIV

— financing: It is recommended that actual construction costs be financed via a USOM/J loan for government construction. Interest and principal are to be paid so far as possible out of funds now budgeted for rental payments. It is presently anticipated that funds from this source will be sufficient.

Annex to Specific Proposal No. Ed. 6.

The following is the list of schools selected for construction to rented facilities.

TOWN	ELEMENTARY	PREPARATORY	SECONDARY	TOTAL
AMMAN	20	7	2	29
ZERKA	2	-	-	2
MADABA	1	1	-	2
SWILEH	1	-	-	1
IRBID	4	1	-	5
JARASH	1	-	-	1
RAMTHA	1	-	-	1
MAFRAO	1	-	-	1
SALT	2	-	1	3
KARAK	2	-	-	2
MA'AN	2	-	-	2
AQABA	2	-	-	2
JERUSALEM	3	2	1	6
BIREH	1	-	1	2
RAMALLAH	1	1	-	2
JERICHO	2	-	1	3
NABLUS	6	2	1	9
QALQILIA	-	1	-	1
JENIN	2	1	1	4
TULKARM	2	1	1	4
HEBRON	3	1	-	4
BETHLEHEM	1	-	1	2
BEIT SAHOUR	-	1	-	1
BEIT JALA	-	1	-	1
Total	60	20	10	90

THE PROGRAM FOR EDUCATION

Specific Proposal No. Ed. 7.

— a proposal to provide improved facilities at existing schools.
— to be done:

1) Prior to July 1, 1962, the Ministry of Education (in cooperation with a Representative of the Jordan Development Board) shall prepare a program for meeting, prior to July 1, 1968, the major improved-facilities needs of Jordan's government schools. In preparing this program, the Ministry of Education shall:

a) Consider the necessity of providing schools with appropriately-equipped athletic fields, art rooms, libraries and laboratories; and also consider the necessity of providing these schools, according to their types and locations, with gardens, workshops, typing machines, and home economics rooms on the basis of the vocational training prescribed for each school.

b) Prepare an inventory of needs to be met together with the estimated costs thereof.

c) Establish priorities so that the most pressing needs are met first within the framework of funds allocated therefor below.

In formulating these priorities, particular attention should be given to providing facilities for meeting pressing vocational needs which will contribute to the pace of economic development.

2) The implementation of the program for the provision of improved facilities is the responsibility of the Ministry of Education and will begin April 1, 1963. However, prior to January 1, 1964, and each year thereafter, the Ministry of Education (together with a Representative of the Jordan Development Board) will meet to review progress and to modify the program accordingly.

— costs: It is estimated that the most pressing needs can be met with allocation of funds as follows:

CHAPTER XIV

Fiscal 1964 — JD	50,000
Fiscal 1965 — JD	75,000
Fiscal 1966 — JD	100,000
Fiscal 1967 — JD	125,000

Total JD 350,000

— financing : Budget, Government of Jordan (JD 350,000).

Specific Proposal No. Ed. 8.

— a proposal for the systematic cooperation of related government ministries and agencies in developing courses of instruction and materials for the schools.

— to be done:

- 1) It is recognized that the Ministry of Education is solely responsible for the content and supervision of the educational programs of the public schools. It should be recognized, however, that other ministries and agencies: (1) are competent to assist fruitfully in the development of programs in their areas of specialization, and (2) need to use the facilities offered by the schools to get important information to students, and ultimately to the public generally. Therefore, prior to May 15, 1962, the Ministry of Education (in cooperation with a Representative of the Jordan Development Board) shall prepare a proposal for systematizing the cooperation of other governmental ministries and agencies with the Ministry of Education.
- 2) The proposals prepared under 1. above, shall be submitted prior to June 1, 1962, to a Committee of ten ((1) Repr. of Ministry of Health, (2) Repr. of Ministry of Agriculture, (3) Repr. of Ministry of Defence, (4) Repr. of Ministry of Social Affairs, (5) Repr. of Ministry of Public Works, (6) Repr. of Department of Forests, (7) Repr. of Department of Antiquities, (8) Repr. of Department of Tourism, (9) Repr. of Jordan Development Board, and (10) Repr. of Ministry of Education — Chairman) for review and modification. The revised document — when approved by the Ministry of Education — shall constitute the government's policy in the field of its purview.

THE PROGRAM FOR EDUCATION

— costs and financing: Work can be done by present staff within budgets at existing levels.

Specific Proposal No. Ed. 9.

— a proposal for a study of the reorganization of the Ministry of Education.

— to be done:

- 1) The Ministry of Education is one of the largest organizations in Jordan. It has grown rapidly. Its professional staff is well qualified to determine — with expert assistance — the optimum organization of the Ministry and to obtain the increased effectiveness and lower costs which will result.
- 2) Prior to February 1, 1963, a Committee of six ((1) Repr. of Jordan Development Board, (2) Repr. of Civil Service Commission, (3) the U.N. Public Administration Advisor, and two others to be designated by him, (4) (5) and (6) Repr. of the Ministry of Education — one as Chairman) shall formulate the terms of reference and modes of procedure for a study of the organization of the Ministry. It is anticipated that the Committee will ask that the study (1) examine the existing activities of the Ministry and recommend expansions or contractions as are appropriate, (2) suggest an overall organization of the Ministry, (3) yield detailed job descriptions and salary schedules, and (4) recommend appropriate staffing procedures.
- 3) Within the terms of reference and modes of procedures developed as under 2. above, the Committee shall designate the study group by April 1, 1963, and make every effort to arrange for the necessary consultants. It is anticipated that not fewer than three senior members of the staff of the Ministry of Education shall be members of the study group.
- 4) The study group shall conduct its work between April 1, 1963 and April 1, 1964, making reports each six months (on October 1, 1963 and on April 1, 1964) to the Committee

CHAPTER XIV

(constituted as indicated under 2., above). The Committee shall comment in writing to the Ministry of Education on each of these reports within 15 days of the receipt thereof.

- 5) The Minister of Education shall prepare action on the final report of the study committee prior to October 1, 1964, asking such additional budget support as is thereby made necessary. The Minister shall, of course, make final decisions on reorganization but shall report in writing prior to January 1, 1965, his reasons for not implementing any recommendations of the study committee, such written reasons being submitted to the Council of Ministers through the Committee.

— costs: Consultants — JD 21,000 (three consultants for the fiscal year 1963-64).

— financing: Consultants, external sources (grants).

Specific Proposal No. Ed. 10.

- a proposal for provision for closer coordination with UNRWA.
- to be done:

Prior to March 1, 1962, the Ministry of Education (in cooperation with a Repr. of Jordan Dev. Bd.) shall make every effort to set up a standing committee of four (1) (2) senior representatives of UNRWA, (3) Repr. of Jordan Dev. Bd., and (4) Repr. of Ministry of Education — Chairman) to examine on a continuing basis the educational activities of UNRWA and of the Government of Jordan and to provide the maximum coordination thereof. This Committee shall report semi-annually (on July 1 and January 1) to UNRWA and to the Ministry of Education suggesting specific coordinated activities as it deems desirable.

— costs and financing: Coverable at current budget levels.

Specific Proposal No. Ed. 11.

- a proposal for the development of higher education in Jordan.
- to be done:

THE PROGRAM FOR EDUCATION

- 1) It is already evident that four-year college training facilities for both men and women teachers in Jordan must be developed quickly. Whether such facilities are to be provided by the development of the existing two-year institutions into institutions offering four-year training, or whether they are to be provided within a university framework will depend in part upon the recommendations of the Royal Commission on Public and Higher Education.
- 2) It is also clear that an expanded program of higher education in the area of agriculture is urgently needed. This could be provided either by extending the program of the present institution to four years or by developing a four-year program of agricultural training within a university framework. Here also the approach to be followed will depend in part upon the recommendations of the Royal Commission on Public and Higher Education.
- 3) To provide qualified teachers of vocational subjects the program currently offered by the Amman Trade School should be extended to three years for those preparing for a vocational teaching career. Those who are preparing for careers as technicians would follow a two-year program. Whether the Amman Trade School should become an independent institute of technology or whether such technical training should be offered within the framework of a university will depend in part upon the recommendations of the Royal Commission on Public and Higher Education. The estimated costs of expanding the program of technical training are listed in detail in the section on costs.
- 4) For purposes of this document it should be stated that a favorable recommendation by the Royal Commission on Public and Higher Education for the development of a university or of university colleges in Jordan, if such a recommendation were adopted by the government, would involve substantial expenditures during the period of the five-year program for economic development. Though exact estimates of such costs cannot be made at this time, it is probable that they would amount to approximately two million dinars. This figure would include

CHAPTER XIV

the costs of providing a four-year program of teacher training for both men and women and a four-year program of agricultural training.

- 5) To insure the most appropriate development of higher education in Jordan, the advice of outstanding experts should be sought. It is therefore respectfully requested that His Majesty appoint a Royal Commission on Public and Higher Education (See **Specific Proposal No. Ed. 2**) to study the problem and to make recommendations. The Committee should complete its study of higher education and present its report not later than June 15, 1962.

— costs : 1. Of developing a university in Jordan. Approximately two million dinars during the period of the five-year program.

- 2) Of developing a three-year program of technology.

Item	1963	1964	1965	1966	1967
1. Five specialists	JD 10,580	JD 22,089	JD 28,053	JD 25,982	JD 18,036
2. Fellowship	3,000	11,126	1,854	—	—
3. Equipment, supplementary workshop	1,785	1,785	—	—	—
4. Equipment, laboratory	50,000	3,570	3,570	—	—
5. Contingencies and audio visual aids	—	3,570	—	—	—
6. Miscellaneous	985	985	985	985	985
7. Additional building construction	17,857	8,928	—	—	—
8. Installation costs, etc.	4,286	—	—	—	—
9. Operating expenditure for institute	22,314	22,314	22,314	22,314	22,314
10. Local operating costs	1,585	3,316	4,208	3,902	2,705
Total	JD 112,482	77,683	60,984	53,183	44,040

- 3) Of the Royal Commission. No additional costs beyond those budgeted for **Specific Proposal No. Ed. 2** would be required.

— financing : 1) Of a university in Jordan. Construction costs to be financed by external grants. For purposes of this

THE PROGRAM FOR EDUCATION

document construction costs are estimated to be JD 1.3 million. Other costs are estimated to be JD .7 million, to be financed from various sources including the budget of the Jordan Government.

- 2) Of the development of a three-year program of technology. For items 1 through 6, application should be made to the United Nations Special Fund for financing by years as follows:

Items 7 through 10 to be financed from the budget of the Government of Jordan, by years as follows:

1963	JD 66,440
1964	43,125
1965	34,462
1966	26,967
1967	19,021

TOTAL JD 158,357

Items 7 through 10 to be financed from the budget of the Government of Jordan, by years as follows:

1963	JD 46,042
1964	34,558
1965	26,522
1966	26,216
1967	25,019

TOTAL JD 190,015

THE PROGRAM FOR HEALTH

Health services of high quality are necessary

- on humanitarian grounds, to restore the ill to well-being and to prevent the healthy from contracting diseases. These are well-recognized responsibilities of all civilized governments.
- on economic grounds:
 - 1) To reduce loss of effective work time due to disease.
 - 2) To raise standards of personal well-being and hence of productivity.

In spite of the low levels of per capita incomes and the rural character of a portion of the population, Jordan offers a relatively high standard of medical services to its citizens. This standard is substantially higher in urban centers than in rural areas.

Curative services are offered

- virtually free — but certainly without «frills» — in government clinics and government hospitals (the doctors and nurses being government employees) to citizens of Jordan generally.
- virtually free — but, again, certainly without «frills» — in UNRWA clinics and UNRWA hospitals (the doctors and nurses being UNRWA employees) to refugees.
- for fee — at a higher level of personal services and comfort — by private clinics and hospitals served by doctors and nurses in private practices. (Many government doctors also have a private practice during non-duty hours).

CHAPTER XV

Preventive services are rendered by the government. Examples are

- the malaria control program (which has virtually eradicated the disease even in previously epidemic areas in the Jordan Valley).
- the tuberculosis program (just now getting underway on a large scale with a systematic search for active cases).
- the maternal and child health program (which presently includes thirty Maternal and Child Health Centers in Jordan).
- the public health nursing program (providing limited public health nursing services in four of seven health districts in Jordan).
- the sanitation program (which operates a sanitation inspection service, aids villages in safe-guarding their water supplies, and provides instruction in good sanitation practices to food-handlers, community level workers, etc).
- the school health program (via which the staff of the Ministry of Health provide occasional materials and lectures to the schools and minister to student needs).
- the nutrition program (under which a study of the dietary habits and needs of the population of Jordan will be undertaken).

With regard to curative medicine —

- 1) The services provided by the Ministry of Health, Government of Jordan, are generally adequate.
- 2) Development programs in this area can be limited to —
 - a) Filling remaining, unmet, hospital and clinic needs and providing such expansion as is necessary to keep pace with population growth.
 - b) Such improvements in organization, personnel, buildings, and equipment as will allow substantial increases in efficiency — better service at lower cost.
 - c) The rationalization of training programs to insure an adequate, continuing, supply of trained personnel.

THE PROGRAM FOR HEALTH

- 3) An expansion in the number of private physicians and private hospitals can be expected as personal incomes rise. Private activities will thus importantly supplement governmental curative programs.

With regard to preventive medicine:

- 1) Benefits to be derived from future activities are great relative to costs since the prevention, or mass treatment, of disease not only avoids expensive, personalized hospitalization and treatment but maintains an economically and socially effective population.
- 2) Although the Ministry of Health, Government of Jordan, has undertaken some effective programs in the area of preventive medicine (e.g., the Malaria Control Program), these programs have claimed only a relatively small portion of the Ministry's attention and budget. It is in this area of preventive medicine that development programs should receive maximum attention.
- 3) Preventive medicine is primarily the responsibility of the government. It will not receive significant assistance from private medical facilities and practice.

Programs for improving health conditions in Jordan include:

- 1) A tuberculosis control program (to identify and treat the more than 40,000 TB cases in Jordan and to protect the healthy from contracting the disease).

Required: That (1) the draft «Ten Year Plan for Controlling Tuberculosis in Jordan» be examined, improved, and expanded prior to February 15, 1962, to provide a detailed program plan, (2) the modified draft be made the basis for an application for financial assistance equal to the foreign exchange needs of the program to USOM/J, such application be made prior to March 15, 1962, and (3) the program be phased into operation beginning June 1, 1962, and continued through the duration of the plan period. See Specific Proposal No.HI.

- 2) The completion of the malaria eradication program (to build upon the excellent work already done and using the excellent staff already in existence, to eradicate completely this dread disease).

CHAPTER XV

Required: That (1) the suggestions contained in the El entitled «Malaria Eradication», dated August 4, 1960, be examined, improved, and expanded prior to February 15, 1962, to provide a detailed program plan, (2) this draft be made the basis for an application for financial assistance from USOM/J, UNICEF, and the WHO, such application to be made prior to March 15, 1962, and (3) the program be phased into operation beginning June 1, 1962, and continued through the duration of the plan period. See **Specific Proposal No. H2.**

- 3) The building and equipment of hospitals (to provide government hospitals in Jerusalem, Nablus and Aqaba, and to provide more efficient facilities to replace scattered, inadequate, poorly equipped rented facilities in Amman and in regional centers).

Required :

- a) That a government hospital of 100 beds be built and equiped in Jerusalem prior to November 1, 1963. See **Specific Proposal No. H3.**
 - b) That a government hospital of 100 beds be built and equiped in Nablus prior to November 1, 1963. See **Specific Proposal No. H4.**
 - c) That a medical center be built and equipped on Jebel Ashrafiyeh, Amman, prior to October 1, 1964, such center to replace inadequate rented facilities now scattered throughout Amman. See **Specific Proposal No. H5.**
 - d) That a government hospital for infectious diseases of 50 beds be built and equiped in Aqaba prior to November 1, 1963. See **Specific Proposal No.H6.**
 - e) That Health Centers be built in regional centers where scattered, inadequate, poorly equipped, frequently rented facilities now reduce efficiency of skilled health professionals and increase costs of operation. See **Specific Proposal No. H7.**
- 4) A management study of the Ministry of Health and of the hospitals, clinics, laboratories, and agencies which it operates (to allow improved operation and administration of one of Jordan's largest enterprises, its Ministry of Health).

THE PROGRAM FOR HEALTH

Required : That (1) the terms of reference of the management study be explicitly worked out prior to March 15, 1962, (2) negotiations designating the study group and for financing be completed prior to June 15, 1962, and (3) the study be carried out and its results observed over the plan period. See **Specific Proposal No. H8.**

- 5) The provision of specialized business management for hospitals and clinics (to relieve professional health personnel from the routine management of health facilities while at the same time providing full-time expert, business management).

Required : Because of it obvious importance, business management of hospitals and clinics should be provided while the overall management study proceeds. The provision of this management requires that (1) the terms of reference for the introduction thereof be worked out prior to May 15, 1962, (2) negotiations for technical assistance be completed with USOM/J prior to June 15, 1962, and (3) the specialized business management be provided and its results observed over the plan period. See **Specific Proposal No. H9.**

- 6) A review of statutory needs and the drafting of necessary legislation or amendments (to provide the necessary basis for the more effective operation of the Ministry of Health.)

Required : That a small, compact committee move promptly (prior to September 1, 1962) to review legislative needs and to draft necessary statutes and/or amendments. See **Specific Proposal No. H10.**

- 7) Quarantines: To build and equip Quarantine Stations at sea-ports, airports and land borders to prevent the importation of communicable diseases and to meet the commitments of the international sanitary regulations as has been agreed upon with WHO.

Required: The Quarantine Stations be built at Aqaba port and at every airport designated by the government as an International airport for international air traffic and at the border stations of Ramtha and H4. See **Specific Proposal No. H11.**

- 8) To build and equip a physiotherapy center which will eventually be developed into a rehabilitation center, the services

CHAPTER XV

of which will extended to serve the different regions of the country, aiming at the treatment of the many cases with physical disabilities found in Jordan and rehabilitating them to become active and productive members of society.

Required : To establish and build a physiotherapy center adjacent to Amman's Surgical Hospital to make use of its facilities. The Cheshire Homes' Fund will be asked to cover the building expenses. The Government shall provide trained personnel and administrative employees. See **Specific Proposal No. H12.**

- 9) To enlarge the Jordan Vaccine Institute by adding a second floor and to equip it with the necessary equipment to enable it to prepare anti-sera which will satisfy the necessary needs of Jordan so that importation of these items will be discontinued, and to establish a special section for food and drug analysis. See **Specific Proposal No. H13.**
- 10) Due to the continuous increase in the number of schools and students in the last few years and the keen desire for education in urban and rural districts in the country, and because of the great importance of health-care for these students which will prepare them to be healthy physically and mentally, it becomes imperative to establish a special school health program which will be responsible for all aspects of school health.

Required : That the Ministry of Health in cooperation with the Ministry of Education prepare a general plan for school health and appoint the necessary personnel for such a program; the doctors and nurses to be assigned in accordance with the number of students in the different districts. See **Specific Proposal No. H 14.**

- 11) Anti-trachoma campaign: Trachoma has been and is still an endemic diseases in Jordan. It affects great numbers of the population, especially children of school age. It causes severe complications and the treatment of the numerous cases is costly. The Ministry of Health has carried out programs for its control, and recently a pilot project was conducted with the assistance of Dr. Winkler, WHO consultant, which indicated that the infection rate in the Hebron district is approximately 37%. Based on these findings, the Ministry of Health

THE PROGRAM FOR HEALTH

believes that the control and eradication of this disease is imperative. See **Specific Proposal No. H15.**

- 12) Training of qualified male and female nurses and other auxiliary health personnel is of paramount importance for the implementation of the proposed health program in the five-year plan. Moreover, it is important to raise the general standard of existing health services which makes it necessary to train technicians in the fields of both curative and preventive medicine. In order to meet these requirements it becomes necessary to enlarge the present Jordan School of Nursing and to establish another center to train male and female practical nurses. Adequate scholarships must be provided for the better students for specialized training in the different technical branches of the different institutions and centers. See **Specific Proposal No. H16 and H17.**

Specific Proposal No. H1.

- a proposal to identify and treat the estimated more than 40,000 TB cases in Jordan and to protect the healthy from contracting the disease.
- to be done:

- 1) Prior to February 15, 1962, a Committee of three (1) Repr. of Jordan Dev. Bd., (2) Repr. of USOM/J and (3) Director, Chest Diseases Division, Ministry of Health — Chairman) shall review, improve, and expand the draft «Ten Year Plan for Controlling Tuberculosis in Jordan» to provide a detailed plan of action and financing for the five fiscal years beginning June 1, 1962. This detailed plan will include plans for (1) construction including provisions for design and supervision, (2) meeting staff needs, including physicians, nurses, administrators, and statisticians, and the training thereof, (3) legislation and regulation, and (4) financing, including estimates of funds required by year.
- 2) Prior to March 15, 1962, the Director, Chest Diseases Division (acting for the Minister of Health), working together with a Repr. of the Plan. Div., Jordan Dev. Bd. will attempt to get a firm commitment from USOM/J to finance the direct foreign exchange needs of the program (for equipment to be purchased abroad and for foreign training and experts as required).

CHAPTER XV

- 3) Proceeding under the terms of the detailed plan prepared under 1. , above, the Minister of Health through the Director, Chest Diseases Division, shall be responsible for implementing the program. However, each year prior to November 1, he shall submit a report a report on activities completed and on plans proposed for the next calendar year. This report shall be submitted in writing to the Jordan Development Board. The first report under this section is to be submitted on November 1, 1962.

— costs: To be indicated precisely in the detailed plan prepared under 1. , above. Rough estimates for purpose of this document are as follows:

	Building Const.	For Exch. Costs	Other	Total
Fiscal 1963	JD 50,000	JD 30,000	JD 35,000	JD 115,000
Fiscal 1964	JD 60,000	JD 30,000	JD 40,000	JD 130,000
Fiscal 1965	JD 40,000	JD 30,000	JD 105,000	JD 175,000
Fiscal 1966	JD 60,000	JD 30,000	JD 100,000	JD 190,000
Fiscal 1967	JD 50,000	JD 30,000	JD 125,000	JD 205,000
	JD 260,000	JD 150,000	JD 150,000	JD 560,000

— financing : Construction and foreign exchange costs, External sources — loans, (JD 410,000). Other costs, Budget, Government of Jordan, (JD 405,000).

Specific Proposal No. H2.

- a proposal to complete the malaria eradication program.
- to be done:

- 1) Prior to February 15, 1962, the Director, National Malaria Eradication Service, Ministry of Health, working together with a Repr. of Plan. Div., Jordan Dev. Bd., shall modify, improve, and expand the EI (dated August 4, 1960) on «Malaria Eradication» to provide a detailed plan of action and financing for the five fiscal years beginning April 1, 1962. This detailed plan will include (1) operations plans for spraying, larviciding, surveillance and other activities (2) a schedule designed to meet personnel training needs, and (3) plans for financing including estimates of funds required by year.

THE PROGRAM FOR HEALTH

- 2) Prior to March 15, 1962, the Director, National Malaria Eradication Service (acting for the Ministry of Health) will undertake to get a firm commitment from USOM/J, UNICEF, and WHO to finance the program along the lines of past practice.
- 3) Proceeding under the terms of the detailed plan prepared under 1. , above, the Minister of Health through the Director, National Malaria Eradication Service, shall be responsible for implementing the program.

— costs: To be indicated precisely in the detailed plan prepared under 1. , above. Rough estimates for purpose of this document are as follows:

Fiscal 1963	JD 55,000
Fiscal 1964	JD 45,000
Fiscal 1965	JD 35,000
Fiscal 1966	JD 27,000
Fiscal 1967	JD 25,000
Total	JD 187,000

— financing : External sources (Grants), JD 187,000 (tentatively, JD 55,000 in 1963, JD 45,000 in 1964, JD 35,000 in 1965, JD 27,000 in 1966, and JD 25,000 in 1967).

In addition to the above costs, Budget, Government of Jordan — JD 227,000 (JD 45,000 each in 1963, 1964, 1965, and 1966 and JD 47,000 (in 1967)). These amounts are covered at the present budget levels.

Specific Proposal No. H3

- a proposal to build, equip, and staff a 100-bed hospital in Jerusalem.
- to be done:

- 1) Prior to April 1, 1962, the Minister of Health will prepare general plans for the construction, equipment and staffing of a 100-bed government hospital in Jerusalem. These plans will include (1) architect's drawings, (2) lists of necessary equipment, (3) anticipation of new staff needs, and (4) plans for financing, including estimates of funds

CHAPTER XV

required by year. These general plans will be submitted to a Committee of three (1) Repr. of Min. of Publ. Wks. (2) Repr. of Plan. Div., Jordan Development Bd., and (3) Repr. of Min. of Health — Chairman) for comments in writing prior to May 1, 1962. Prior to May 15, 1962, the Minister of Health shall revise his plans as may be appropriate in the light of the written comments received.

- 2) Prior to November 15, 1962, detailed drawings shall be prepared by the Ministry of Public Works, bids will be asked and opened, and the construction contract let. At this point, the Committee referred to in 1., above, shall meet to inform itself of all actions taken and to submit comments therein in writing to the Minister of Health.
- 3) Construction shall proceed during the period November 15, 1962, to September 1, 1963, under the supervision of the Ministry of Public Works. During this same period, necessary equipment will be procured by the Ministry of Health. The hospital should be staffed and made ready for operation not later than November 1, 1963.

— costs : To be indicated precisely in the detailed plan prepared under 1., above. Rough estimates for purposes of this document are as follows: (Table 15-11).

Fiscal year to March 31 :	1963	1964	1965	1966	1967
For construction	JD 20,000	50,000	Nil	Nil	Nil
For equipment	JD Nil	30,000	Nil	Nil	Nil
For staff	JD Nil	15,000	30,000	30,000	30,000
	JD 20,000	95,000	30,000	30,000	30,000

— financing : Building construction and equipment, External sources — Loans (JD 100,000).

Staff, Budget, Government of Jordan (JD 105,000).

Specific Proposal No. H4

— a proposal to build, equip, and staff a 100-bed hospital in Nablus.

THE PROGRAM FOR HEALTH

— to be done:

- 1) Prior to April 1, 1962, the Minister of Health will prepare general plans for the construction, equipment, and staffing of a 100-bed government hospital in Nablus. These plans will include (1) architect's drawings, (2) lists of necessary equipment, (3) anticipation of new staff needs, and (4) plans for financing, including estimates of funds required by year. These general plans will be submitted to a Committee of three (1) Repr. of Min. of Publ. Wks. (2) Repr. of Plan. Div., Jordan Development Bd., and (3) Repr. of Min. of Health — chairman) for comments in writing prior to May 1, 1962. Prior to May 15, 1962, the Minister of Health shall revise his plans as may be appropriate in the light of the written comments received.
- 2) Prior to November 15, 1962, detailed drawing shall be prepared by the Ministry of Public Works, bids will be asked and opened, and the construction contract let. At this point, the Committee referred to in 1., above, shall meet to inform itself of all actions taken and to submit comments thereon in writing to the Minister of Health.
- 3) Construction shall proceed during the period November 15, 1962, to September 1, 1963, under the supervision of the Ministry of Public Works. During the same period, necessary equipment will be procured by the Ministry of Health. The Hospital should be staffed and made ready for operation not later than November 1, 1963.

— costs : To be indicated precisely in the detailed plan prepared under 1., above. Rough estimates for purpose of this document are as follows:

Fiscal year to March 31 :	1963	1964	1965	1966	1967
For construction	JD 20,000	50,000	Nil	Nil	Nil
For equipment	JD Nil	30,000	Nil	Nil	Nil
For staff	JD Nil	15,000	30,000	30,000	30,000
	JD 20,000	95,000	30,000	30,000	30,000

— financing : Building Construction and Equipment, External Sources — Loans (JD 100,000).

Staff, Budget, Government of Jordan (JD 105,000).

CHAPTER XV

Specific Proposal No. H5

— a proposal to complete the medical center on Jebel Ashrafiya in Amman to replace inadequate, rented facilities scattered over the capital and to increase thereby efficiency and to reduce costs.

— to be done:

- 1) Prior to February 1, 1962, a Committee of three (1) Repr. of Plan. Div., Jordan Dev. Bd., (2) Repr. of Ministry of Public Works, and (3) Repr. of Ministry of Health — Chairman) shall review existing plans for an Amman Medical Center and develop a detailed proposal for its implementation. This detailed proposal will include (1) architect's drawings, (2) lists of equipment needs beyond those which can be satisfied via transfer from present facilities, and (3) financing plans, including estimates of funds required by year.
- 2) Prior to October 1, 1962 detailed drawings shall be prepared by the Ministry of Public Works, bids will be asked and opened, and the construction contract let. Then, the Committee referred to in 1., above, shall meet to inform itself of all actions taken and to submit comments thereon in writing to the Minister of Health.
- 3) Construction shall proceed during the period November 1, 1962, and August 1, 1964, under the supervision of the Ministry of Public Works. The Center should be ready for occupancy and for transfer of staff and equipment prior to October 1, 1964.

— costs : To be indicated precisely in the detailed plan prepared under 1., above. Rough estimates for purposes of this document for construction and equipment — JD 500,000 (JD 125,000 in fiscal 1963, JD 200,000 in fiscal 1964 and JD 175,000 in fiscal 1965).

— financing : External sources — Loans (JD 500,000).

Specific Proposal No. H6

— a proposal to build, equip, and staff a 50-bed hospital for the treatment of infectious diseases in Aqaba.

THE PROGRAM FOR HEALTH

— to be done:

- 1) Prior to April 1, 1962, the Minister of Health will prepare general plans for the construction, equipment, and staffing of a 50-bed government hospital in Aqaba. These plans will include (1) architect's drawings, (2) lists of necessary equipment, (3) anticipation of new staff needs, and (4) plans for financing, including estimates of funds required by year. These general plans will be submitted to a Committee of three (1) Repr. of Min. of Publ. Wks. (2) Repr. of Plan. Div., Jordan Development Bd., and (3) Repr. of Min. of Health — chairman) for comments in writing prior to May 1, 1962. Prior to May 15, 1962, the Minister of Health shall revise his plans as appropriate in light of the written comments received.
- 2) Prior to November 15, 1962, detailed drawings shall be prepared by the Ministry of Public Works, bids will be asked and opened, and the construction contract let. At this point, the Committee referred to in 1., above, shall meet to inform itself of all actions taken and to submit comments thereon in writing to the Minister of Health.
- 3) Construction shall proceed during the period November 15, 1962, to September 1, 1963, under the supervision of the Ministry of Public Works. During this same period necessary equipment will be procured by the Ministry of Health. The hospital should be staffed and made ready for operation not later than November 1, 1963.

— costs : to be indicated precisely in the detailed plan prepared under 1., above. Rough estimates for purposes of this document are as follows:

Fiscal year to March 31 :	1963	1964	1965	1966	1967
For construction	JD 10,000	25,000	—	—	—
For equipment	JD —	15,000	—	—	—
For staff	JD —	7,500	15,000	15,000	15,000
	JD 10,000	47,500	15,000	15,000	15,000

— financing : Building Construction and Equipment — External sources — loans (JD 50,000).

— Staff — Budget, Government of Jordan (JD 52,500).

CHAPTER XV

Specific Proposal No. H 7.

— a proposal to build regional health centers where scattered, inadequate, rented facilities now reduce efficiency of skilled health professionals and increase costs of operation.

— to be done:

- 1) Prior to August 15, 1962, the Minister of Health shall survey health facilities in regional centers with a view to recommending new facilities where required. His report shall be submitted in writing to a Committee of three (1) Repr. of Plan. Div., Jordan Dev. Bd., (2) Repr. of Ministry of Public Wks. and (3) Repr. of Ministry of Health — Chairman) for review and, if necessary, expansion into a detailed plan of action prior to October 15, 1962. This detailed plan of action will include (1) architect's drawings, (2) lists of equipment needs beyond those which can be met via transfer from present facilities, and (3) financing plans, including estimates of funds required by year.
- 2) Prior to March 15, 1963, detailed drawings shall be prepared by the Ministry of Public Works, bids will be asked and opened, and the construction contracts let. At this point, the Committee referred to in 1., above, shall meet to inform itself of all actions taken and to submit comments thereon in writing to the Minister of Health.
- 3) Construction shall proceed during the period April 1, 1963, and July 1, 1964, under the supervision of the Ministry of Public Works. The various centers should be ready for occupancy and for transfer of staff and equipment prior to September 1, 1964.

— costs: To be indicated precisely in the detailed plan of action prepared under 1., above. Rough estimates for purposes of this document — JD 80,000 (JD 40,000 in fiscal 1964, JD 40,000 in fiscal 1965).

— financing: External sources — Loans (JD 80,000).

Specific Proposal No. H8

— a proposal for a management study of the Ministry of Health.

THE PROGRAM FOR HEALTH

— to be done:

- 1) The Ministry of Health is one of the largest enterprises in Jordan. It has grown rapidly. Its professional staff is well-qualified to determine, with expert assistance, the optimum organization of the Ministry and to obtain the increased effectiveness and lower costs which will result. Therefore, prior to March 15, 1962, a Committee of six (1) Repr. of Jordan Dev. Bd., (2) Repr. of Civil Serv. Comm., (3) Repr. of USOM/J, (4) (5) and (6) Reprs. of Ministry of Health — one as chairman) shall formulate the terms of reference and modes of procedure for a management study of the Ministry. It is anticipated that the Committee will ask that the study (1) examine the existing activities of the Ministry and recommend expansion or contraction as may be appropriate, (2) suggest an overall organization of the Ministry, (3) yield detailed job descriptions and salary schedules, and (4) recommend appropriate staffing procedures.
- 2) Within the terms of reference and modes of procedures developed as under 1., above, the Committee shall, prior to June 15, 1962, designate the study group and make every effort to arrange for the necessary consultants. It is anticipated that not fewer than three senior members of the staff of the Ministry of Health shall be members of the study group.
- 3) The study group (constituted as arranged under 2., above) shall conduct its work between July 1, 1962 and July 1, 1963, making reports each six months (on January 1, 1963, and July 1, 1963) to the Committee (constituted as indicated under 1., above). The Committee shall comment in writing to the Minister of Health on each of these reports within 15 days of the receipt thereof.
- 4) The Minister of Health shall prepare action on the final report of the study committee prior to January 1, 1964, asking such additional budget support as is thereby made necessary. The Minister shall, of course, make final decisions on re-organization but shall report in writing prior to March 1, 1964, his reasons for not implementing any recommendations of the study committee, such written

CHAPTER XV

reasons being submitted to the Council of Ministers through the Committee (constituted as indicated above).

- costs : Consultants — JD 48,000 for 3 consultants for 2 years. (JD 24,000 each fiscal year 1963-64).
- financing : External sources — Grants (JD 48,000).

Specific Proposal No. H9

- a proposal to provide specialized business management for hospitals and clinics.
- to be done:

- 1) Prior to May 15, 1962, the Committee of six (as constituted in **Specific Proposal No. H6**) shall formulate terms of reference for the introduction of specialized business management for hospitals and clinics. It is anticipated that the Committee will (1) designate the institutions to be provided such management, (2) define generally the scope for such specialized management, (3) indicate the foreign experts required to set-up, and perhaps to operate, the business procedures, (4) prepare a time table for accomplishment of the task, and (5) estimate all costs involved.
- 2) Prior to July 15, 1962, the Minister of Health (in cooperation with a Repr. of Jordan Dev. Bd., and guided by the Committee formulation under 1., above) shall make every effort to complete negotiation with USOM/J for provision by that agency of necessary technical assistance to carry the program through.
- 3) Assuming the availability of USOM/J assistance, the Minister of Health shall supervise the introduction of the specialized business services guided by the time table developed by the Committee.

- costs : Costs must be detailed under 1., above. Rough estimates for purposes of this program are as follows (in thousands of dinars):

Fiscal year to March 31	1963	1964	1965	1966	1967
U. S. experts in hospital adm.	JD 14.6	14.6	14.6	7.3	7.5
For training abroad	JD 6.9	6.9	4.6	4.6	2.5
For local staff & misc.	JD 5.0	7.5	10.0	12.5	15.0
Total	JD 26.5	29.0	29.2	24.4	24.6

THE PROGRAM FOR HEALTH

- financing : Experts and training, External sources — Grants (JD 83,700).
- Local staff and miscellaneous, Budget, Government of Jordan (JD 50,000).

Specific Proposal No. H 10

- a proposal to review the statutory and regulatory needs of the Ministry of Health.

- to be done:
Prior to September 1, 1962, the Minister of Health shall prepare (using an intra-ministerial committee as required) for submission to the Jordan Development Board draft statutes and/or regulations as required for the more effective operation of the Ministry of Health.

- costs and financing : From present budgets.

Specific Proposal No. H11.

- a proposal to establish quarantine stations at all points of land, air and sea entry into Jordan.
- to be done:

- 1) Prior to March 1, 1962, a Committee of three (1) Repr. Plan. Div. Jordan Dev. Bd., (2) Repr. of Ministry of Public Works, and (3) Director of Public Health Division, Ministry of Health — chairman — shall prepare a detailed plan for the establishment of quarantine stations at all points of land, air and sea entry into Jordan and make preparations for its implementation. This detailed proposal will include (1) architect's drawings, (2) lists of equipment needs, and (3) financing plans, including estimates of funds required by year.
- 2) Prior to November 1, 1962, detailed drawings shall be prepared by the Ministry of Public Works, bids will be asked and opened, and the construction contract let. At this point, the Committee referred to in 1., above, shall meet to inform itself of all actions taken and to submit comments thereon in writing to the Minister of Health.

CHAPTER XV

3) Construction shall proceed during the period December 1, 1962, and August 1, 1963, under the supervision of the Ministry of Public Works. The quarantine stations should be ready for occupancy of staff and equipment prior to September 1, 1963.

— costs: To be indicated precisely in the detailed plan prepared under 1., above. Rough estimates for purposes of this document are as follows:

Fiscal year to March 31 :	1963	1964	1965	1966	1967
For construction	JD 12,000	12,000	-	-	-
For equipment	JD 7,000	7,000	-	-	-
For staff	JD -	2,400	2,400	2,400	2,400
Total	JD 19,500	21,900	2,400	2,400	2,400

— financing: Building construction and Equipment — External sources — Loans (JD 39,000).

Staff — Budget, Government of Jordan (JD 9,600).

Specific Proposal No. H 12.

— a proposal to establish a rehabilitation center in Amman where disabled children will receive physiotherapy and training provided by physiotherapists.

— to be done:

- 1) A committee of five (1) Repr. of Plan. Div., Jordan Dev. Bd., (2) Repr. of Cheshire Homes, (3) Repr. of Ministry of Public Works, (4) Repr. of Ministry of Social Welfare, and (5) Chief Orthopedic Department Surgical Division, Ministry of Health — chairman, will be formed immediately to review the plans prepared by the Cheshire Homes for the proposed center which is to be located on the Medical Center's grounds, Jebel Ashrafiya, Amman.
- 2) Construction shall begin before the end of 1961 and be ready for occupancy before mid 1962.

THE PROGRAM FOR HEALTH

— costs :

Fiscal year to March 31 :	1963	1964	1965	1966	1967
For construction	JD 12,000	Nil	Nil	Nil	Nil
For equipment	JD 3,000	Nil	Nil	Nil	Nil
For staff	JD 1,000	1,500	1,500	1,500	1,500
	JD 16,000	1,500	1,500	1,500	1,500

— financing: Building construction and equipment — Cheshire Homes' Fund (JD 15,000).

Staff — Budget, Government of Jordan (JD 7,000).

Specific Proposal No. H13

— a proposal to augment laboratory facilities and provide them with the necessary equipment and staff required to produce anti-sera and carry out additional food and drug analysis; and to add a second floor to the Jordan Vaccine Institute which is now being constructed.

— to be done:

- 1) Prior to February 1, 1961, a Committee of four (1) Repr. of Jordan Dev. Bd., (2) Repr. of USOM/Jordan, (3) Repr. of Ministry of Public Works, and (4) Director, Jordan Govt. Laboratories, Ministry of Health — chairman) shall (a) prepare architect's drawing for the additional floor in the Jordan Vaccine Institute, and (b) plan financing including estimates for equipment needed for food and drug analysis.
- 2) Prior to March 15, 1962, the Director, Jordan Government Laboratories working together with a Repr. of the Planning Div., Jordan Development Board will attempt to get a firm commitment from USOM/J to finance the direct foreign exchange needs of the program (for equipment to be purchased, abroad, and for foreign training). The Director Jordan Government Laboratories shall contact WHO and UNICEF for experts required.
- 3) Prior to October 1, 1962, detailed drawings shall be prepared by the Ministry of Public Works, bids will be asked

CHAPTER. XV.

and opened, and the construction contract let. At this point, the Committee referred to in 1. above, shall meet to inform itself of all actions taken and to submit comments thereon in writing to the Minister of Health. Construction shall proceed during the period October 1, 1962 to July 1, 1963, under the supervision of the Ministry of Public Works. During this same period, necessary equipment will be procured by the Ministry of Health. The center should be staffed and made ready for operation not later than September 1, 1963.

-- costs :

Fiscal year to March 31 :	1963
For construction	JD 10,000
For equipment	JD 5,000
Total	JD 15,000

-- financing: For Construction and Equipment, External sources— Grants (JD 15,000).

Specific Proposal No. H 14

-- a proposal for the establishment of a School Health Program which will provide for the periodic physical examination of all students enrolled in Jordan's schools, both government and private; the provision of facilities within schools for the initial treatment of accidents occurring during school hours; initiating the correction of physical defects found during the periodic physical examination, i.e. vision, hearing speech, dental caries, orthopedic, mental etc, and the treatment of specific diseases, i.e. trachoma, etc., by referral to specific facilities; required immunization; and supervision of the sanitary facilities of the schools to include personal and environmental hygiene.

-- to-be done:

- 1) Prior to February 1, 1962, a Committee of three (1) Repr. of Jordan Dev. Bd. (2) Repr. of Ministry of Health, and (3) Repr. of Ministry of Education, shall formulate the terms of reference and modes of procedure for the establishment and implementation of a School Health Program for Jordan.

THE PROGRAM FOR HEALTH

2) Proceeding under the terms of the detailed plan prepared under 1. above, the Ministry of Health and/or the Ministry of Education shall be responsible for implementing the program which will be initiated not later than April 1, 1962.

-- costs : To be indicated precisely in the detailed plan prepared under 1. above. Rough estimates for the purposes of this document are as follows:

Fiscal year to March 31 :	1963	1964	1965	1966	1967
For equipment	JD 15,000	15,000	15,000	15,000	15,000
For staff and transport	JD 10,000	10,000	10,000	10,000	10,000
Total	JD 20,000	25,000	25,000	25,000	25,000

-- financing: For Equipment, External sources, Grants (JD 75,000).

For Staff and Transport, Budget, Government of Jordan (JD 50,000).

Specific Proposal No. H 15

-- a proposal to identify and treat the numerous cases of trachoma and to prevent the cases of blindness which are caused by the complications of trachoma.

-- to be done:

- 1) Prior to February 1, 1962, a Committee of three (1) Repr. of Jordan Dev. Bd. (2) Repr. of USOM/J, and (3) Director of Eye Diseases Division, Ministry of Health — chairman, shall review the report — «Communicable Eye Diseases Control in Jordan» submitted by Dr. J. G. Winkler, WHO Consultant, and prepare a detailed plan of action and financing for a country-wide program for the control of trachoma in Jordan, for the three fiscal years beginning April 1, 1962. This detailed plan will include plans for (1) utilization of existing facilities for clinic requirements, (2) meeting staff needs, including physicians, nurses, administrators, statisticians, and the training thereof, (3) legislation and regulations, and (4) financing, including estimates of funds required by year.

CHAPTER XV

- 2) Prior to February 1, 1962, the Director of Eye Diseases Division, Ministry of Health (acting for the Minister of Health), working together with a Repr. of the Plan Div., Jordan Dev. Bd., will (1) attempt to get a firm commitment from USOM/Jordan to finance direct foreign exchange needs of the program (for equipment and drugs to be purchased abroad and for foreign training and technicians as required), (2) to get a firm commitment from UNICEF to provide required transport and additional requirements.
- 3) Proceeding under the term of the detailed plan prepared under 1., above, the Ministry of Health, through its Eye Diseases Division shall be responsible for implementing the program. However, each year prior to November 1, the Director of the Eye Diseases Division shall a report on activities completed and plans proposed for the next calendar year. The first report shall be submitted November 1, 1962.

— costs : to be indicated precisely in the detailed plan prepared under 1., above. Rough estimates for purpose of this document are as follows:

— financing :

Fiscal year to March 31 :	1963	1964	1965	Total
External sources - Grants	JD 15,000	15,000	10,000	40,000
Budget, Govt. of Jordan	JD 15,000	15,000	20,000	50,000
Total	JD 30,000	30,000	30,000	90,000

Specific Proposal No. H16

— to meet the demand for nursing and ancillary personnel it is proposed (1) to increase the enrolment in the Jordan School of Nursing from 60 to 80 female students, (2) to establish a professional nursing school for 30 male students, (3) to open a school for the training of 10 male and 20 female practical nurses annually, and (4) to carry out the necessary building construction.

— to be done:

- 1) Prior to March 15, 1962, a Committee of three (1) Repr.

THE PROGRAM FOR HEALTH

of Jordan Dev. Bd., (2) Repr. of Min. of Public Works, and (3) Chief of the Division of Nurse Training, Ministry of Health, shall prepare plans for the necessary building additions to the Jordan of Nursing which would provide housing for 40 additional female students (20 nursing and 20 practical nursing) students and additional classrooms.

- 2) Prior to March 15, 1962, a Committee composed of a Repr. of Jordan Dev. Bd., USOM/J and Director of the Jordan School of Nursing shall prepare (1) lists of equipment required, (2) anticipated staffing needs, and (3) tentative curriculum for the practical nurse training program.
- 3) Prior to October 1, 1962, a detailed plan shall be presented by the Min. of Public Works. Bids will be asked, opened and the construction contract let.
- 4) Construction shall proceed during the period November 1, 1962, and July 1, 1963. By September 1, 1963, the building should be ready for occupancy, the additional staff appointed and the necessary equipment and furniture installed.

— costs:

Fiscal year to March 31 :	1963	1964	1965	1966	1967
For construction	JD 15,000	5,000	—	—	—
For equipment	—	5,000	—	—	—
For staff	—	3,000	3,500	7,000	7,000
For food, clothing etc.	—	2,000	3,000	3,500	3,500
For training	JD 7,000	7,000	7,000	7,000	7,000
Total	JD 22,000	22,000	13,500	17,500	17,500

— financing : Building construction, equipment, and training, External sources — Loans (JD 60,000).

— Staff, food, clothing, Budget, Government of Jordan (JD 32,500).

Specific Proposal No. H 17

— a proposal to review the training needs of the Ministry of Health.

THE PROGRAM FOR HEALTH

— to be done:

Prior to December 15, 1961, the Minister of Health shall prepare, after consultation with all agencies offering training in health disciplines, including both preventive and curative services, for submission to the Jordan Development Board, the training needs of the Ministry.

— costs: JD 20,000 per annum.

— financing : External sources — Grants.

CHAPTER XVI

THE PROGRAM FOR SOCIAL WELFARE

The objectives of the Ministry of Social Affairs are as follows (per Article 3 of law of the Ministry of Social Affairs, No. 14 of 1956):

- the provision of a comprehensive social security program.
- the coordination of social services for all citizens at all stages of life.
- the coordination of the utilization of «manpower».

The Ministry of Social Affairs contains three major operating departments.

- cooperatives.
- labour.
- social services.

This program relates to each of these three operating departments.

CHAPTER XVI

The estimated expenditures of the Ministry of Social Affairs (compared to total governmental expenditures) are as indicated below:

TABLE 16.1

Fiscal Year	Estimates of Exp. (all Govt.) JD	Ratio 56/57 = 100	Estimates of Exp. Ministry of Social Affairs			Ratio 56/57 = 100
			Salaries JD	Other JD	Total JD	
1956/57	23,181,000	100	61,000	132,000	193,000	100
1957/58	29,753,000	128	51,000	137,000	188,000	88
1958/59	35,437,000	153	67,000	153,000	220,000	114
1959/60	38,171,000	165	70,000	162,000	232,000	120
1960/61	35,224,000	152	72,000	178,000	250,000	129
1961/62	33,420,000	144	75,000	173,000	248,000	128
	195,186,000	148	396,000	936,000	1,331,000	116

It can be seen that expenditures of the Ministry of Social Affairs have not risen as rapidly as those for the government as a whole.

With respect to the Department of Cooperative Development.

- 1) The department was organized under the Cooperative Societies Law No. 39 of 1952. It continues operation under Law No. 17 of 1956 drafted in view of experience gained in the intervening four years.
- 2) The cooperative movement has grown rapidly as witnessed by Table 16.2 on the following page.

THE PROGRAM FOR SOCIAL WELFARE

Table 16.2

Type of Coop.	No. of Cooperatives					
	Rural		Urban		Others	
	1953	1961	1953	1961	1961	1961
Credit and thrift	40	196	0	19	0	0
Marketing	1	3	0	1	0	0
Consumer	0	3	0	3	0	0
General agricultural	4	12	1	1	0	0
Multi-purpose	0	8	0	3	0	0
Mutual benefit	0	1	0	3	0	0
Artisan	0	2	0	9	0	0
Processing	0	3	0	0	0	0
Transport	0	4	1	0	0	0
Central Union	0	0	0	1	0	0
Housing	0	0	1	10	0	0
School-thrift	0	0	0	0	0	48
Total	45	232	3	50	48	48

- 3) Cooperatives have indebtedness as follows (as of April 1, 1961):

Sector	Indebtedness	Creditor
Rural	JD 413,000	Agricultural Credit Corporation
Urban	JD 81,000	Development Board

- 4) The Department of Cooperative Development should undertake a program of expansion in the number of cooperatives particularly of rural credit and thrift cooperatives (to take over the entire task of making short-term agricultural loans from the Agricultural Credit Corporation).

See Specific Proposal No. SA. 1.

- 5) With a much expanded program, the Department of Cooperative Development will require improved and expanded accounting and auditing procedures. This is provided by Specific Proposal No. SA. 2.

CHAPTER XVI

Specific Proposal No. SA. 1.

— a proposal for a rapid expansion in the number of cooperatives, particularly of credit and thrift cooperatives in rural areas.

— to be done:

1) The Director, Department of Cooperative Development, now has detailed plans for an expansion in the number of cooperatives from which this program is drawn. He should proceed to implement this program within the framework of the time and money set forth by Table 16.3.

2) Each year, as soon as possible after the end of the fiscal year, the Director, Department of Cooperative Development, shall prepare a written report on the previous years operation. In view of this report and other information, he (in cooperation with a representative of Jordan Dev. Bd.) shall revise plans for cooperative expansion as appropriate.

—costs and financing : As summarized below (in thousands of dinars):

	1963	1964	1965	1966	1967	Total
From Budget, Govt. of Jordan	5,4	6,4	8,1	13,7	16,4	50,0
From Agricultural Credit Corp.	239,0	321,3	370,8	411,9	526,5	1,869,5
From IDF or its successor	43,7	104,5	67,2	100,7	176,1	492,2
From paid-up capital and surplus	71,3	96,0	101,4	187,7	172,5	628,9
From Central Coop. Union	3,0	3,5	4,0	4,5	5,3	20,3
From External sources (Grants)	4,5	4,5	4,5	4,5	4,5	22,5
Total	386,9	536,2	556,0	723,0	901,3	3,085,4

Table 16.3
EXPANSION OF THE COOPERATIVE MOVEMENT

1963 -1967 incl.
(amounts in thousands of JDs)

	1963	1964	1965	1966	1967	Total
A Credit and Thrift - Rural						
1. No. to be						
formed	40	60	65	65	70	350
expanded	232	272	332	379	462	—
2. Capital Required for Loans						
	JD	JD	JD	JD	JD	JD
from paid - up	—	—	—	—	—	—
Capital and surplus	59	82.5	86.6	171.4	154.6	554.1
from A.C.C.	239	291.3	340.8	366.9	526.5	1,764.5
	298	373.8	427.4	538.3	681.1	2,318.6
B Thrift and Credit, Artisan and Other - Urban						
1. No. to be						
formed	11	15	20	23	22	91
expanded	50	61	76	96	119	—
2. Capital Required for Loans						
	JD	JD	JD	JD	JD	JD
from paid - up Capital and surplus	12.3	13.5	14.8	16.3	17.9	74.8
from Industrial Development Fund or its successor	28.7	44.5	67.2	100.7	146.1	387.2
	41.	58.	82.	117.	164.	462.
C Marketing Cold Storage and Processing						
1. No. to be formed :						
District Processing	1	—	—	—	—	1
District Agr. Marketing	—	2	2	3	—	7
Regional Cold Storage	—	1	—	—	—	1
Regional Canning	—	—	—	—	1	1
	1	3	2	3	1	10
2. Capital Required for Loans						
	JD	JD	JD	JD	JD	JD
from A.C.C.	—	30	30	45	—	105
from Industrial Development Funds or its successor	15	90	—	—	30	105
	15	90	30	45	30	210

CHAPTER XVI

cont Table 16.3

EXPANSION OF THE COOPERATIVE MOVEMENT

1963 - 1967 incl.

(amounts in thousands of JDs)

	1963	1964	1965	1966	1967	Total
D School thrift						
1. <u>No. to be:</u>						
formed	80	80	100	120	120	500
expanded	50	130	210	310	430	-
2. Capital Required for Loans						
	-	-	-	-	-	-
E Staff and Equipment for A.B.C. and D.						
1. <u>No. required</u>						
Field organizers	5	5(10)	7(17)	7(24)	7(31)	31
Cars (jeep)	5	4(-)	3(-)	5(-)	5(-)	22
Car drivers	5	1(6)	3(9)	4(13)	2(15)	15
2. <u>Amounts Required from Government Budget</u>						
	JD	JD	JD	JD	JD	JD
from Government Budget	5.4	6.4	8.1	13.7	16.4	50.0
from Central Cooperative Union.	3.0	3.5	4.0	4.5	5.3	20.3
	8.4	9.9	12.1	18.2	21.7	70.3
F Training of Staff						
1. to be trained						
	4	4	4	4	4	20
2. <u>Amounts required</u>						
	JD	JD	JD	JD	JD	JD
from External sources (Grants)	4.5	4.5	4.5	4.5	4.5	22.5

Specific Proposal No. SA. 2.

— a proposal for expert help in developing accounting and auditing procedures for cooperatives.

— to be done:

The greatly expanded responsibilities for the Department of Cooperatives (as indicated in **Specific Proposal No. SA. 1**)

THE PROGRAM FOR SOCIAL WELFARE

will require the development and vigorous use of effective accounting and auditing procedures. Therefore, the Director, Department of Cooperatives (in cooperation with a Repr. of Jordan Dev. Bd.) shall arrange for an expert accounting consultant to be available July 1, 1962 — June 30, 1964, for this purpose.

— costs : JD 7,000 per calendar year.

— financing : External sources (Grants).

With respect to the Department of Labour:

- 1) The implementation of the Labour Code (Law No. 21/1960) will require much of the Department of Labour. It must be expanded to meet its responsibilities. Such expansion is provided for by **Specific Proposal No. SA. 3.**
- 2) Prompt development of necessary regulations under the code is essential. The Department of Labour should request expert help as required in promulgating these regulations.

Specific Proposal No. SA. 3.

— a proposal for the expansion of the Department of Labour

— to be done:

The Director, Department of Labour, now possesses detailed staffing proposal for the Department. Employment and training of the minimum staff (estimated at thirty-nine people) to implement the Labour Law should be achieved by the end of fiscal 1962-63 or shortly thereafter. The staff should be gradually raised throughout the period of the five-year plan to more adequately:

- a) Enforce an eight or nine-hour labour working day and six-day week;
- b) Diminish the employment of children and increase the employment of adults;
- c) Help to maintain stable labour-management relations in Jordan;

CHAPTER XVI

- d) Help to promote good managerial practices, including health and safety measures;
- e) Enable the Department of Labour to furnish the Development and Statistics authorities essential information on employment trends and needs.

The Director, Department of Labour, should keep the Jordan Development Board as well as the Ministry of Social Affairs regularly informed as to the achievements under this proposal.

- costs : 1962-63 will be a year of rapid build-up of the Labour Department with the full annual expenditure rate of JD 18,000 for a minimum staff reached only at the end of 1962-3. The completion of staffing to the 66-71 persons proposed by the Department of Labour is scheduled in eight rather than five years. Rough estimates of additional expenditures, therefore, are (in thousands of JDs) :

Fiscal 1963 — JD 14; Fiscal 1964 — JD 19; Fiscal 1965 — JD 21; Fiscal 1966 — JD 23; Fiscal 1967 — JD 25; Total — JD 102.

- financing : Budget, Government of Jordan.

With respect to the Department of Social Welfare

- 1) The needs for social services in Jordan are large. They
 - cannot be substantially met during the five years of this program.
 - cannot be financed by municipalities whose financial resources will be fully committed in other directions (as indicated by «The Program for Municipal Development»).
- 2) The Department possesses excellent, detailed plans which must be carefully examined and coordinated with the work of other agencies and departments and then implemented so far as resources will allow. This is provided for by **Specific Proposal No. SA. 4.**

THE PROGRAM FOR SOCIAL WELFARE

Specific Proposal No. SA. 4.

- a proposal for an expanded program of social services in Jordan.

— to be done:

- 1) The Director, Department of Social Welfare, now has detailed plans for an expansion of social services from which this program is drawn. He should proceed to implement this program within the framework of the time and money set forth by the Table 16.4, «The Program for Social Services».
- 2) As soon as possible after the end of each fiscal year, the Director, Department of Social Welfare shall prepare a written report on the previous year's operation. In view of this report and other information, he (in cooperation with a Representative of Jordan Dev. Bd.) shall revise plans for social welfare expansion as appropriate.

- costs and financing : as summarized below (in thousands of dinars)

Fiscal year to March 31 :	1963	1964	1965	1966	1967	Total
Budget, Govt. of Jordan	5	4,2	85,2	137	196,6	465
External sources (Loans)	54	81	108	135	162	540
External sources -(Grants)	22,5	4,5	67,5	90	112,5	337,5
External sources -(Grants)	18	22,5	27	31,5	36	135
Total	99,5	189,7	287,7	393,5	507,1	1,427,4

The Program for Social Services
(Amounts in thousands of JDs)

- 1) Average costs of planning, construction and original equipment of a new building 13.5
 2) Average annual costs of running an institution (equipment, staff, clothing, food and misc.) 7
 3) Average costs of participant training of staff of a new institution 4.5
 4) Average annual costs of H.Q. administration of a new institution .8
 No. of existing institutions — nurseries, homes, clubs, schools, etc. — totals twelve.

TABLE 16.4

1. No. of buildings proposed for construction
- a. to replace existing bldg.
 b. to accommodate new institutions
- Total
2. Capital required for construction and original equipment (External sources (Loans))
3. No. of new institutions proposed for establishment
4. Additional operating costs
- a. for new institutions (GBJ)
 b. for H.Q. adm. (GBJ)
 c. for participant training (1st. year) in new institutions (External sources (Grants)).
- Total
5. Increased costs for other programs:
- Feeding of under-nourished school children - External sources (Grants)
- GBJ

Year	No. of beneficiaries
1963	25,000
1964	50,000
1965	75,000
1966	100,000
1967	125,000

Total

	1963	1964	1965	1966	1967	Total
	4	5	6	7	8	30
	4	6	8	10	12	40
	JD	JD	JD	JD	JD	JD
	54	81	108	135	162	540
	4	5	6	7	8	30
	JD	JD	JD	JD	JD	JD
	-	28	63	105	154	350
	-	3.2	7.2	12	17.6	40
	18	22.5	27	31.5	36	135
	18	53.7	97.2	148.5	207.6	525
	JD	JD	JD	JD	JD	JD
	22.5	45	67.5	90	112.5	337.5
	5	10	15	20	25	75
	27.5	55	82.5	110	137.5	412.5

THE PROGRAM FOR SOCIAL WELFARE

Expansion of the Social Services

(1963-1967 inclusive)

Year	S. No.	Name of New Institution
1963	1	Children's Home (7-18 years)
	2	Boys' Reformatory School
	3	Boys' Club
	4	Old People's Home
1964	1	Rehabilitation Centre for Deaf and Dumb Children
	2	Rehabilitation Centre for Sub-Normal Children
	3	Rehabilitation Centre for Blind Children
	4	Children's Home (0-7 years)
	5	Nursery
1965	1	Rehabilitation Centre for Physically Handicapped Children
	2	Rehabilitation Centre for Recipients of Public Assistance.
	3	Girls' Reformatory School
	4	Boys' Club
	5	Old People's Home
	6	Nursery
1966	1	Children's Home
	2	Girls' Club
	3	Boys' Club
	4	Community Centre
	5	Community Centre
	6	Nursery
	7	Nursery
1967	1	Rehabilitation Centre for Blind Children
	2	Girls' Club
	3	Girls' Club
	4	Boys' Club
	5	Citizens' Advice Bureau
	6	Nursery
	7	Nursery
	8	Nursery

CHAPTER XVII

THE PROGRAM FOR COMMUNICATIONS

It is generally agreed that significant capital expenditures will not be required for posts and telegraph over the next 5 years.

Capital expenditures are required for

- telephone communications.
- radio broadcasting.

With regard to telephones:

- there has been a very rapid growth in demand over the past five years. The number of telephones in use or on order has more than doubled since 1959.
- demand — together with capital used to meet it — is estimated as follows:

Table 17.1

Network	Telephone Lines			Required
	1959	1961(1)	1967(2)	Capital Expenditures (JD's) (2)
Amman	8,000	15,000	31,530	1,231,000
Irbid	1,000	1,500	2,630	124,000
Ma'an	180	400	930	146,000
Karak	210	280	480	81,000
Jerusalem	2,640	5,420	9,970	1,196,000
Nablus	500	2,670	5,600	903,000
Total	12,540	25,270	51,000	3,661,000

(1) Includes requests for phone connections not met.

(2) Estimates of Ministry of Communications.

CHAPTER XVII

- the provision and operation of a telephone service is a essentially commercial operation and should be in the hands of an independent government corporation — the proposed Jordan Telephone and Communications Corporation. See **Specific Proposal No. C. 1.**
- meeting demand of the magnitude of that indicated above will put great strain on financial and human resources and will require
 - 1) Careful computation and phasing of financial needs and a vigorous and effective presentation thereof to potential capital suppliers abroad. See **Specific Proposal No. C. 2.**
 - 2) A review of rate policies to increase revenues to attract capital suppliers. See **Specific Proposal No. C. 3.**
 - 3) Recruiting of technical personnel abroad and a «crash program» for training Jordanians — both locally and abroad — to handle technical positions. See **Specific Proposal No. C. 4.**

With regard to radio:

- the Hashemite Broadcasting Service provides the nation's most effective means for the dissemination of news and educational materials on a mass basis.
- there are now over 100,000 receiving sets in Jordan and the number thereof is growing rapidly. The local audience is estimated at 1,500,000 persons.
- the Hashemite Broadcasting Service has recently expanded, receiving new transmission equipment and a new station building.
- the Hashemite Broadcasting Service should provide an excellent means for taking this program for economic development to the citizens of Jordan.
- expansion and improvement of facilities should be provided as indicated by **Specific Proposal No. C. 5.**

Specific Proposal No. C. 1.

- a proposal to create the Jordan Telephone and Communications Corporation to build and operate telephone facilities in the Kingdom.

THE PROGRAM FOR COMMUNICATIONS

— to be done:

- 1) The provision of telephone service is essentially a commercial operation and should be so organized. It is, therefore, recommended that a government corporation — the Jordan Telephone and Communications Corporation — be established as soon as practicable. Procedures for the establishment of this corporation shall be the responsibility for a Committee of three (1) Repr. of Ministry of Communications, (chairman), (2) Repr. of Jordan Dev. Bd., and (3) Repr. of Ministry of National Economy). This Committee shall:
 - a) Draft a charter for the proposed corporation.
 - b) To determine which functions and assets related to communications can best be handled through this autonomous government corporation considering the criteria of economies of integration and the ability to charge for the services furnished.
 - c) Specify means for the transfer of telephone and related assets to the corporation.
 - d) Indicate a management and staffing pattern for it.
 - 2) The Committee shall report its recommendations for the creation of the Corporation through the Jordan Development Board to the Council of Ministers for appropriate modification, approval and submission to Parliament.
- costs and financing: No additional costs.

Specific Proposal No. C. 2.

- a proposal for the careful computation and phasing of financial needs for telephone expansion and for a vigorous presentation thereof to potential capital suppliers abroad.
- to be done:
- 1) Assuming that the Jordan Telephone and Communications Corporation is promptly established, the management thereof (in cooperation with a Repr. of Jordan Development Board) shall prepare a program for expansion of telephone facilities over the five year period.

CHAPTER XVII

This program shall:

- a) Specify location, kind, and cost of facilities to be added each year.
 - b) Estimate revenues and costs stemming from the operation of the expanded facilities.
- 2) As soon as the program developed under 1. , above is available, the management of the Jordan Telephone and Communications Corporation (in cooperation with a Repr. of Jordan Dev. Bd.) shall canvass all potential foreign capital suppliers and shall arrange for financing from that source offering most suitable terms.
 - 3) After financing has been arranged for, the management of the Jordan Telephone and Communication Corporation shall proceed to the necessary construction and installation of facilities.

— cost: Costs are estimated as follows for purposes of this program document.

Fiscal 1963	—	JD	400,000
Fiscal 1964	—	JD	600,000
Fiscal 1965	—	JD	800,000
Fiscal 1966	—	JD	800,000
Fiscal 1967	—	JD	1,080,000

— financing : Suggested for application for loan abroad.

Specific Proposal No. C. 3.

- a proposal for a review of rate policies on telephone service.
- to be done:

Prior to July 1, 1962, a Committee of four ((1) Repr. of Public Service Commission, (2) Repr. of Jordan Telephone and Communications Corporation, Chairman, (3) Repr. of Jordan Development Board and, (4) Repr. of Ministry of National Economy) shall be constituted to review and — if necessary — to revise rate policies for the furnishing of telephone services in Jordan. In setting this rate policy, the need for an adequate return to attract foreign funds shall receive the highest priority.

THE PROGRAM FOR COMMUNICATIONS

The policy set shall be submitted through the Jordan Development Board to the Council of Ministers for approval.

— costs and financing: No increase in staff or budgets required.

Specific Proposal No. C. 4.

- a proposal for a «crash program» for training technicians for the Jordan Telephone and Communications Corporation.
- to be done:

- 1) Prior to May 1, 1962, the management of the Jordan Telephone and Communications Corporation (in cooperation with a Repr. of Jordan Development Board) shall specify its needs for training personnel and for the programs necessary to provide them.
- 2) The Government of Jordan will subsidize the activities of the Jordan Telephone and Communications Corporation by covering the costs of the necessary training.

— costs : Costs are to be specified under 1. , above, Preliminary estimates thereof suggest expenditures of JD 20,000 per year.

— financing: Budget, Government of Jordan.

Specific Proposal No. C. 5.

- a proposal for extending radio and general cultural facilities by the Hashemite Broadcasting Service.
- to be done:

The Director, Hashemite Broadcasting Service, now possesses plans for additional facilities for broadcasting and cultural activities. These include:

Transmitters, power plants, standby equipment	JD 180,000
Offset press for government publications	35,000
Theatre with broadcast facilities	100,000
Halls in seven district centers	70,000
Films, studio and processing equipment	10,000
Other	15,000

JD 410,000

CHAPTER XVII

- costs : Funds for substantial progress on this construction program and for any additional staffing involved should be made available as follows:

Fiscal 1963	—	JD	75,000
Fiscal 1964	—	JD	75,000
Fiscal 1965	—	JD	75,000
Fiscal 1966	—	JD	75,000
Fiscal 1967	—	JD	110,000

- financing : Budget, Government of Jordan.

CHAPTER XVIII

THE PROGRAM FOR CONSTRUCTION

This program has already frequently called for construction. It has envisaged the construction of

- irrigation projects.
- industrial firms.
- hotels, rest houses, cafes, museums.
- electrical generation and distribution facilities.
- expanded facilities at Aqaba.
- an international airport at Jerusalem.
- a (possible) extension of the railway to Aqaba.
- roads.
- municipal facilities.
- schools.
- hospitals.
- telephone facilities.
- social welfare facilities.

This chapter deals with problems related to construction of

- general government buildings.
- housing projects.

CHAPTER XVIII

With respect to construction of general government buildings:

- 1) Offices of the Government of Jordan are scattered throughout the city. This makes communication between ministries, departments, and authorities more difficult and contributes to a lack of coordination of activities.
- 2) Offices of the Government of Jordan are frequently in overcrowded buildings not designed for their present use. These buildings are frequently rented at high rental rates. The result is poor facilities, loss in efficiency, and high costs.
- 3) Offices of the Government of Jordan are frequently found in congested areas when they might be moved to outlying areas to remove congestion.

Therefore:

- 1) An overall plan should be prepared for construction of government buildings in Amman consistent with the requirements of efficient government and a sound city plan.
- 2) Construction should proceed within the framework of this plan.

See Specific Proposal No. C1.

With respect to housing projects:

- 1) Housing shortages persist in most urban centers in Jordan.
- 2) Housing costs can be reduced by better design and mass building.
- 3) There is a particular shortage of moderate-cost, and low-cost, housing.

Therefore:

- 1) Cost-cutting designs and techniques for low-cost housing should be developed.
- 2) Plans should be carefully developed for a number of moderate cost, or low-cost, housing projects in leading urban centers.
- 3) Construction should proceed using cost-cutting designs and techniques in selected areas.

See Specific Proposal Nos. C2 and C3.

THE PROGRAM FOR CONSTRUCTION

Specific Proposal No. C1

— a proposal for preparing and executing an overall plan for government construction in Jordan consistent with a sound city plan.

— to be done:

- 1) Prior to June 1, 1962, the Ministry of Public Works (in cooperation with a representative of the Jordan Dev. Bd.) shall arrange for the services of two consultants (one an architect, the other an expert in public administration) to prepare prior to June 1, 1963 a plan providing adequate housing in Amman for Jordan's governmental agencies. This plan shall:
 - a) Be coordinated with all sound plans for city development now being prepared, or considered, by the Municipality of Amman.
 - b) Give due attention to the needs for easy communication among government agencies.
 - c) Recommend designs which provide for efficient operations at low cost.
 - d) Provide for movement out of expensive rented quarters.
 - e) Recommend a schedule of construction.
 - f) Estimate costs of construction of needed facilities.
- 2) Immediately upon receipt of the plan prepared under (1), above, it shall be presented through the Ministry of Public Works and the Jordan Development Board to the Council of Ministers for approval. When approved, the plan shall be turned over to the Ministry of Public Works for the preparation of detailed drawings (by consultants from abroad, if necessary or desirable), for the asking and letting of bids, and for the supervision of construction, all as required by the plan.
- 3) Each year to December 31, the Ministry of Public Works (in cooperation with a representative of the Jordan Development Board) shall report the progress of work under

CHAPTER XVIII

the plan in writing to the Jordan Development Board, recommending such changes in the plan as then seem appropriate.

- costs : Costs will be detailed by the consultants operating within the framework of (1) above. They are estimated for purposes of this program as follows (in thousands of dinars):

Fiscal year to March 31 :	1963	1964	1965	1966	1967
Consultants	14.0(1)	7.0(2)	7.0(2)	7.0(2)	7.0(2)
Construction costs	—	100.0	150.0	200.0	250.0
Total	14.0	107.0	157.0	207.0	257.0

(1) Two, under terms of (1), above

(2) One, as continuing consultant.

- financing: External sources — grants, for consultants; loans for construction.

Specific Proposal No. C2

- a proposal for obtaining improved housing designs.
- to be done:
 - 1) Prior to April 1, 1966, the Jordan Development Board shall have prepared and mailed invitations to tender for the design of sample individual housing units and of housing projects appropriate for Jordan's urban areas.
 - 2) Prior to June 15, 1962, the Jordan Development Board shall have selected at least two agencies for the submission of the designs called for in (1) above. The designs will be asked for prior to June 15, 1963.
- costs : Estimated at JD 10,000.
- financing : From funds currently available for feasibility studies.

THE PROGRAM FOR CONSTRUCTION

Specific Proposal No. C3

- a proposal for preparing and executing an overall plan for provision of public housing in urban centers.
- to be done:

- 1) Immediately upon, receipt of sample designs for individual housing units and for housing projects (as prepared under Specific Proposal No. C2), a Committee of three (1. Representative of Ministry of Public Works, 2. Repr. of Ministry of Finance, and 3. Repr. of Jordan Development Board-chairman) shall be constituted to review these designs, to select one or more, and to prepare a program for construction of houses to be sold over long terms to private individuals.

This program shall:

- a) Recommend the magnitude of the program to be undertaken.
 - b) Recommend the location of units or projects.
 - c) Estimate the timing and amount of construction costs.
 - d) Recommend the persons to be allowed to purchase the units and the terms of purchase.
- 2) Not later than October 1, 1963, the program prepared under (1), above, shall be submitted through the Ministry of Public Works and the Jordan Development Board to the Council of Ministers for approval. When approved, the plan shall be turned over to the Ministry of Public Works for the preparation of detailed drawings, for the asking and letting of bids, and for the supervision of construction.
 - 3) Upon completion of construction, the units shall be turned over to the Ministry of Finance for sale under the terms set in the program as approved.
 - 4) Each year prior to December 31, the Committee (as constituted under 1., above) shall prepare a written report on progress under the program for presentation to the Jordan Development Board. This report will recommend changes as experience dictates.

CHAPTER XVIII

— costs : Costs will be detailed as indicated above. Estimates for the purposes of this program are as follows (in thousands of dinars).

Fiscal year March 31 :	1963	1964	1965	1966	1967
Construction costs	—	25	100	200	300

— financing: External Sources — Loans.

Construction Summary

This document thus far has indicated planned building construction projects as given in table 18.1 on the following page.

THE PROGRAM FOR CONSTRUCTION

Table 18.1
CONSTRUCTION SUMMARY PLANNED BUILDING PROJECTS IN FIVE YEAR PROGRAM (1)

Project	Cost (in thousands of dinars)				
	1963	1964	1965	1966	1967
1. Additional Hotel Facilities (Specific Proposal No. T. 1)	1,344.3	1,660.7	1,022.8	1,078.8	993.4
2. Preservation & Restoration of Buildings & Mon. in Jerusalem & Bath. Museums (Specific Proposal No. T.4)	—	—	25	50	75
3. Buildings of Aqaba (Spec Proposal No. Trans7)	25	25	25	25	39
4. Municipal Buildings	114	114	114	114	114
5. Girls Primary Schools (Spec Proposal No. Ed. 1)	Nil	30	30	90	90
6. Vocational Schools (Spec. Proposal No. Ed. 3)	Nil	40	80	160	240
7. New Schools to replace rented facilities (Spec. Proposal No. Ed. 6)	250	250	250	250	250
8. Jordanian University	—	100	400	450	350
Adm. Bldgs. for technical development (Spec. Proposal No. Ed. 11)	118	19	—	—	—
9. Hospitals, etc. TB Prog (Spec. Proposal No. H1)	350	60	40	40	50
10. Hospital in Jerusalem (Spec. Proposal No. H3)	20	50	Nil	Nil	Nil
11. Hospital in Nablus (Spec. Proposal No. H4)	20	50	Nil	Nil	Nil
12. Medical Centre in Amman (Spec. Proposal No. H 5)	125	200	175	Nil	Nil
13. Hospital Aqaba (Spec. Proposal No. H 6)	10	25	Nil	Nil	Nil
14. Regional Health Centres (Spec. Proposal No. H 7)	Nil	40	40	Nil	Nil
15. Quarantine Stations (Spec. Proposal No. H 11)	12	12	Nil	Nil	Nil
16. Rehabilitation Centres in Amman (Spec. Proposal No. H 12)	12	Nil	Nil	Nil	Nil
17. Laboratory Facilities (Spec. Proposal No. H 13)	10	Nil	Nil	Nil	Nil
18. Nursing Schools (Spec. Proposal No. H 16)	15	5	Nil	Nil	Nil
19. Social Welfare Facilities (Spec. Proposal No. SA 4)	54	81	108	135	162
20. Cultural Facilities (Spec. Proposal No. Com5)	34	34	34	34	34
21. General Government Buildings (Spec. Proposal No. C. 1)	Nil	100	150	200	250
22. Housing Projects (Spec. Proposal No. C. 3)	Nil	25	100	200	300
Total	2,113.3	2,920.7	2,608.8	2,666.8	2,967.4

The grand total required for five years is JD 13,476, 785

(1) Table does not include industrial and commercial buildings, transportation facilities, water projects, electricity and communications projects, and unprogrammed residential buildings.

THE PROGRAM FOR FINANCIAL INSTITUTIONS

The management of Jordan's currency since 1950 and the operations of the commercial banks and other financial institutions have, on the whole, been appropriate to the stage of the country's economic development. Tying the dinar to and keeping it officially at a par with the pound sterling has been sensible in view of Jordan's heavy dependence upon foreign trade. Commercial bank operations have been conservative and have given depositors no cause for alarm. Agricultural credit has been extended within the limits permitted by the Agricultural Bank and the Jordan Development Board, at times with special assistance from the Treasury of Jordan; and cooperative societies have made modest credit contributions to agriculture. The Development Bank has extended credit for both agricultural and industrial development. The Currency Board has fulfilled quite satisfactorily its limited functions of issuing and redeeming local currency in exchange for sterling and investing the sterling counterpart in treasury bills and British Government securities. And, finally, the Currency Control Department of the Ministry of Finance has been able to achieve a reasonable degree of stability in the external value of the Jordan dinar.

Yet in addition to these favourable financial developments, perhaps greater contributions to Jordan's economic development could have been made in the past through the country's financial institutions, and certainly substantially greater contributions must be made in the future if the planned rate of economic development is to be achieved. A set of recommendations for adapting financial institutions to meet the credit needs of the present and near future is outlined in the following sections.

CHAPTER XIX

I) Central Banking Activities

1) The provisions of Law No. 4, 1959, as amended in 1960, which call for the establishment of a central bank in Jordan should be implemented as rapidly as possible. 1/ The Governor, who should be a Jordanian with outstanding financial experience, the five members of the Board of Directors who should also be Jordanians, and the Deputy Governor who should be a foreign expert with long experience in central banking operations, should be appointed by July 1, 1962.

The first task of the Deputy Governor should be that of developing an organizational chart and working out a staffing pattern. It will be desirable to employ as heads of departments foreign experts experienced in various aspects of central banking activities during the early years of the Bank's operation. The Deputy Governor and all other foreign members of the Bank's staff should have Jordanian deputies who would be trained on the job to take over, as rapidly as possible, the responsibilities of the foreign experts. Initially, to make the Bank operational, the Controller of Currency and Jordan Currency Board functions could be incorporated within the Bank's structure, keeping the present administrative arrangement of a single foreign expert as the head of both activities. In time separate heads for these functions would be desirable. A Department of Administration under the headship of an outside expert should also be included within the Bank's initial operating framework.

In view of the fact that the value of the Jordan Dinar has been closely tied to that of the Pound Sterling, it would be helpful if the outside experts initially required by the Central Bank could be obtained from the Bank of England.

In view of the fact that the value of the Jordan Dinar has partly operational by January 1, 1963, or earlier, if possible. This could be done establishing Issue, Currency Control, and Administration Departments. See Specific Proposal No. F.I.I.

It is recognized that the Bank's activities would be somewhat limited during the early period of its existence. Because of this some would argue that the establishment of the Bank should be postponed

1 The Central Bank Amendment Law has been approved by the Council of Ministers, but it has not yet been ratified by the Parliament.

THE PROGRAM FOR FINANCIAL INSTITUTIONS

until the need for it is more pressing. To delay starting the Bank however, would be unwise. In the first place central banking activities are highly technical and the training of competent central-bank administrators requires a considerable amount of time. By making the Bank operational in the near future staff training can be carried out in a manner that will insure competent operation of the Bank as its activities expand during the years which lie ahead.

Second, there will be need for the conduct of some central banking activities to facilitate the carrying out of the Five Year Plan for Economic Development. To delay the activation of the Bank would interfere with the optimum execution of the economic development program.

2) Advantages which will accrue from the presence of a central bank:

a) Placing the responsibility for regulating the note issue and the responsibility for the stabilization of the international and domestic value of the dinar within the hands of the Central Bank authorities should provide for more effective coordination of these related functions. This will become particularly important if Jordan moves away from the present policy of maintaining a strictly 100% sterling reserve behind its note issue.

b) The Central Bank through the policies which it establishes for rediscounting the assets of the commercial banks and other financial institutions, can both encourage the growth of credit in the economy and yet, when necessary, restrain the growth of credit to retard the development of undesirable inflationary pressures. It can, in short, contribute both to economic growth and to cyclical stability.

c) The Central Bank will serve as a useful fiscal agent for the government. It should gradually assume responsibility for the handling of government deposits and will perhaps at times make short-term loans directly to the government within the limits established in the law. The latter practice should be looked upon by both the government and the bank as one to be avoided by the government whenever possible rather than as an easy means to cover a deficit in the budget; later, as the government finds it desirable to speed up the rate of economic growth by the deficit financing of developmental projects, the Central Bank may provide an important secondary market for government securities through open-market pur-

CHAPTER XIX

chases. The Central Bank will also administer the government's gold and foreign exchange reserves, and it will be the agency which deals with international financial organizations.

d) When the Government of Jordan begins to float securities of various maturities, the Central Bank can help to prevent undesirable fluctuations in the prices of such securities through open-market purchases or sales.

e) By requiring the commercial banks to adopt adequate uniform accounting procedures the quality of banking statistics will be markedly improved. This will contribute to the ability of the Bank's Statistics Department to develop a comprehensive set of banking statistics.

f) Though initially rather limited functions may be carried out by the Central Bank, it is important that it be established as quickly as possible so that a trained staff may be developed which will be able to cope effectively with the expanding responsibilities which the Bank will face as the pace of Jordan's economic development increases over the next five to ten years.

II) The Currency Issue

1) Serious consideration should be given to modifying the 100% sterling reserve required for the note issue. Though it will continue to be important to Jordan to maintain a stable exchange value for the dinar, it should be possible to maintain an adequate degree of stability with something less than a 100% sterling cover. Such sterling reserves as it may prove feasible to release could be used in helping to finance development projects carried out by the government. A fiduciary issue of up to JD 4.5 million resulting from rediscounting operation of the Central Bank and reductions in the sterling reserve would not seem to represent an unreasonable change in reserve policy if it is developed gradually over a period of years. Reductions in the currency reserve percentage should be made by the Central Bank authorities only when they are consistent both with the maintenance of reasonable internal price level stability and with the maintenance of reasonable stability in the foreign exchange value of the dinar. In the longer run it may prove feasible to reduce the currency reserve to a greater extent. This is a matter to be determined on the basis of the experience of the Central Bank.

THE PROGRAM FOR FINANCIAL INSTITUTIONS

Initially the fiduciary issue should be directed primarily to the financing of economic development projects contained in the Five-Years Plan.

Steps which should be taken to provide authorization for a fiduciary issue are outlined in **Specific Proposal No. F. I. 2.**

III) Savings or Time Deposits

1) The total volume of savings and time deposits has shown a marked upward trend, increasing from JD 1,300,000 in 1953 to JD 13,199,000 in 1960. The major portion of this rise is, however, a result of the increase in public time deposits; for private time deposits in 1960 amounted to only JD 5,484,000. All but a very small percentage of the time deposits are held in the commercial banks and the balance of such deposits are held in the rural cooperative societies. It is important to Jordan's future economic development that individuals be encouraged to increase their rate of saving and that these savings should be channelled into those forms of investment which will contribute most effectively to the country's economic growth. An increase in the rate of saving in the form of time deposits in commercial banks will be helpful if these savings are channelled into local investment outlets through bank investments in the securities of the Agricultural Credit Corporation and the Industrial Development Corporation.

2) A significant volume of hoarded wealth in the form of cash and gold is apparently held by the low-income rural and urban population. Though the total amount of such hoards cannot be accurately determined, it is believed to be substantial. The establishment of convenient time deposit facilities in rural and urban areas would help to channel hoards into constructive investment uses and would provide an outlet for future savings. It is recommended that a postal savings system be established on a limited basis and that it be brought into partial operation by the end of the second year of the Five-Year Development Program.

To attract the savings of low income rural and urban residents, continuing educational publicity would have to be used to point up the advantages of placing savings at interest in postal savings accounts where they will be extremely safe, rather than accumulating such savings in the form of non-interest earning hoards of cash and gold which are subject to theft and accidental loss. It would stimulate interest in the system if cash prizes were awarded

CHAPTER XIX

each year to a given percentage of depositors in each postal savings bank on the basis of a drawing by lot.

The experience with postal savings banks in other countries has shown that they can be quite successful in attracting the savings of the low income rural and urban population. In addition, a great many Jordanians have had personal experience with a postal savings system in the past.

It should be emphasized that postal savings facilities should be made available in localities where commercial bank offices are already located. The reason for this stems from the fact that the usual cold and formal atmosphere of the typical commercial bank office is intimidating to the financially unsophisticated low-income individual. Providing an informal savings window in a post office will more readily attract his savings.

The interest rate paid on postal savings deposits should be guaranteed by the full faith and credit of the Jordanian Government. The Government would be able to use part of the savings accumulated by the postal savings banks over and above necessary cash reserve balances for developmental purposes.

The establishment of postal savings facilities in Jordan has been recommended in the past, but so far action has not been taken. The implementation of such facilities should not be further delayed.

Specific steps to be taken in establishing a postal savings system are outlined in **Specific Proposal No. F. I. 3.**

IV) The Development of a Capital Market

Though the development of a capital market is naturally a slow process in underdeveloped countries, Jordan has reached the stage at which efforts should be made to encourage the growth of capital market activity. A large volume of privately-owned investment funds is currently held in foreign investments, in part, at least, because attractive security investments are not available in Jordan. In addition, some funds currently flowing into conspicuous consumption might be attracted into local investments instead if suitable investment opportunities were present. Steps which should be taken to increase the scope of capital market activity are outlined in **Specific Proposals Nos. F. I. 4 and 5.**

THE PROGRAM FOR FINANCIAL INSTITUTIONS

V) Commercial Banking

The international character of commercial bank operations in Jordan and the relatively undeveloped state of domestic industry help to explain the fact that the largest percentage of bank credit is granted for the financing of internal and external trade — in the latter case, primarily imports. As a result of the domestic shortage of types of short-term investments considered acceptable by the commercial banks, these institutions have customarily invested their surplus funds abroad, particularly in sterling assets.

In reviewing commercial bank practices in Jordan, there seems reason to question whether the banks have exploited the domestic credit field as intensively as possible, consistent with sound banking policies. Though the risks involved in agricultural credit in Jordan are too great to justify extensive commercial-bank participation, there are other credit outlets which may deserve greater attention than they have received in the past. Specific areas are discussed briefly below:

1) The financing of small artisans and craftsmen by commercial banks has been limited. Credit needs in this area are for both working capital and capital for the purchase of small-scale machinery and tools which could be amortized over a period of a few years. The commercial banks should be directed to make, in cooperation with the Industrial Development Corporation referred to later, an intensive study of the credit expansion possibilities in this area. It may well be that much potential entrepreneurial talent is being held back for want of ability to command sufficient credit. The Central Bank also should study carefully the credit needs of the small entrepreneur and make recommendations concerning ways in which these needs may be met more adequately.

2) The volume of residential real-estate credit could be usefully expanded. The need here is not so much for credit to finance the construction of luxury homes as it is for credit to help finance low income housing. In view of the rather extensive shortage of the latter type of housing in Jordan such financing should not involve excessive risk.

3) Commercial banks could also be expected to supply increased amounts of mortgage credit in connection with the construction of additional hotel facilities for tourists. Where the amount of credit involved in any one project is too large to be attractive to a single

CHAPTER XIX

bank, the bank should be encouraged to seek one or more bank partners to cooperate in supplying the total credit needed. In this connection it should be mentioned that two of the commercial banks in Jordan occupy a rather dominant position in the commercial banking structure; and several of the banks carry on relatively small-scale operations. It would perhaps strengthen the banking structure if some mergers should develop among the smaller banks. This would be helpful if a proper balance were maintained between the safety of the commercial banking system and the maintenance of an adequate degree of competition among the individual banks.

4) The commercial banks should be urged to take a significant participation in government and in autonomous government corporation securities as these are issued.

VI) Agricultural Credit

The most difficult credit problem in Jordan has been and continues to be in the area of agricultural credit. The unpredictable variations in rainfall give rise to an irregular cyclical pattern of agricultural production. In poor crop years the income of a substantial number of farmers becomes so low that amortization of the principal or even payment of the interest stemming from previous credits extended cannot be met. And in good crop years farm incomes have not, on the average, permitted farmers to recoup past losses and to free themselves from debt. Since 1947 the government has found it necessary to intervene several times during drought period to prevent widespread foreclosures on farm lands pledged as collateral behind loans. In addition, the limited supply of agricultural credit available at reasonable rates through the facilities of the Agricultural Credit Corporation, the cooperative societies, and, in the past, the Jordan Development Board has been far short of farmers' needs. As a result, it is a rather typical pattern for individual farmers to be forced to turn to local money lenders for credit. The rates charged by money lenders tend to be extremely high, reflecting in part, at least, the nature of the credit risks involved. In short, in spite of efforts so far made by the Jordanian Government, the farm population tends to be weighed down by a demoralizingly heavy burden of debt, and to be handicapped by a shortage of available credit. This situation has had a retarding effect upon the expansion of agricultural production. Measures required to deal with the problem of agricultural credit are outlined below:

THE PROGRAM FOR FINANCIAL INSTITUTIONS

1) Provision for the future credit needs of agriculture cannot effectively be made until the present structure of agricultural indebtedness has been reorganized on a more rational basis. It is a matter of the highest importance that relief be granted to farmers from oppressive burdens of debt and interest payments.

A specific proposal for accomplishing the adjustments needed in the volume of currently outstanding agricultural indebtedness is included in the Program for Agriculture. See Specific Proposal No. A 18.

This problem has been considered by the government in the past. The Council of Ministers in September 1954 sent the Council's Legal Advisor and the then Assistant Under-Secretary of the Ministry of National Economy to Cyprus to study the measures which had been taken there to readjust the heavy burden of long-outstanding farm indebtedness. In their report to the Council of Ministers they recommended that an adaptation of the Cyprus Law of Restatement and Readjustment of Farm Indebtedness of 1940 be adopted in Jordan.

On the basis of this recommendation the Prime Minister in 1955 appointed a committee of 10 to draft legislation patterned after the Cyprus Law. In June, 1955, the committee presented its draft law to the Council of Ministers, but to date no further action has been taken.

It is important that formal steps to relieve the excessive burden of agricultural indebtedness should no longer be delayed.

2) Agricultural credit facilities must be expanded to meet the legitimate credit needs of farmers and to enable them to avoid having to incur a heavy indebtedness with local money lenders in the future. Of the existing agricultural financial institutions, cooperative societies appear to be best suited for the administration of short-term agricultural credit, and every effort should be made to encourage their development where they are not now present. The Central Cooperative Union should be provided with operational funds through long-term loans from the Agricultural Credit Corporation; and all of the individual cooperatives should be required to be affiliated with the Central Cooperative. The individual cooperatives should be permitted to borrow on their own promissory notes, within prescribed limits, directly from the Central Cooperative. In addition, they should be allowed to rediscount the promissory notes of

CHAPTER XIX

their members at the Central Cooperative Union within reasonable limits — perhaps in an amount up to 50% of their total outstanding short-term credits. This limit should be subject to adjustment in the light of experience.

The short-term credits extended to individual farmers should be largely in kind — that is, in the form of seeds, fertilizer, etc. This should encourage more efficient use of agricultural credit and reduce the extent to which such credits tend to be diverted to consumption expenditures.

Short-term credits extended to farmers should be made in the form of unsecured loans and should not involve mortgages against farm property.

To prevent a sizeable portion of farm owners from again sinking under an insupportable burden of debt as a result of bad crop years, formalized procedures should be instituted to permit the extending of repayment periods without additional interest payments when such delays are deemed by the Central Cooperative Union to be warranted. Such deferments should be accorded whether or not the paper has been rediscounted by the Central Cooperative Union. It must be emphasized that these deferment measures alone will not meet all of the needs of farmers during prolonged drought periods when their means of livelihood may largely disappear. Some form of governmental relief such as subsistence grants may become necessary at such times.

In addition it is extremely important that improved farm-marketing techniques be developed so that farmers will not have to accept the low prices prevailing at the height of the harvesting season. This problem is discussed in detail in the section of the Plan dealing with agricultural marketing. Suffice it here to say that the government's grain storage program is a helpful development in the area of nonperishable foods, but as yet little progress has been made in solving the marketing problem for perishables.

Steps to be taken in connection with the Central Cooperative Union are developed in **Specific Proposal No. F. I. 6.**

3) The Agricultural Credit Corporation should withdraw as rapidly as possible from the short-term agricultural credit field. To encourage the growth of cooperative societies where they do not now exist, the Agricultural Credit Corporation should set a deadline after

THE PROGRAM FOR FINANCIAL INSTITUTIONS

which no further short-term loans will be extended. January 1, 1967, is suggested as a target date.

The Agricultural Credit Corporation should concentrate upon intermediate and long-term loans for capital improvement projects in agriculture; and these loans should be made directly to farmers. The Corporation should be provided with a sufficiently large capitalization so that it will not depend upon annual appropriations from the government. In addition to original capital funds supplied directly by the government and from other sources, the Agricultural Credit Corporation should be permitted to issue bonds in an amount up to 50% of its total capital. These bonds should be backed by the full faith and credit of the Jordanian Government and they should be offered to the commercial banks, to the Central Bank, and to the public. 2/

To enable the Agricultural Credit Corporation to supply effectively development agricultural credit, it is imperative that the Corporation develop as rapidly as possible a technical staff of well-trained field representatives to negotiate loans to farmers. The field representatives should be given the authority to make loan commitments within specific limits. The ultimate success of the Corporation will depend upon the quality of the field staff and the extent to which this staff is permitted to operate autonomously.

Steps to be taken in providing for the expansion of the Agricultural Credit Corporation are listed in **Specific Proposal No. A.3. VII) The Industrial Development Corporation**

Limited funds for development purposes have been made available in the past by the Development Bank of Jordan which is UNRWA sponsored, by the Industrial Development Fund, by the Agricultural Bank, now the Agricultural Credit Corporation, and by the United States-Jordan Joint Fund for Economic Development. Though the assistance supplied through these agencies has been useful, there is an urgent need for a greatly expanded and a more appropriately organized system for supplying developmental credit to industry and related sectors of the economy. To meet these needs

2/ Under the Central Bank Law as drafted, the Central Bank is authorized to acquire government but government-guaranteed securities. It is strongly recommended that the law be amended to permit the Central Bank to hold government-guaranteed securities as well.

CHAPTER XIX

It is recommended that a new industrial credit agency be established to be known as the Industrial Development Corporation.

This Corporation should be a Jordanian undertaking and ownership should be expected to be primarily governmental rather than private. If this agency is to be successful in meeting the needs for which it should be established, it would be financially relatively unattractive to private investors. A subsidy in the form of a low return received on the corporation's capital stock would have to be supplied by the government and any private stockholders. It is essential, however, that the corporation be granted a high degree of autonomy in conducting its credit operations.

The form which the corporation should take is more fully developed in **Specific Proposal No. F. I. 7.**

VIII) Small-Municipalities Development Bank

Under Law No. 69 of 1953, if a Moslem person dies intestate or leaves an heir under 18 years of age, an incapacitated heir, or an absent heir having no agent in Jordan, the Moslem Religious Court concerned administers the estate. The actual management of each estate is conducted by a committee composed of the Sharia religious judge who serves as chairman, the appointed director of the estate, and the government sub-accountant. The duties of the managers of individual estates include the making of monthly payments to the heirs to cover their expenses; the payment of the costs of repair and maintenance of estate property; and the lending at interest of any residual funds.

In each sub-district an Orphans Trust has been established to which revenues from individual estates flow, and from which expenditures on behalf of heirs and their estates are made. The excess of total revenues over total expenses is used for extending consumption loans at 9% interest to individual borrowers, including government employees.

It is proposed that present practices be somewhat modified so that funds arising from the individual estates will be channelled into constructive small-municipality development projects. The Orphans Trust in each sub-district should be restricted to receiving revenue from individual estates and to making payments for the maintenance of heirs and their property. All surplus funds should

THE PROGRAM FOR FINANCIAL INSTITUTIONS

be deposited at interest in a new financial institution, the Small-Municipalities Development Bank. This Bank in turn would extend loans to small municipalities for development purposes. In order to insure adequate protection of the interests of the beneficiaries of the trusts involved, these loans should be guaranteed by the Jordan Government.

Steps required to effect this change are described in **Specific Proposal No. F. I. 8.**

(IX) International Investors Company of Jordan, Ltd.

Inquiries are frequently received both from emigrants from Jordan and from foreign nationals concerning investment opportunities in Jordan enterprises. At present there is no formalized technique for directing the funds available from these sources into local investments. As a result substantial amounts of potential foreign investment funds are being lost to the Jordan economy. To rectify this situation it is recommended that an investment company be established to handle investment funds received from emigrants and from foreign nationals.

Once this investment company is established its existence should be advertised abroad in order to attract the largest possible volume of investment funds. The investment company would issue equity shares which would be offered for sale to interested investors abroad. The funds received from the sale of these shares would be invested in turn in the securities of local companies. The diversified portfolio which the investment company would accumulate would greatly reduce the risk incurred by those abroad in investing funds in Jordan.

Steps required to initiate the investment company are listed in **Specific Proposal No. F. I. 9.**

(X) Regulation and Encouragement of Insurance Companies

There is urgent need in Jordan for more formalized regulation of insurance companies and insurance agents. In addition, encouragement should be given to the development of a more extensive insurance business by Jordanian companies. At the present time, for example, a major portion of Jordan's imports are purchased on a C.I.F. basis with the insurance being furnished by foreign

CHAPTER XIX

companies. Efforts should be made to change the purchase arrangements for imports so that an increasing portion of goods entering the country will be insured through Jordanian companies.

Steps to be taken in the area of insurance are outlined in **Specific Proposal No. F.I.10.**

Specific Proposal No. F. I.1.

The Council of Ministers should set January 1, 1963, or an earlier date if practicable, as the effective date for the beginning of active operation of the Central Bank.

Beginning at once the Minister of Finance should take steps to prepare a list of qualified candidates for the positions of Governor and Deputy Governor. In preparing this list full consideration should be given to the fact the operation of a central bank is an extremely technical matter which must be carried out properly or the entire economy will suffer the consequences. Though the Governor of the Bank may be an outstanding Jordanian financial expert, the Deputy Governor must be a person who has had extensive experience in actual central bank operations. The Minister of Finance should submit his list of qualified candidates for these positions to the Council of Ministers by June 1, 1962. The Council of Ministers, in turn, should make every effort to complete the appointments to the two top positions by September 1, 1962.

Once appointed, the Deputy Governor should immediately begin to develop an organizational plan and to appoint key staff members. It will be important that in the beginning department heads should also be persons who have had experience in foreign central banks.

As soon as the Governor and the Deputy Governor have been appointed, the functions of the Jordan Board and the Currency Control Department should be incorporated into departments of the Bank.

— financing: The authorized capital of the Bank is JD 1,000,000 to be supplied by the Government of Jordan.

Specific Proposal No. F.I.2.

The Currency Control Department with a representative of the Jordan Development Board shall draft an amendment to the

THE PROGRAM FOR FINANCIAL INSTITUTIONS

Central Bank of Jordan Law of 1959, authorizing the Central Bank to introduce a fiduciary note issues of up to JD 4.5 million. This draft amendment should be presented for approval to the Council of Ministers by June 1, 1962.

Specific Proposal No. F.I.3

A committee of four, one member representing the Development Board (Chairman) and one member each representing the Ministry of Finance, the Ministry of Communications and the Currency Control Department should be appointed by April 1, 1962, to draft a law providing for the establishment of a postal savings system in Jordan. This draft law should be submitted to the Prime Minister for presentation to the Parliament by August 1, 1962.

— costs : Estimated to be JD 35,000 over the five-year period.

— financing : Income from investment of funds received on deposit plus Government of Jordan subsidy as needed.

Specific Proposal No. F.I.4.

The government should take the lead in issuing securities to be offered to the general public. Experiments should be initiated during the coming year with small issues of various maturities and bearing reasonable rates of interest. These should be offered for sale by the Ministry of Finance through the central bank, the commercial banks, the post offices, the cooperative societies, and the securities exchange. The denominations should vary from quite small to large in order to appeal to various income groups. Preceding such issues, an extensive publicity campaign should be carried out to advise the public of the forthcoming offerings. If necessary to promote a sufficient demand for such securities, a number of cash prizes could be awarded each year on a lottery basis to government security holders. Prior to January 1, 1962, a committee composed of one representative of the Ministry of Finance, one representative of the Jordan Development Board, and the Controller of Currency, chairman, shall be appointed to advise the Minister of Finance concerning the appropriate types and amounts of securities to be offered.

Specific Proposal No. F.I.5.

Prior to January 1, 1963, the government should establish a

CHAPTER XIX

securities exchange with brokerage offices in both Amman and Jerusalem. These offices should have direct wire contact with the exchange office so that they could furnish immediate price quotations and place buy and sell orders for their customers, the securities exchange should handle both equity and non-equity types of securities. In time brokerage offices could be established in other localities if justified by the anticipated volume of business.

As the first step in bringing such a program into being, a committee composed of a representative of the Ministry of Finance, chairman; a representative of the Ministry of National Economy; and a representative of the Jordan Development Board should draw up a proposed law for presentation to the Prime Minister by May 1, 1962. In drafting the proposed law, consideration should be given to the following points.

a) The securities exchange should be managed by a three-man rotating board of governors appointed by the Minister of Finance. One of the directors should be a senior official in the Ministry of Finance and the other two should be highly experienced persons from the business community.

b) The commissions charged by the securities exchange should be set at reasonable levels. The actual rates established should be subject to the approval of the Minister of Finance.

c) Corporations wishing to raise capital through fixed income securities should, with the permission of the board of governors of the exchange, be permitted to offer a flotation of securities directly on the exchange. The investment banking technique for floating new issues of securities does not seem appropriate for Jordan at present.

d) Since the number of corporations in Jordan is small, the volume of equity shares outstanding is not large and such trading activity as has been carried on has been on a relatively small scale. The presence of an organized securities exchange would stimulate wider interest in equity-type securities. This in turn would facilitate the floating of additional equity shares by existing corporations as their capital needs expand and would also make it easier for newly-established corporations to float initial share offerings. The expansion in trading in equity shares which would be encouraged by the existence of a securities exchange should divert a larger share of current savings and previously acquired investment funds to invest-

THE PROGRAM FOR FINANCIAL INSTITUTIONS

ment in issues of Jordanian corporations. This would make available increased financing for the development of domestic businesses and would contribute to the country's economic progress.

Corporations wishing to raise capital through equity issues should, with the permission of the board of governors of the exchange, be permitted to offer a flotation of shares directly on the exchange.

— costs : Estimated at JD 10,000 per annum.

— financing: Self-financing plus Government of Jordan subsidy as needed.

Specific Proposal No. F. I. 6.

A law should be drafted by the Ministry of Social Affairs covering the following points:

1) The Central Cooperative Union should be permitted to borrow operational funds as needed on a long-term basis from the Agricultural Credit Corporation.

2) All local agricultural cooperatives should be required to be affiliated with the Central Cooperative.

3) The Central Cooperative should be organized to help the local cooperatives meet the short-term credit needs of their members through the techniques of rediscounting short-term agricultural paper for the local cooperatives and the making of direct loans to them.

4) The Central Cooperative Union should be given the authority to extend the repayment period of short-term loans extended to farmers by the local cooperatives without additional interest payments when deemed necessary.

This draft law should be presented to the Prime Minister for submission to the Parliament by May 1, 1962.

— costs : (Included in Specific Proposal No. S.A.I):

— financing : Long-term loans from the Agricultural Credit Corporation. (See Specific Proposal No. A 14).

Specific Proposal No. F.I.7.

Prior to March 15, 1962, the Jordan Development Board in

CHAPTER XIX

cooperation with the Ministry of National Economy shall draft a law providing for the establishment of an Industrial Development Corporation. The draft law should provide for the type of financial institution which is described in the following suggested set of articles of association. When drafted, this law shall be presented to the Prime Minister for submission to the Parliament.

Articles of Association of the Industrial Development Corporation

ARTICLE 1 — The name of the corporation shall be « The Industrial Development Corporation of Jordan, Ltd.» (hereinafter referred to as the «Corporation»). The Corporation's head office shall be maintained in the capital city of the Hashemite Kingdom of Jordan. The Corporation shall have the right of establishing branches or agencies anywhere in Jordan.

ARTICLE 2 — The purpose of the Corporation shall be to encourage the development of, or to undertake the establishment, but not the operation, of those industrial, commercial, and utility enterprises in Jordan which will expand employment and income within the nation and which may reduce the nation's unfavorable balance of trade. In fulfilling this purpose, the Corporation shall search out suitable enterprises and shall give vigorous attention to the decentralization of loan-making authority and to the building of an active capital market via sale of its portfolio securities to private holders as rapidly as circumstances permit.

ARTICLE 3 — To attain this purpose, the Corporation may —

- a) grant term loans (one year or longer to maturity) to individuals, companies, cooperative societies, and municipalities (or autonomous municipal bodies) engaged in relevant, revenue-producing enterprises.
- b) participate in any relevant enterprise by subscribing to, underwriting, or otherwise acquiring the whole, or part, of the equity capital of individual enterprises.
- c) participate in any relevant enterprise by subscribing to, underwriting, or otherwise acquiring the whole, or part, of the fixed-income issues of individual enterprises.

THE PROGRAM FOR FINANCIAL INSTITUTIONS

- d) assist in the organization and establishment of relevant new enterprises whether or not the Corporation makes a loan to, or takes a participation in, these enterprises.
- e) provide financial, technical, and administrative service to its clients.
- f) participate (including contingent participations) with private banks in term loans negotiated by these private banks, such loans to be negotiated within the framework of rules prescribed by the Directors of the Corporation.
- g) acquire real property for the use of the Corporation or for protection or recovery of the claims of the Corporation; accept mortgages and other types of security; sell, or otherwise dispose of, its real property and securities and in general engage in any type of financial business necessary for the attainment of its objectives.

ARTICLE 4 — The Corporation may not —

- a) accept deposits at interest,
- b) make loans to the central government,
- c) lend more than 10 per cent of its total paid up net resources (capital plus reserves) to any one borrower,
- d) pay — or obligate itself to pay — for the shares of any single enterprise more than 10 per cent of its total paid up net resources (capital plus reserves),
- e) buy its own shares.

ARTICLE 5 — The equity capital of the Corporation — the aggregate amount of JD 10,000,000 — shall be contributed by the government or the Hashemite Kingdom of Jordan. Payment shall be made in cash or by transfer or assignments of claims representing loans granted to individual enterprises or municipalities (for revenue producing purposes) or by transfer or assignment of shares or participations in individual enterprise. In the event of transfer or assignment of such claims or participations, the value thereof shall be determined by the Board of Directors. Of the total equity capital, JD 1,000,000 shall be paid in upon the organization of the Corporation. Additional sums shall be paid in as required and upon the formal request of the Board of Directors.

CHAPTER XIX

ARTICLE 6 — The government of the Hashemite Kingdom of Jordan shall receive a payment (in lieu of dividends) not to exceed 2 per cent of paid-in equity capital per annum in — but only in — those years in which income is earned.

ARTICLE 7 — The Corporation shall be authorized to borrow funds in order to increase its loanable resources so long as its total indebtedness does not exceed twice the total of its paid-in equity capital.

ARTICLE 8 — A Board of Administration shall be in charge of the conduct of the business of the Corporation.

- a) The Board of Administrators shall consist of 3 members one of whom shall be a foreign of long experience in this type of credit, appointed by the Council of Ministers.
- b) In the first Board to be constituted, one member shall serve for one year, one member for four years, and one member for seven years. Subsequent appointments shall be for periods of six years. Members whose terms expire shall be eligible for reappointment to the Board. One member of the Board shall be appointed Chairman.
- c) All members of the Board shall devote their full time to the affairs of the Corporation. The Chairmen shall act as its chief executive officer. No member of the Board shall have, or acquire, a financial interest (either directly or indirectly) in any enterprise to which the Corporation shall loan funds or in which it shall take a participation.

ARTICLE 9 — Responsible for the conduct of the Corporation's business, the administrators shall:

- a) call, as required, for the paying-in of equity capital from the Government of the Hashemite Kingdom of Jordan and determine the value of contributions in kind thereto.
- b) establish the basic policies and regulations under which the Corporation shall make loans, take participations in loans made by private agencies, and purchase participation in enterprises.
- c) establish the basic policies and regulations under which the Corporation shall dispose of securities held in order to contribute to the development of a private capital market.

THE PROGRAM FOR FINANCIAL INSTITUTIONS

- d) establish the basic policies and regulations under which the Corporation shall borrow funds.
- e) establish the basic policies and regulations under which the Corporation shall actively seek new projects, organize new enterprises, assist existing projects, and aid in the development of a private capital market which will channel private capital to economic development.
- f) open and close branches of the Corporation.
- g) select and engage the staff necessary to implement the policies and regulations outlined above and to supervise and audit the work thereof to ensure adherence thereto. Particular attention shall be given to the selection of an adequate and competent technical staff.
- h) make recommendations to the Council of Ministers for such amendments to this charter as may be deemed necessary.

ARTICLE 10 — The Administrators shall be assisted in the management of the Corporation by an Advisory Committee of five persons to be appointed by the Council of Ministers. This Committee shall meet at the call of the administrators but at least once every three months. It shall be fully informed of the policies and regulations of the Corporation and of its operating results. It may recommend changes in policies and regulations to the Board of Administrators but its recommendations shall be advisory only and not binding upon the Board. Its recommendations shall be made in writing and copies shall be sent to the Development Board and the Council of Ministers. The Advisory Committee shall include the Minister of National Economy, the Vice President of the Jordan Development Board, and 3 private persons — 1 banker, 1 industrialist, and 1 merchant to be appointed by the Council of Ministers. On the first committee to be constituted, of the private persons one shall serve for 1 year, one for 2 years, and one for 3 years. Subsequent appointments shall be for periods of three years. Members whose terms expire shall not be eligible for appointment to the Committee.

ARTICLE 11 — At the end of each fiscal year, the Board of Administrators shall cause to be drawn up a report, balance sheet, and profit and loss statement for presentation to the Council of Ministers and, upon arrival thereby, to the general public.

CHAPTER XIX

ARTICLE 12 — Auditors shall examine the books and records of the Corporation and submit their report to be Board of Administrators for presentation to the Council of Ministers.

The draft law providing for the establishment of an Industrial Credit Corporation should be presented to the Prime Minister for presentation to the Parliament by June 1, 1962.

Estimated cost and financing for the five-year period: (See Specific Proposal No. 14.)

Specific Proposal No. F. I. 8

By March 1, 1962, the President of the Development Board should appoint a committee of three representing the Ministry of National Economy, the Jordan Development Board, and the Chief Justice. The representative of the Chief Justice shall serve as chairman. It shall be the task of this committee to draft a law amending Law No. 69 of 1963, in order to limit the responsibilities of the sub-district Orphans Trusts to the receipt of revenue from the individual trusts and to the making of payments for the living expenses of the heirs and the repair and maintenance of their property. All surplus funds accruing to the sub-district Orphans Trusts are to be deposited at interest in the Small-Municipalities Development Bank.

It shall also be the task of this committee to prepare a draft of proposed articles of association of the Small-Municipalities Development Bank. In preparing this draft the committee should take into consideration the surplus funds accumulated by the sub-district Orphans Trusts and the fact that the Bank's funds are intended to be used primarily in making developmental loans to small municipalities. Such loans should be fully guaranteed by the Jordan Government.

The committee should present its draft amendment to Law No. 69 of 1953 and its draft of the articles of association of the Bank to the Prime Minister for submission to the Parliament by June 1, 1962.

- costs: Estimated JD 5,000 per annum to cover staff emoluments, rentals, and miscellaneous expenses.
- financing: Income from the Bank's loans.

THE PROGRAM FOR FINANCIAL INSTITUTIONS

Specific Proposal No. F. I. 9

—The Jordan Development Board shall draft a law providing for the sponsorship by the Government of an investment company to be known as the International Investors Company of Jordan, Ltd. The Board of Administrators of the Company shall consist of three persons appointed by the President of the Jordan Development Board. One member, the chairman, shall be from the Jordan Development Board, and the other two members shall be Jordanian bankers having international reputations. The members of the Board of Administrators shall serve without pay.

In addition to the Board of Administrators, there shall be a full-time managing director. This position should be filled by an able and imaginative person who can be an effective salesman of the company's shares. The remaining staff shall be composed of one or more clerks and secretaries as needed.

It shall be the purpose of this company to issue shares which will be offered for sale to Jordanian emigrées and natives in various countries of the world. Funds received from the sale of shares shall be invested in securities issued by Jordanian corporations. As the Government of Jordan turns over its shares of local corporations to the Industrial Development Corporation, this Corporation in turn can make a portion of these shares available for purchase by the Investors Company.

Dividends shall be paid by the Investors Company as permitted by earnings received on the shares held.

The draft law should be submitted to the Prime Minister for presentation to the Parliament by July 1, 1962.

- cost : JD 6,000 per annum for staff, supplies, advertising, staff travel, etc.
- financing : Government of Jordan Budget and, in time, income from shares held.

Specific Proposal No. F. I. 10

The Ministry of National Economy should appoint a committee by January 1, 1962, to study the present insurance arrangements in Jordan, to make recommendations for expanding the insurance business conducted by local companies, and to draft a law providing

CHAPTER XIX

for the establishment of an Insurance Commission having authority to license insurance companies and agents and to establish formal regulations covering insurance activities. Included in the powers delegated to the Insurance Commission should be the power to require foreign insurance companies doing business through local agents to invest within Jordan a percentage of their premium receipts from local business. The committee should complete its report by July 1, 1962.

CHAPTER XX

FISCAL PROGRAM

The broad area of fiscal policy includes such matters as the sources and techniques used in providing government revenue, the nature of government expenditures, and the formal budgeting procedure followed by the government. All of these topics were studied in great detail by the recent Royal Fiscal Commission which published its Report in August of 1961. ^{1/} This is an excellent report and the recommendations made by the outstanding panel of experts comprising the Royal Fiscal Commission should be implemented without further delay. Since the report stands on its own, no attempt to discuss it in detail will be made here. Some general observations and a few detailed comments about fiscal policy in Jordan may serve, however, as a useful supplement to the Commission's Report.

The governmental fiscal situation in Jordan is composed of both favorable and unfavorable factors. On the favorable side these points may be listed:

- 1) The Constitution of Jordan takes an enlightened position in regard to the basic principle of taxation to be followed. Article III includes this statement: «In imposing taxes, the Government should adhere to the principle of progressive taxation, while at the same time ensuring equality and social justice. Taxation should not exceed either the paying ability of the taxpayer or the financial needs of the Government».

^{1/} This Report has been placed under classified status by the Government and has not yet been released to the public.

CHAPTER XX

2) The Government has in current operation a tax system which includes a wide variety of taxes, licences, and fees. Thus the government has experience in administering a diversified revenue system which includes the following revenue sources:

- Import duties
- Excise levies on alcohol, tobacco, salt & matches
- Inspection and miscellaneous fees
- Stamp charges
- Export duties
- Income tax
- National Guard tax
- Social Welfare tax
- Animal head tax
- Land tax
- Land and buildings tax
- Trade licences
- Road transport licences
- Import licences
- Other licences
- Post, telephone, and telegraph receipts
- State Domain revenue
- Currency profits
- Cement and phosphate profits
- Interest from bank accounts and loans
- Economic and technical assistance
- Loans for development projects
- Relief and aid

3) The Government of Jordan is not plagued by a burdensome indebtedness. Instead it is in the most unusual position of having no pressing indebtedness whatsoever, and of having substantial liquid surplus balances.

The favourable aspects of Jordan's fiscal situation listed above must be viewed in the light of the following critical comment:

1) In spite of the enlightened statement concerning progressive taxation in the Constitution, the existing revenue sources provide, in practice, little if any progressivity; and the over-all revenue struc-

FISCAL PROGRAM

ture is seriously regressive. This situation is well documented in the Report of the Royal Fiscal Commission and steps are outlined there which when implemented, should make the tax system correspond more to the progressive principle stated in the Constitution. A step not included in the Commission's Report which should also be taken is described in Specific Proposal No. FP.1 (a).

2) Though the government has had extensive experience in administering its list of taxes, licences, and fees, substantial improvement in the administration of some revenues is urgently needed. This is particularly true of land and real-estate taxes and of the income tax. Measures required to improve procedures in these areas are outlined in Specific Proposals No. FP. 1 (b) through FP. 1 (g) and FP. 2 through FP. 4.

3) The fact that the Government of Jordan is not burdened with indebtedness cannot be interpreted to mean that the fiscal position of the country is sound. It must be remembered that foreign aid of various types accounts for approximately 60 per cent of government revenues and only about 40 per cent of the government's income accrues from local sources. This unusually heavy dependence upon foreign revenue sources is an unhealthy situation and one which carries a constant threat of serious economic difficulty for Jordan should a substantial reduction in outside aid occur.

Though the recommendations contained in the Report of the Royal Fiscal Commission when implemented should result in an annual increase in revenues from local sources of somewhat more than JD 2,000,000, it must be emphasized in the most categorical terms that the realization of this local revenue increase must not be looked upon by countries supplying aid to Jordan as an excuse for reducing the extent of their assistance. Jordan is currently embarking upon an ambitious Five-Year Plan for economic development. This Plan is based upon the assumption that an increased amount of economic-development financing will be contributed both by the Jordan Government and by outside sources. Thus any reduction in foreign aid prompted by an increase in local tax revenues would only have the effect of interfering with the Economic Development Plan and of reducing the prospective rate of economic growth. The successful implementation of the Five-Year Plan may make possible significant reductions in the amount of foreign assistance required by Jordan after the interval required for the execution of the Plan.

CHAPTER XX

4) Budgeting practices in Jordan leave much to be desired. It appears that neither a complete accrual nor a complete cash basis is used in keeping government accounts. Under the present accounting system there is a lapse of a considerable period of time before the full financial results of a completed fiscal year can be ascertained. This situation seriously interferes with careful budget planning.

Proper budget control techniques are also largely lacking in Jordan. There is an urgent need for budget examiners having the training and experience needed to enable them to check the efficiency of the operations of individual departments in the government.

As a corollary of the budget problems listed above, it should be emphasized that over-all budget improvement also requires a reclassification of revenue and expenditure items on a more rational basis.

Though some of the steps which should be taken to improve the budgeting process are indicated in the Report of the Royal Fiscal Commission, some further measures which are needed are listed in **Specific Proposals No. FP. 5 through FP. 7.**

Specific Proposal No. FP.1

— a proposal to amend the following tax laws.

Urban Building and Land Tax Law No. 11 of 1954;
Income Tax Law No. 12 of 1954;
Rural Land Tax Law No. 30 of 1955;
Tax Collection Law No. 6 of 1952.

1) The 20% reduction from the yearly rental value of urban buildings which is allowed in consideration of depreciation by time and use in calculating the urban property tax should be reduced to 10%. The types of structures usually erected in urban areas in Jordan are subject to a relatively slow rate of physical deterioration. Thus, a 10% rate of allowable depreciation for tax purposes would be sufficient.

2) Delayed payment of income and property taxes should be subject to a penalty fine to be imposed at the rate of 10% per annum, with, in the case of the income tax, no authorization for remission of the penalty by the assessing officer. It is intended that deferred

FISCAL PROGRAM

payment of taxes arising from delays in reaching final assessments should be included under this fine provision. Fines should become effective as of May 1 of each year, so that the month of April will be a grace period during which taxes for the tax year just completed may be paid without penalty.

3) There should be a uniform income-tax assessment basis for both municipally-owned and privately-owned utilities as present municipally owned utilities are exempt from income tax payments and there is some lack of uniformity in the income tax assessment of privately-owned utility companies.

4) The due date for the payment of income taxes should be the first day of each fiscal year — April 1. Since to settle the final assessment of the income tax, particularly for large tax payers, often takes a year or more beyond the year in which income was earned the last amount of income tax paid should be paid for the current tax year, with appropriate adjustments to be made when the final assessment is accomplished.

5) At the present time, a tax payer who believes that his income tax assessment is unfair may make an appeal to one of the Courts of Appeal. At present there are two such courts, one at Amman and one at Jerusalem. These courts are heavily burdened with criminal and civil cases and as a result, well over 200 pending income tax appeal cases have accumulated in the courts. This means that the time delay involved in adjusting such cases tends to be excessive. This unfortunate situation seems likely to get substantially worse as time goes by unless appropriate steps are taken to rectify it.

To overcome the income tax appeal problem the necessary legal steps should be taken to establish a Circuit Court of Tax Appeal. This court should consist of a judge who is thoroughly familiar with income tax matters, and of two technical associates who will furnish needed assistance to the judge. The court should be provided with adequate financing to enable it to spend such time in the various parts of the country as may be needed to carry out its duties efficiently.

6) All taxes should be made a first lien on all land and buildings owned by assessee.

7) The tax collection committees no longer appear to play an effective role in the process of collecting overdue taxes. It is recom-

CHAPTER XX

mended, therefore, that all powers now vested in the tax collection committees should be vested in the sub-accountants and assessing officers.

— to be done:

- 1) Between December 15, 1961 and March 15, 1962 a Committee of five ((1) Legal Advisor to the Min. of Finance, (2) Repr. of the Revenue Division of the Min. of Finance, (3) Repr. of the Planning Division, Jordan Dev. Bd., (4) and (5) Two Reprs. of the Income Tax Dept. including the Director of Income Tax Dept. as Chairman) shall draft laws to amend the above quoted laws according to the contents of the Proposal;
- 2) Between March 15, and April 1, 1962 the draft amendment laws referred to in 1., above shall be presented through the Minister of Finance to the Council of Ministers for approval and submission to Parliament.
- 3) The amendment laws should be effective as from the beginning of the fiscal year 1962/63.

— costs : For the (proposed) Circuit Court of Tax Appeal — JD 4,500 per annum.

— financing : Budget, Government of Jordan.

Specific Proposal No. FP. 2

— a proposal to consider the question of applying the income tax to agriculture and cattle breeding. From the standpoint of equity the income tax should be applied to all sources of income.

— to be done:

- 1) Between December 15, 1961 and February 15, 1962, a committee of five ((1) Repr. of Planning Division, Jordan Dev. Bd., (2) Repr. from industry, (3) Repr. from agriculture, (4) and (5) Two Reprs. of the Income Tax Department as chairman) shall consider this matter and make recommendations through the Minister of Finance of the Council of Ministers;
- 2) The amendment law should be effective as from the beginning of the fiscal year 1962/63.

— cost and financing: covered in present budget.

FISCAL PROGRAM

Specific Proposal No. FP. 3

To facilitate the income-tax-assessment process, three additional sub-offices are urgently needed. One additional sub-office should be located in Zerqa; one should be located in Hebron; and one should be located in Aqaba.

The funds required to cover the personnel and other costs of establishing these additional offices should be included in the budget of the Income Tax Department for the fiscal year 1962/63 and onwards.

— cost : JD 6,000 per annum.

— financing : Budget, Government of Jordan.

Specific Proposal No. FP.4

— a proposal to amend the Landlords and Tenants Law No. 62 of 1953.

Under the Landlords and Tenants Law No. 62 of 1953, which is a continuation of the Law of 1941, the tenant is entitled to continue to occupy residential or business property indefinitely at the same amount of rent which he originally paid. In view of the sharply rising trend of actual real estate values since 1941, the continuation of the rent-control law in its present form has tended both to depress the base of the urban land and building tax with consequent revenue losses to the government, and to discriminate somewhat unfairly against landlords whose property has been occupied by the same tenants for an extended period of time.

Though some form of rent control is still needed for the protection of middle and lower-income tenants in view of the relative shortage of housing which still exists in Jordan, the existing rent control law should be revised.

— to be done:

- 1) Between December 15, 1961 and March 15, 1962 a Committee of three ((1) Repr. of the Min. of Finance, (2) Repr. of the Planning Division, Jordan Dev. Bd., and (3) Legal Advisor to the Min. of Justice, Chairman) shall draft a revised rent control law;

CHAPTER XX

- 2) Between March 15, and April 1, 1962, the draft law referred to in 1. above shall be presented through the Minister of Justice to Council of Ministers for approval and submission to the Parliament;
- 3) The revised law should be made effective as from the beginning of the fiscal year 1962/63.

Specific Proposal No. FP.5

As a first step in improving the budgeting process in Jordan, an outstanding foreign expert in this area, familiar with Jordan's problems, should be employed for a period of approximately six months to make a careful study of the problems and to make detailed recommendations for needed improvements. The frame of reference of this expert's study should also include an examination of the Income Tax Department and consideration of its personnel requirements.

On the basis of the expert's findings, the Development Board shall draw up specific recommendations for changes required in the budgeting process and in income tax administration; and these recommendations shall be submitted to the Council of Ministers for action.

These are matters which are closely connected with the potential success of the Five Year Plan, and they must not be neglected.

— cost: JD 4,000

— financing: One of the private foundations.

Specific Proposal No. FP. 6.

As officials in the Ministry of Finance, including the Department of Income Tax, retire or are transferred to other departments, they should be replaced by qualified university graduates. This should be done irrespective of past policies and practices.

Specific Proposal No. FP.7

To improve the efficiency of the staff of the Ministry of Finance it is recommended that the training programs indicated below be implemented.

FISCAL PROGRAM

1) For each of the fiscal years 1962-63 through 1966-67, three staff members of the Ministry of Finance should be sent abroad for training in tax policy and administration and in governmental budgets and budget accounting. Candidates selected for this training should have completed their secondary education and have worked for at least two years in the Ministry of Finance; and they should be proficient in the English language.

2) For each of the fiscal years 1962-63 through 1966-67, two staff members from the Income Tax Department should be sent abroad for training in tax policy and administration and in governmental budget accounting. When appropriate the study program should include work for an advanced degree. Candidates selected for this training should be university graduates in economics, law business administration, accounting or related fields; and they should have served for at least two years in the Income Tax Department. Candidates selected should have a good command of English.

— cost: JD 7,500 per annum.

— financing: External grants.

CHAPTER XXI

THE PROGRAM
FOR
GOVERNMENT
ADMINISTRATION

In the presentation of the individual development programs for the various sectors of the economy, close attention has been given to policy and administrative aspects; for the Five-Year Program could not be complete without a reasonably clear understanding of the manner in which it should be carried out. Indeed to a great extent the practicability of the plan must be tested against the administrative policies and measures proposed for its execution.

The problem of implementation is partly a question of motivation and partly a question of administrative mechanics. It is necessary to identify the motivating forces of human energy which can be enlisted and to devise programs and policies which will mobilize those energies for the realization of the plan. Success or failure in achieving the desired goals rests fundamentally on the spirit or will of the people. The plan will not be carried out unless there is a conscious sense of national destiny and a determination to exert strenuous efforts toward building and developing the country. An immense responsibility rests upon the leadership in the government to show the way, to demonstrate faith and confidence and to fashion the public service into an effective instrument for assisting the people in all walks of life to make their own contributions to the country's development.

The role of the government is crucial but the plan will fail completely if it is assumed that this is a government plan and that the people are to play a passive role. In fact the spirit of the plan

CHAPTER XXI

is quite different. In many diverse ways it assumes the mobilization of the people's imagination and energies — this spirit prevails to varying degrees in the different sectors of the economy but is particularly evident in agriculture and rural development, in industrial development and in trades and services. Public policy is to free the economy as much as possible from controls in the industrial, commercial, and agricultural sectors and to rely increasingly upon private initiative and judgement.

Machinery for Planning and Implementation

The location of responsibility for making and executing plans is of prime importance. The Jordan Development Board has devoted considerable attention during the past few years to the establishment of agencies and authorities with adequate legislative powers for carrying out such executive and operational responsibilities. Examples can be found in the Agricultural Credit Corporation, the Central Water Authority, the East-Ghor Canal Authority and others. Ultimately, responsibility both for the initiation and the execution of plans must rest with the various ministries, departments and other units of line administration to which program responsibilities are assigned. The coordinating and supervising organizations and staff bodies at best can stimulate and appraise but nothing can be accomplished unless the administrative agencies of the government are able to perform the concrete tasks of programming and execution. Planning and implementation are complementary facets of the responsibility of all units of the government machine.

As development goes forward, the expression «administration» steadily assumes a broader content. It includes within its scope the building up of personnel, training of men, running the administrative machine, seeking the cooperation and participation of the people, informing and educating the public, and finally, organizing a sound system of planning based as much on the participation of people at each level as on the best technical, economic and statistical information available. Increasingly, administrative tasks have been undertaken in new fields, especially those concerned with economic, industrial and commercial operations. If the administrative machinery at all levels, both municipal and central, performs its work with efficiency, integrity, and with a sense of urgency and concern for the community, the success of the plan will be fully assured. Thus, in a very real sense the Five-Year Plan resolves itself into a series of well-defined administrative tasks.

THE PROGRAM FOR GOVERNMENT ADMINISTRATION

The Plan for Economic Development presented in this document represents activities either continued from the past, usually on an expanded scale, or new activities which would have required longer periods of preparation.

The principle administrative tasks during the Five-Year Plan can be classified into certain broad categories:

- 1) ensuring integrity in administration;
- 2) building up administrative and technical cadres and providing incentives and opportunities for creative service;
- 3) continuously assessing requirements of personnel in relation to the tasks to be undertaken; organizing large-scale training programs in all fields; and mobilizing the available training resources, including public and private institutions, industrial and other establishments, apprenticeship and in-service training;
- 4) devising speedy, efficient and economic methods of work; providing for continuous supervision; and arranging for objective evaluation of methods and results at regular intervals;
- 5) carrying technical, financial and other aids to small producers as in agriculture, national extension and community projects, villages, and small industries;
- 6) building up organization for the efficient management of public enterprises as in industrial and commercial undertakings, transport services, and irrigation schemes;
- 7) securing local community action and public participation to obtain the maximum results from public expenditure, as in agriculture and in social services;
- 8) strengthening the co-operative sector of the economy through assistance in managerial and technical personnel and the establishment of cooperative financial, marketing, and other institutions.

This statement of administrative tasks is by no means exhaustive. Although each task constitutes a theme by itself, the various undertakings have to be viewed together as interdependent elements in the execution of the plan. In carrying out these tasks, it

CHAPTER XXI

is essential that there should be sufficient coordination in policy and programs in different sectors of the economy to accomplish the objectives and targets set by the plan.

In order to achieve the objectives of the plan and to meet the tasks involved the Jordan Civil Service Department must be strengthened. Over the period of five years covered by the Economic Development Plan, the intention is to reorganize the Civil Service Department on a strictly functional basis, so that the main objectives of the Department in the field of public administration can be attained.

To that end it is considered that the Civil Service Department should be divided into six functional divisions, each of which would be adequately staffed and headed by an official of appropriate status. Three of these Divisions — the Recruitment Division, the Training Division, and the Organization and Methods Division — will be grouped under the control of an official of high status, designated Assistant Permanent Secretary, and the other three — the Personnel Division, the Legal Division and the Planning and Coordinating Division — will be similarly grouped under the control of another Assistant Permanent Secretary.

The Recruitment Division and the Training Division will be concerned with the early stages of the civil servant, that is his appointment, and his training either before he begins service or during his service. The Organization and Methods Division will be concerned with the improvement of efficiency in Ministries and Departments of the Government generally.

The Personnel Division will be concerned with the day-to-day life of a civil servant, i.e. with his promotion, discipline, leave transfer and other terms and conditions of service. The Legal Division will deal with legal and legislative matters pertaining to the Civil Service, and the Planning and Coordination Division will concentrate upon planning the further development of the Civil Service Department in the general interests of the civil service as a whole.

The two Assistant Permanent Secretaries will work under the control of a Permanent Secretary to whom they will submit such matters as are concerned with policy and principle and as do not fall within the category of routine cases or cases governed by policy and principle.

The Permanent Secretary in turn will work under the control of the Head of the Civil Service Department to whom he will submit

THE PROGRAM FOR GOVERNMENT ADMINISTRATION

such matters as are concerned with the institution of fresh policy and principle and other matters which he considers worthy of consideration.

The Permanent Secretary will in addition be in direct control of another Division of the Civil Service Department, the Administration Division which will be concerned with all matters pertaining to the proper administration of the Department's affairs.

Finally, the Head of the Civil Service Department will be responsible for the general efficiency of the whole Department and will take any steps necessary to insure a high level of performance by all divisions.

In addition to the above administrative units there will be a Civil Service Selection Board as laid down in the Civil Service law, whose main functions will be to arrange for competitive examinations to test the suitability of applicants for entering to the Civil Service, to lay down appropriate principles and methods for the recruitment of civil servants, to provide the best qualified available persons to fill vacancies in Ministries and Departments on the basis of competitive examinations and other tests, and to take steps necessary to ensure that persons entering the Civil Service are of good character and are not objectionable on security grounds.

A listing of the staff that will be required by the Civil Service Department under the Five-Year Plan is presented in Appendix A. The total number of staff members called for is 78 which is approximately two-and-one-half times the size of the present staff of the Department. This expansion will require an increase in the Department's budget from the present level of JD 19,000 to JD 42,204.

In addition to strengthening the Civil Service Department, the Five-Year Program for Economic Development provides for such expansions in the staff of individual Ministries, Authorities, Departments, and Institutions as will be required to enable them to meet effectively the added burdens and responsibilities placed upon them. The expansion in operating expenses, which are composed primarily of increased staff costs, programmed for the government sector in the fiscal year 1963 is JD 686,500, and by 1967 the increase in governmental operating expenses above present levels is scheduled to reach JD 1,765,100.

Finally, it should be emphasized that the technical staff of the Jordan Development Board must be increased substantially to

CHAPTER XXI

enable it to meet the heavy responsibilities which are placed upon it during the period of implementation of the Five-Year Program. Additional staff required includes two persons at the Ph.D. degree level, three persons at the M.A. degree level, and five persons at the B.A. degree level. In view of the extremely heavy demands upon the Planning Division during the first year of the Program, six members should be added to the staff during the fiscal year 1963, and the remaining four should be added as quickly as possible thereafter.

It is recognized that in view of the shortage of people in Jordan with advanced-degree qualifications in fields which would be appropriate for work in the Planning Division, it may be necessary to add staff members with less than the desired level of formal academic training. Where this is the case careful consideration should be given to the practical experience of potential candidates. In addition staff members who have demonstrated an excellent potential for further development should be sent abroad for additional training.

THE PROGRAM FOR GOVERNMENT ADMINISTRATION

APPENDIX A

The Proposed Staff for the Civil Service Department
of Jordan according to the Five-Year Plan.

<u>T i t l e</u>	<u>Salary or Grade</u>	<u>No.</u>
1. Head of the Civil Service Department	130 Dinar per month	1
2. Permanent Secretary	1 A	1
3. Assistant Permanent Secretary	2	2
4. Division Head	3	2
5. Division Head	4	4
6. Assistant Division Head	4	2
7. Assistant Division Head	5	4
8. Training Officer	5	2
9. O & M. Officer	5	2
10. Classification Officer	5	1
11. Promotions Officer	5	1
12. Appeals & Grievances Officer	5	1
13. Test Development Officer	5	1
14. Administrative Officer	5	1
15. Examining Officer	6	1
16. Roster Officer	6	1
17. Classifiers	6	3
18. Chief Typist	6	1
19. Assistant Administrative Officer	6	1
20. Clerk	7	8
21. Clerk	8	13
22. Typist	8	1
23. Clerk	9	8
24. Typist	9	1
25. Clerk	10	7
26. Typist	10	1
27. Tel. Operator	15 D.	1
28. Messengers	12 D.	6
	<u>Total</u>	<u>78</u>

THE PROGRAM FOR STATISTICS

Jordan has made considerable progress in its collection of statistics, but faces the need for a great expansion of its program if its statistics are to furnish necessary assistance to rational public and private decision making. For example, the Five-Year Program should have a firmer basis in national income accounting but no figures are available beyond 1959.

The proposals for statistics that follow provide:

- For expert technical advice in many areas: labor force, agricultural production and marketing, price statistics, etc.
- For close coordination with the Development Board (particularly on national income estimates) and the ministries, who will bear the major responsibility for the collection of some and the use of most of the statistics.
- For the first complete agricultural census, and a second expanded industrial census.
- For expansion in staffing to better discharge its functions.
- For the training of the staff, abroad when necessary.

This program contains seventeen proposals, the high number being an indication of the importance of statistics in implementing and revision of the Five-Year Program. The subjects covered are:

CHAPTER XXII

- S 1 Labor Force Statistics
- S 2 Annual National Income Survey
- S 3 Agricultural Production Statistics
- S 4 Agricultural Census for Crop Year 1962-63
- S 5 Agricultural Marketing Statistics
- S 6 Industrial Census for 1964-65
- S 7 Retail and Wholesale Price Statistics
- S 8 Health Statistics
- S 9 Automobile Registration Statistics
- S 10 Income Tax Statistics
- S 11 Construction Statistics
- S 12 Electricity Statistics
- S 13 Municipal Water Supply Statistics
- S 14 Establishment of a Statistical Training Centre
- S 15 Statistical Planning
- S 16 Staffing, Organization and Budget of Statistics Dept.
- S 17 Foreign Training in Statistics

Specific Proposal No. S 1

- a proposal for Labor Force Statistics in Jordan.
- to be done:
 - 1) Prior to August 31, 1962, the Department of Statistics (in cooperation with the Jordan Development Board) shall make every effort to secure a commitment from the United Nations to provide one suitable expert in Labour Force Statistics, to work within the Statistics Department for a period of one year.
 - 2) A Committee of six, ((1) Director of Statistics — Chairman, (2) UN expert, (3) representative of Jordan Development Board, (4) representative of Ministry of Social Affairs, (5) representative of Ministry of National Economy and (6) representative of Ministry of Agriculture) shall be constituted not later than one month after the arrival of the UN expert. This Committee shall decide on the best way to organize the collection and processing of labor statistics in Jordan. Wherever possible use shall be

THE PROGRAM FOR STATISTICS

made of data already being collected by the Government Ministries and Departments, or of survey regularly carried out which might be enlarged to produce the desired Labour Force Statistics.

- 3) The UN expert shall supervise the organization of whatever sections are needed in any ministries and departments to collect and process Labor Force Statistics.
- 4) The Department of Statistics shall publish the Labor Statistics recommended by the Committee.
 - costs : UN expert — JD 7,000. Data collection and processing costs indicated below in **Specific Proposal No. S. 16.**
 - financing : Foreign expert : UN and budget, Government of Jordan.

Specific Proposal No. S 2

- a proposal for Annual National Income Surveys (including Industrial Sample).
- to be done:
 - 1) The Department of Statistics shall conduct an annual national income survey, working closely with the Planning Division, Jordan Development Board on the implications of its findings for the Five-Year Program. Wherever possible the Department shall rely on statistical data which it is collecting itself on a regular basis, or use shall be made of data already being collected by Government ministries and departments, such as the Ministry of Agricultural Marketing, the Road Transport Commission etc. It is also of utmost necessity that the Dept., as part of its work in estimating national income, shall carry out an annual survey of a sample of industrial establishments in the years when a complete industrial census has not taken place (See **Specific Proposal No. S 6.**)
 - 2) A Permanent Committee of seven, ((1) Director of Statistics — Chairman, (2) representative of Department of Statistics, (3) representative of Ministry of National Economy, (4) representative of Ministry of Agriculture, (5) representative of Ministry of Social Affairs, (6) represen-

CHAPTER XXII

tative of Bureau of Agricultural Marketing, and (7) representative of the Jordan Development Board) shall be established to advise the Department on the Annual National Income Survey. This Committee shall meet at least twice per year, once to make plans for the next survey and once to review the work of the already complete survey.

- Costs and financing : None not covered in Specific Proposal No. S 16.

Specific Proposal No. S 3

- a proposal for the improvement of the Agricultural Production Statistics.

— to be done :

- 1) Prior to March 1, 1962, the Ministry of Agriculture shall make every effort to secure a commitment from UN to provide one suitable foreign agricultural statistical expert, for a period of two to three years, to work with the Ministry of Agriculture (under this program), the Department of Statistics (under Specific Proposal No. S 5), and also to cooperate with officials of the Bureau of Agricultural Marketing.
- 2) The UN expert shall submit written comments and recommendations to the Ministry of Agriculture for the improvement of statistics of areas planted, crop forecasts, actual production, and any other statistics collected by the Ministry of Agriculture.
- 3) A Committee of six, ((1) the Under-Secretary of Agriculture — Chairman, (2) Chief of the Agricultural Statistics Section in the Ministry, (3) UN expert, (4),(5) two Representatives of the Bureau of Agricultural Marketing, and (6) Representative of the Jordan Development Board), shall be constituted not later than one month after the receipt of the UN expert recommendations, to study the implementation of the expert's recommendations. This Committee shall also consider the best way of publishing the statistics obtained by the Ministry of Agriculture.

THE PROGRAM FOR STATISTICS

- costs : UN expert estimated at JD 3,500 for 1962-63, JD 7,000 for 1963-64, JD 7,000 for 1964-65.

Implementation of recommendations: estimated at JD 1,000 per annum starting fiscal year 1963.

- financing : Budget, Government of Jordan.

Specific Proposal No. S 4

- a proposal for Agricultural Marketing Statistics.

— to be done:

- 1) Prior to August 30, 1962, the Bureau of Agricultural Marketing shall make every effort to secure a commitment from the British Middle East Development Division to provide a foreign expert for a minimum period of one year.
- 2) The expert shall supervise the establishment of the Bureau of Agricultural Marketing Statistics Section. This section shall undertake:
 - a) Collection and dissemination of statistics concerning the volume of transactions in local markets, as well as farm prices and wholesale prices for agricultural produce. The collection of statistics on retail prices for agricultural produce shall be the responsibility of the Ministry of Agriculture.
 - b) Collection and dissemination of information concerning agricultural exports. It will not, however, collect information on the anticipated or actual production, this being the responsibility of the Ministry of Agriculture under Specific Proposal No. S 3.

- costs : Foreign expert : JD 7,000 per annum. (JD 3,500 in 1963, JD 3,500 in 1964).

Staffing cost estimates of the section is JD 2,500 per annum. (It is assumed that the Bureau will insist on certain administrative reforms in municipal markets which should result in the obtaining of raw statistical data without any additional effort on the part of the Bureau. Staff would, therefore, be needed only in the central office of the Bureau and not in local markets).

CHAPTER XXII

Other costs: Budget, Government of Jordan (the entire costs of the Bureau's activities being roughly covered by fees).

- financing: Foreign expert — external grant (Probably from UN Special Advisors' Fund).

Specific Proposal No. S 5

- a proposal for Agricultural Census for Crop Year 1962-63

— to be done:

- 1) Enumeration of the complete agricultural census of the Crop Year 1962-63 shall begin in November 1963 (a slight modification of this date may be necessitated in order not to conflict with that of the general population census). The UN Advisor obtained under **Specific Proposal No. S 3** shall give technical supervision to the program.
- 2) The Statistics Department, prior to the arrival of the UN Expert, shall prepare written tentative plans for the Census. These plans shall include:
 - a) A draft questionnaire and instructions to enumerators.
 - b) A time-table for designating enumeration districts, training enumerators, testing the questionnaire, enumeration, checking, tabulation and publication.
 - c) An explicit consideration of the extra staff and expenditures needed for each operation.
- 3) An advisory Committee of six, ((1) Director of Statistics — Chairman, (2) Chief of the Agricultural Statistics Section in the Ministry of Agriculture, (3) Representative of Department of Agricultural Research, (4) Representative of Jordan Development Board, (5) Representative of Bureau of Agricultural Marketing, and (6) UN expert) shall meet not later than one month after the arrival of the UN expert, to consider the plans submitted by the Department of Statistics and modifications proposed by the UN advisor, or by any other member of the committee.
- 4) The Statistics Department (in cooperation with its foreign experts) shall submit to the Jordan Development

THE PROGRAM FOR STATISTICS

Board after the completion of the Agricultural Census, their detailed final costs.

- costs: Preliminary estimates for purposes if this program are JD 60,000 in 1963-64; JD 20,000 in 1964-65.
- financing: External sources — grant.

Specific Proposal No. S 6

- a proposal for Industrial Census in 1964-65.

— to be done:

- 1) Prior to January 15, 1964, an advisor Committee of five, ((1) Director of Statistics — Chairman, (2) one other representative of the Department of Statistics, (3) representative of Ministry of National Economy, (4) representative of Ministry of Social Affairs and (5) representative of Jordan Development Board shall meet to consider the plans for the Industrial Census of 1964.
- 2) The Statistics Department shall carry out the census using whatever expert advice is available to it.
- 3) Prior to June, 30, 1964, the Department shall submit a draft questionnaire to the advisory committee for approval.
- 4) The questionnaire, raised in the light of the comments of the advisory committee, shall be tested in a pilot survey prior to August 15, 1964, and shall be in final form prior to September 1, 1964.
- 5) Prior to January 30, 1965, training of enumerators shall be completed and enumeration of the complete Industrial Census of the year 1964-65 shall begin in February 1965 (a slight modification of this date may be necessitated in order not to conflict with that of the general population census).

- costs: JD 5,000 in 1964-65; JD 5,000 in 1965-66.
- financing: External sources — grant.

Specific Proposal No. S 7

- a proposal for Retail and Wholesale Price Statistics, Family Budget Enquiries.

CHAPTER XXII

— to be done:

- 1) Prior to April 1, 1962, the Department of Statistics shall make every effort to secure a commitment from USOM/J to provide one suitable expert in price statistics, to stay in Jordan for a period of at least six months.
- 2) The USOM/J expert shall supervise the improvement of the collection of wholesale and retail price statistics, aiming at the semi-monthly collection and publication of statistics on prices of certain important commodities, and the collection of material which would enable the construction of a cost-of-living index. The Department shall rely, for figures on wholesale agricultural prices, on the work of the Bureau of Agricultural Marketing.

— costs : Expert : JD 3,600.

Costs of implementation of recommendations: none not covered in Specific Proposal No. S 16.

— financing : Expert : External grant (USOM/J).

Specific Proposal No. S 8

— a proposal for Health Statistics.

— to be done:

- 1) A Committee of five, (1) Director of Statistics — Chairman, (2) Representative of the staff of the Department of Statistics, (3) an advisor to the Statistics Department, (4), (5) two representatives of the Ministry of Health) shall meet prior to April 15, 1962. This Committee shall undertake:
 - a) The decision of what additional health statistics it is desirable to publish in the Quarterly Bulletin of Statistics and in the Statistical Year Book.
 - b) Discussion of ways for the improvement of the collection and tabulation of Health Statistics.
 - c) Decisions on deadlines, by which the Statistics Department shall receive forms and statistics in order to meet the publication dates.

THE PROGRAM FOR STATISTICS

- 2) The Ministry of Health shall be informed of the Committee's decisions and shall try to meet the deadlines decided upon in c., above.

— costs and financing: Current Budget, Government of Jordan.

Specific Proposal No. S 9

— a proposal for Automobile Registration Statistics.

— to be done:

- 1) The Director of the Department of Traffic shall make available to the Department of Statistics all statistics pertaining to automobile registration.
- 2) Prior to April 1, 1962, a Committee of three, (1) Director of Statistics — Chairman, (2) Advisor to the Statistics Department, and (3) Director of the Department of Traffic) shall meet to consider the presentation of automobile registration statistics. This Committee shall also decide on modifications to the method of collecting information which will facilitate the desired presentation.

— costs and financing: Current Budget, Government of Jordan.

Specific Proposal No. S 10

— a proposal for Income Tax Statistics.

— to be done:

- 1) The Director of Income Tax shall make available to the Statistics Department, all statistics pertaining to Income Tax.
- 2) A Committee of three (1) Director of Statistics — Chairman, (2) Advisor to Statistics Department, and (3) Director of Income Tax), shall meet prior to March 1, 1962, to consider the presentation of Income Tax Statistics. This Committee shall also decide on modifications to the method of collecting information which will facilitate the desired representation.

— costs and financing : Current Budget, Government of Jordan.

CHAPTER XXII

Specific Proposal No. S 11

- a proposal for Construction Statistics.
- to be done:

- 1) Prior to April 15, 1962, a Committee of seven ((1) Director of Statistics Department — Chairman, (2) Advisor to Statistics Department, (3) Representative of Ministry of Public Works, (4) Representative of Ministry of National Economy, (5) Representative of Jordan Development Board, (6) & (7) Representatives of the Municipalities of Amman and Jerusalem) shall meet to consider the best way of obtaining statistics concerning residential, commercial, industrial and government construction.
- 2) Prior to May 31, 1962, the Director of Statistics shall submit a report to the Jordan Development Board, explaining what steps will be taken to obtain statistics on construction and in what form these statistics shall be published.

- costs : Staffing of Statistics Department under **Specific Proposal No. S 16**.
- financing: Budget, Government of Jordan.

Specific Proposal No. S 12

- a proposal for Electricity Statistics
- to be done:

Prior to March 30, 1963, a Committee consisting of two representatives of the Statistics Department and two representatives of the Electricity Board shall meet and undertake:

- a) Choice of ways of obtaining and presenting electricity statistics, including, by company, the installed capacity and actual production, the number of consumers by type and amount of consumption, and electricity rates.
- b) Submission of a written report to the Jordan Development Board prior to May 30, 1963, explaining the necessary steps of obtaining and publishing these statistics.

THE PROGRAM FOR STATISTICS

- costs and financing : None not covered in **Specific Proposal No. S 16**.

Specific Proposal No. S 13

- a proposal for Municipal Water Supply Statistics.
- to be done:

- 1) Prior to April 20, 1962, a Committee of eight ((1) Representative of Central Water Authority — Chairman, (2) and (3) two Representatives of the Statistics Dept., (4) Representative of the Ministry of Interior, (5) Representative of the Jordan Development Board, (6) and (7) two Representatives of the Municipalities of Amman and Jerusalem and (8) Representative of the Municipal Loan Fund) shall meet to consider the best way of obtaining and presenting municipal water supplies statistics. The statistics shall include the number of consumers by type, monthly consumption of water by consumer, and summaries of construction and other investment made by municipal water departments.

- 2) The Statistics Department shall publish in its quarterly bulletin and statistical year book such figures on municipal water supplies as recommended by the Committee.

- costs: Estimate per annum for the agency responsible for collection and tabulation of the figures (probably the Central Water Authority) is JD 800.
- financing: Budget, Government of Jordan.

Specific Proposal No. S 14

- a proposal for the establishment of a Statistical Training Center.
- to be done:

- 1) A Statistical Training Center shall be established in the Department of Statistics along the lines outlined in the memorandum of Mr. Young (Ref. T.Y. 4).
- 2) Prior to September 15, 1962, the Director of Statistics shall prepare draft legislation for the establishment of the center and for granting special financial recognition to those

CHAPTER XXII

receiving its diploma. Consultation with Representatives of the Fond Foundation in Beirut is recommended before submission to the Council of Ministers.

- 3) A Board of Directors of eight, (1) Director of Dept. of Statistics — Chairman, (2) Representative of Ministry of Agriculture, (3) Representative of Ministry of National Economy, (4) Representative of Ministry of Education, (5) Representative of Ministry of Health, (6) Representative of Ministry of Social Affairs, (7) Representative of Bureau of Agricultural Marketing, and (8) Representative of Jordan Development Board) shall be established to advise on the general policy to be followed by the center.

— costs: Capital outlay of JD 2,000 and annual operating costs of JD 3,070 (according to Mr. Young's calculations).

— financing: External grant from private foundation (presumably Ford).

Specific Proposal No. S 15

— a proposal for Statistical Planning.

— to be done:

- 1) The Director of Statistics shall make every effort to secure a commitment from the UN or any other foreign agency to provide one suitable expert in statistical planning to work within the Statistics Department and in cooperation with all the other experts suggested in the program during the execution of the Five-Year Plan.
- 2) The Department of Statistics, with the assistance of the expert in statistical planning, shall prepare a plan for the flow of work in the Department so that the regular collection and processing of data, as well as special enquiries, can be carried out smoothly and with maximum efficiency. In the case of special enquiries the plan shall show the period for planning the study, testing the questionnaire, enumeration, and processing the returns. It shall also show the staff required for each operation. Every effort shall be made to plan the work in such a way that a given number of enumerators, coders, tabulators, and punching machine operators shall be kept continuously at work and

THE PROGRAM FOR STATISTICS

that temporary additions to the staff of the Department shall be minimized.

— costs: Foreign expert: JD 7,000 per annum for period of Five-Year Program.

— financing: External sources-grant.

Specific Proposal No. S 16

— a proposal for Staffing, Organization, and Budget of Statistics Department.

— to be done:

- 1) The Director of Statistics (in cooperation with the Statistical Planning Advisor and other advisors whom he may wish to consult, and in the light of the plan for statistical work prepared under Specific Proposal No. S 15) shall undertake:

- a) Preparation of a complete staffing chart and list of job descriptions for the Department over a five-year period.

- b) Preparation of budgetary estimates for the Department's work over the next five years. The estimates shall show in detail the cost of the regular staff of the Department, expenditures on temporary staff required for special enquiries and costs of transportation, travelling allowances, statements and publications, purchase and maintenance of machinery, and other costs.

- c) Preparation of office space requirements estimates over a five-year period.

- 2) The Statistics Department shall submit to the Jordan Development Board, the plan of work under Specific Proposal No. S 15, the staffing chart, job description, budget estimates and estimates of office space requirements.

— costs: Staffing — The employment of the following number of employees by the Statistics Department is presently estimated as necessary to facilitate its execution of the Five-Year Plan:

CHAPTER XXI

Four statistical specialists, four other university graduates, twenty-two at matriculation level or above, twenty punchers, coders etc., on daily salary. Total staffing cost: JD 19,650. Other costs (machine purchase and maintenance, publications, travel and transportation, etc.) : JD 9,800. Total for 1963 estimated at JD 15,000; for 1964, JD 25,000; for subsequent years, JD 29,450.

- financing : Budget, Government of Jordan.

Specific Proposal No. S 17

- a proposal for Foreign Training in Statistics.
- to be done:

The Statistics Department shall submit to the Jordan Development Board, a detailed program of the foreign training which shall be needed by its employees, indicating:

- Specifications of the type of training required and suitable places where such training can be obtained.
 - From where the trainees are to be obtained and what their qualifications are likely to be.
 - The fact that elementary statistical training shall be available in Jordan under **Specific Proposal No. S 14** and that after its operation for a period of two years a few of its graduates may be ready for foreign training.
 - That the work can be carried out satisfactorily by the Department in the absence of such trainees who are members of the staff of the Statistics Department.
- costs : Estimates per annum (in thousands of JD's) is 2,300.
 - financing : External Sources — Grants. (Supplemented by the Budget, GOJ, if necessary).

CHAPTER XXIII

THE FINANCIAL SUMMARY

The estimated development expenditures under the Five-Year Program are JD 127,320,000.

- these include estimates of the capital requirements for both government and private investment in construction, equipment, and working capital.
- they also include expenditures over present levels in the developmental areas of government activity broadly defined to include those activities such as education, health and social affairs which are concerned with the development of Jordan's human resources.

One hundred twenty-seven million dinars is a large sum but the funds can be obtained if:

- the Jordan government through fiscal reforms such as those recommended by the Royal Fiscal Commission raises its revenues and controls operating expenditures.
- friendly nations and international agencies give careful consideration to Jordan's needs and possibilities, and the Jordan government in turn follows through the steps required to develop fully the plans for major projects.
- the Jordan people demonstrate their faith in the economic future of Jordan by increased savings and domestic investment.

High Priority for Development of Key Resources — Before presenting the summaries of the financial requirements by programs,

CHAPTER XXIII

by types of expenditure, and by sources of financing it is important to stress the underlying strategy of the Five-Year Program. It is to concentrate, particularly in the first three years, on developing Jordan's resources in the three high priority areas of agriculture, including the requisite water requirements; industry, particularly in potash development and mining; and tourism. Development of supporting services such as electricity, transport, communication and of human resources through education, health, and social welfare programs are of fundamental importance for balanced development as a whole and are provided for; but Jordan's first economic problem is to make the maximum use of its limited water, its known minerals and its extraordinary tourist attractions. Accordingly over half of the five-year development expenditures and approximately 60% of those for the first three years, are concentrated in these three areas as shown below:

- Agriculture (including all water development except for municipal supplies):
 - For three years: JD 23,105,000
 - For five years: JD 36,235,000
- Industry & mining (including transport facilities for potash)
 - For three years: JD 15,520,000
 - For five years: JD 21,645,000
- Tourism (including International Airport facilities)
 - For three years: JD 7,215,000
 - For five years: JD 9,709,000
- Total for three years: JD 45,840,000 (58% of total)
- Total for five years: JD 67,489,000 (53% of total).

Recognition of Need for Experts, Studies and Training. — Of necessity the financial requirements for a number of proposals could only be roughly approximated. For some proposals (such as for fish ponds and the Aqaba railway) no financial requirements have been included in this summary either because of lack of data on costs or too limited evidence on economic desirability. The Five-Year Program contains many proposals which should result in revisions of its own expenditure estimates by calling for studies and specific plans in key areas. It sets up procedures and dates for de-

THE FINANCIAL SUMMARY

veloping and implementing the information. Altogether JD 3,654,000 is allocated for the work is concentrated in the first years.

Classes of Expenditures — Five classes of expenditures are distinguished in this financial summary:

- Expenditures for experts and studies that are needed for the detailed assessment, plans and designs that will serve to implement the proposals. (5-year total: JD 3,654,000).
- Expenditures for training manpower — competent managers, administrators, and professionals. These are in addition to the needs for more general and vocational education. (5-year total: JD 887,000).
- Expenditures that constitute regular additions to the yearly budgets such as requirements for continuing promotional expenditures for tourism, increased staff, and increased road maintenance. (5-year total: JD 7,739,000).
- Capital expenditures by the government for roads, buildings, irrigation projects etc. (5-year total: JD 54,627,000).
- Capital expenditures by private individuals and firms (all corporations unless wholly owned by the government are considered to be in the private sector). (5-year total: JD 60,414,000).

Classification by Source of Funds — A three-fold classification is used in the summary tables:

- Government of Jordan — this category includes funds raised by taxes and users fees, both by the central government and the municipalities. (5-year total: JD 21,410,000).
- Private Jordan — this includes the funds advanced and the direct investment of all private sources, predominantly Jordanian. All corporations except those totally owned by and operated as agencies of the government are included in the private sector. (5-year total: JD 46,980,000).
- External Assistance — Both loans and grants from foreign governments and international agencies, and occasionally foundations — are included in this heading. For developmental purposes, major reliance is placed upon loans, but a basic assumption for the program is continuing grant as-

CHAPTER XXIII

assistance for budget support at present rates. (5-year total : JD 58,930,000).

Significance of the Doub's Classification of Expenditures and Sources of Funds. — Almost half of the total development expenditures, and well over half of the capital investment expenditures are estimated to be made by private firms and individuals. Much of the public investment, for example, in water projects is designed to facilitate private development. This rate of development of the private sectors (and the three key sectors of agriculture, tourism, and industry — mining are all private) is only possible with the government and external sources supplying some of the funds for private investment. The private sector even with some foreign investment will be hard-pressed to supply the JD 46,980,000 estimated for it as a source of funds.

For several of the programs the estimates for financing differ from the estimate for expenditures. These differences result from the fact that the proposals and institutions designed for financing are placed in one program and the scope of the expenditure activity extends over several. For example, it is anticipated that the Industrial Development Corporation proposed under the Program for Industry, will make some advances for tourist facilities. The sources of such funds for the I.D.C. are shown in the industry program, while such expenditures are shown in the tourist program. A subtraction from the industrial program as a source of funds and an addition to the financing side of the tourism program must then be made to indicate the basic equality between financing and expenditures. Such adjustments are shown in Table 23-5 entitled Notes and Reconciliation.

These financial summary tables are presented at the end of this chapter:

Table 23-1	:	Estimated Developmental Expenditures for Five Year Program: Public and Private Sectors by Program and by Years.
Table 23-A	:	Estimated Developmental Expenditures by Types and by Sources of Financing: Total for the Five Years — Fiscal 1963 through Fiscal 1967.
Table 23-2B	:	Same for Fiscal 1963
Table 23-2C	:	> > Fiscal 1964
Table 23-2D	:	> > Fiscal 1965
Table 23-2E	:	> > Fiscal 1966
Table 23-2F	:	> > Fiscal 1967
Table 23-3	:	Notes and Reconciliation

THE FINANCIAL SUMMARY

The Financial Feasibility of the Program

The financial demands of the development program upon the Government of Jordan budget should be well within the fiscal capacity of the growing economy with an improved fiscal system. Exclusive of municipal expenditures, the amounts called for from fiscal 1963 through fiscal 1967 are JD 3,605,000, JD 4,483,000, JD 4,663,000, JD 4,433,000 and JD 4,232,000. These will not all be additional appropriations since present projects will be phased out, to the extent of about one million dinars in 1963 and two million dinars by 1965.

The projected private investment will be a challenge, but not an impossible one. Savings of individuals and firms in 1959 were estimated at JD 4,500,000 and probably are currently around five million dinars (these figures as residuals in national income analysis may be underestimates).

The program calls for JD 8,527,000 in private investment in fiscal 1962-3 and for JD 46,980,000 in the 1963-7 period. The apparent difference can be made up by increased Jordanian savings, by private foreign investment, and by agricultural improvements not requiring cash outlays. If these prove insufficient, the government should be ready to use its own assets and income to meet any deficiency.

The external assistance called for assumes the continuation of JD 16,000,000 a year in budget support in addition to predominantly loan assistance of JD 10,361,000 in fiscal 1963 and JD 58,930,000 for the five-year period. Recognition abroad that planned development will do much to decrease long-run dependence on foreign assistance should help in making this amount available. Purposeful effort by Jordanians with the aid of foreign technical assistance will be necessary in developing sufficiently specific appraisals and designs for loan negotiations on proposals.

Economic Estimates of the Results of the Program

What can Jordan expect in terms of the three basic objectives laid out for the program: expanded gross domestic product, increased employment, and an improved balance of trade? Admittedly the answers given here to this three-part question are very approximate due to the limits of current statistics. After the completion of the current census and with the planned expansion of both the Department of Statistics and the Planning Division, high priority should be given to the continuing reconsideration of these estimates.

CHAPTER XXIII

Estimates for 1959, 1961 and 1967 of the Gross National Product by components is given in Table 23-4. The 1959 data are based on the National Income for Jordan in 1959 (Department of Statistics). The 1961 figures are extrapolations of these. The estimates for 1967 are based on the expenditures called for in the Five-Year Program. The ratios of 1967 to 1959 expenditures are used, since the 1959 study is the most recent available.

Table 23-4
ESTIMATED COMPONENTS OF JORDAN'S GROSS NATIONAL PRODUCT
(all figures in 000's of JD) 1959, 1961 & 1967

	1959	1961	1967	Ratio 1967/1959
Agriculture	10.5	(17.5)	27.0	2.5
Industry (Manufacturing Mining, Electricity)	7.9	(8.5)	20.0	2.5
Construction	3.7	(4.0)	7.5	2.0
Transport	9.7	(10.5)	12.5	1.5
Wholesale & Retail & Banking	16.2	(17.5)	25.0	1.5
Ownership of Buildings	4.2	(5.0)	7.5	1.75
Public Administration & Defense	16.1	(17.0)	18.0	1.125
Services	6.0	(7.0)	15.0	2.5
TOTAL: Gross Domestic Product at Factor Cost	74.3	(86.5)	132.5	1.75
PLUS: Indirect taxes	7.5	(8.5)	11.5	1.5
EQUALS: Expenditure on Gross Domestic Product	81.8	(95.0)	144.0	1.75
PLUS: Factor Income from abroad	1.0	(1.0)	1.0	1.0
EQUALS: Gross National Product	82.8	(96.0)	145.0	1.75

The greatest growth is expected in the industrial sector (2½ times) and services (2½ times), reflecting the high priorities given to mineral and tourist development. Agriculture in 1967 is also estimated at 2½ times the 1959 level, which, however, was atypically low due to the drought. The assumption of little price change is made so that real gross domestic product is estimated at 1¼ the 1959 level, an annual growth rate of slightly under 10% from the approximated 1961 level.

THE FINANCIAL SUMMARY

Employment — Employment effects are estimated in Table 23-5 in which the base is the manpower study completed in early 1960, and whose totals were published with considerable reservation.

Table 23-5

	Manpower Survey 1960	Estimated 1967	Estimated Increase to 1967
Agriculture	150,000	175,000	25,000
Public Administration & Defense	75,000	82,500	7,500
Industrial workers	22,000	34,750	12,750
Building & Construction Workers	18,000	27,000	9,000
Commerce & Services	14,600	27,600	13,000
	279,600	346,850	67,250

The increase in Table 23-5 is quite probably low. An increase in the gross national product of the magnitude called for, allowing for a productivity increase of 5% per year, would indicate an increase of one-third in employment or some 90,000 workers, which this report takes as a maximum for the 1959-1967 period. Jordan's labor statistics should be greatly improved and with these improvements, a better projection of employment effects can be made.

Balance of Trade — The Five-Year Program should place Jordan in a substantially improved position in its balance of trade. Increases in exports (including tourism) estimated by various proposals in the program are:

Industry (primarily Potash and Phosphate)	JD 6,000,000
Tourism	JD 5,000,000
Agriculture	JD 4,000,000

In addition import substitute possibilities for current imports can be estimated for industry at JD 3,000,000 and for agriculture at perhaps another JD 2,000,000. If increased imports can be held to the level of planned external developmental assistance in 1967, about JD 8,000,000, the potential improvement is JD 12,000,000. This estimate probably should be taken as the maximum likely, since holding down imports too firmly in the period of the Five-Year Program can have a dampening effect on development and can raise definite problems of inflation.

TABLE 23 - 1

ESTIMATED DEVELOPMENTAL EXPENDITURES FOR FIVE YEAR PROGRAM
(Millions of Dinars)

Program	1963		1964		1965		1966		1967		Total	
	Total Public	Private Inv.	Total Public	Private Inv.	Total Public	Private Inv.	Total Public	Private Inv.	Total Public	Private Inv.	Total Public	Private Inv.
1 Agriculture	0.24	2.06	0.32	2.23	0.32	2.39	0.32	2.42	0.33	2.75	1.53	12.05
2 Fisheries	0.04	—	—	—	—	—	—	—	—	—	0.04	—
3 Forestry	0.12	—	0.20	—	0.23	—	0.25	—	0.26	—	0.04	—
4 Water Resources	5.34	—	7.26	—	6.64	5.21	5.21	—	2.35	—	24.20	—
5 Mining	0.06	0.35	0.06	0.50	0.06	0.55	0.05	0.55	0.04	0.60	0.10	2.55
6 Industry	0.12	2.95	0.13	4.15	0.13	4.26	0.13	1.86	0.14	2.63	0.65	15.95
7 Tourism	0.19	1.26	0.34	1.48	0.36	0.87	0.40	0.88	0.38	0.94	1.67	5.53
8 Electricity	0.05	0.67	0.04	0.72	0.03	0.47	0.03	0.28	0.03	0.28	0.12	2.42
9 Trade & Services	0.02	0.30	—	0.40	—	0.40	—	0.40	—	0.50	0.02	2.00
10 Transportation	2.35	0.10	3.50	0.10	3.16	0.20	1.07	0.40	1.74	0.60	11.82	1.40
11 Municipal Development	1.01	—	1.26	—	1.22	—	1.22	—	1.82	—	7.34	—
12 Education	0.38	—	0.63	—	1.15	—	1.51	—	1.60	—	5.27	—
13 Health	0.54	—	0.83	—	0.38	—	0.38	—	0.40	—	2.77	—
14 Social Affairs	0.13	—	0.23	—	0.33	—	0.44	—	0.56	—	1.69	—
15 Communications	0.49	—	0.70	—	0.89	—	0.90	—	1.21	—	4.19	—
16 Construction	0.02	3.50	0.13	3.60	0.26	3.70	0.41	3.80	0.55	3.90	1.38	18.50
17 Financial Institutions	0.02	—	0.03	—	0.03	—	0.03	—	0.03	—	0.14	—
18 Fiscal Program	0.05	—	0.02	—	0.01	—	0.02	—	0.02	—	0.09	—
19 Govt. Administration	0.11	—	0.05	—	0.05	—	0.05	—	0.05	—	0.24	—
20 Statistics	0.11	—	0.05	—	0.06	—	0.04	—	0.04	—	0.33	—
	11.30	11.19	15.80	13.18	15.26	12.84	12.97	10.99	11.57	12.20	66.91	60.40

Table 23 - 2 A

ESTIMATED DEVELOPMENTAL EXPENDITURE BY TYPES AND BY SOURCES OF FINANCING
TOTAL FOR FIVE YEARS - FISCAL 1963 THROUGH FISCAL 1967
(Thousands of dinars)

Program	EXPENDITURES						FINANCING						
	Expenditures in Public Sector			Expenditures in Private Sector			Govt. of Jordan		Private (mostly Jordan)		External Assistance		Total
	Experts & Studies	Trailing Oper.	Expanded Capital Inv.	Capital Inv.	Private Inv.	Expenditures	Total	Govt.	Private	Assistance	Total		
1 Agriculture	467	190	769	101	12,054	13,381	1,098	7,000	4,939	8	13,027		
2 Fisheries	8	—	—	35	—	43	35	—	8	—	43		
3 Forestry	235	16	99	709	—	1,049	853	—	206	1,059	2,108		
4 Water Resources	1,681	50	541	23,752	—	26,200	5,700	—	20,644	26,204	52,848		
5 Mining	178	16	99	—	2,550	2,843	174	1,300	1,369	—	2,843		
6 Industry	160	207	787	—	15,948	16,602	580	9,816	7,524	17,920	34,444		
7 Tourism	151	151	642	879	5,537	7,209	1,289	4,750	3,883	6,422	13,665		
8 Electricity	74	14	95	—	2,425	2,608	102	990	910	2,002	4,612		
9 Trade & Services	19	—	—	—	2,000	2,016	—	2,000	14	2,016	4,030		
10 Transportation	16	65	1,523	10,217	1,400	13,224	3,655	1,400	8,169	13,224	26,448		
11 Municipal Development	52	20	70	7,195	—	7,337	4,115	500	2,722	5,248	10,587		
12 Education	148	16	890	4,214	—	5,268	1,335	—	1,993	5,268	10,536		
13 Health	296	100	1,054	1,319	—	2,769	886	—	1,369	2,769	5,538		
14 Social Affairs	14	22	1,110	540	—	1,786	649	—	1,049	2,315	4,104		
15 Communications	—	100	41	4,049	—	4,198	510	—	5,680	4,190	9,878		
16 Construction	52	—	—	1,325	18,500	19,877	140	65	1,377	18,500	38,377		
17 Financial Institutions	—	—	90	52	—	91	52	—	39	91	180		
18 Fiscal Program	4	35	52	—	—	236	184	—	52	236	472		
19 Govt. Administration	70	12	253	2	—	337	148	—	189	337	674		
20 Statistics	3,653	887	7,759	54,627	40,414	122,320	21,410	46,980	58,930	127,310	249,630		

See Table 23 - 3. Notes and Reconciliation for analysis of differences in expenditure and financing and for other notes.
Government of Jordan financing includes municipalities in Water and Municipal Development Program - See Table 23 - 3.

Table 23. 2 B

ESTIMATED DEVELOPMENTAL EXPENDITURE BY TYPES AND BY SOURCES OF FINANCING

TOTAL FOR FISCAL 1963
(Thousands of dinars)

Program	E X P E N D I T U R E S					F I N A N C I N G			
	Expenditures in Public Sector			Private Capital Inv.	Total Expenditures	Govt. of Jordan	Private (mostly Jordan)	External Assistance	Total
	Experts & Studies	Training	Oper.						
1 Agriculture	71	37	101	26	2,059	138	1,100	999	2,237
2 Fisheries	8	—	35	35	43	35	—	8	43
3 Forestry	34	5	3	82	—	124	—	32	124
4 Water Resources	518	10	104	4,698	—	5,330	—	3,904	5,330
5 Mining	38	2	19	—	350	409	100	275	409
6 Industry	39	25	40	15	2,951	3,070	101	1,368	3,197
7 Tourism	37	52	100	1,264	—	1,456	150	1,125	42
8 Electricity	32	13	16	—	665	718	23	235	460
9 Trade & Services	15	—	—	—	300	315	100	300	14
10 Transportation	19	13	203	—	2,107	2,442	733	1,609	2,442
11 Municipal Development	—	—	10	995	—	1,005	575	180	1,005
12 Education	33	3	24	325	—	385	—	339	385
13 Health	79	24	121	319	—	524	66	477	543
14 Social Affairs	7	4	68	54	—	133	35	74	106
15 Communications	—	20	4	471	—	495	95	400	495
16 Construction	24	—	—	—	3,500	3,524	—	3,500	3,524
17 Financial Institutions	—	—	14	10	—	24	9	15	24
18 Fiscal Program	4	7	10	—	—	21	10	11	21
19 Govt. Administration	24	8	17	—	—	49	27	—	49
20 Statistics	25	2	82	2	—	111	19	—	111
	1,010	165	888	9,241	11,189	23,493	3,605	8,527	22,493

See Table 23. 3. Notes and Reconciliation for analysis of differences in expenditure and financing and for other notes.
Government of Jordan financing includes municipalities in Water and Municipal Development Program. - See Table 23. 3.

Table 23. 3 C

ESTIMATED DEVELOPMENTAL EXPENDITURE BY TYPES AND BY SOURCES OF FINANCING

TOTAL FOR FISCAL 1964
(Thousands of dinars)

Program	E X P E N D I T U R E S					F I N A N C I N G				
	Expenditures in Public Sector			Private Capital Inv.	Total Expenditures	Govt. of Jordan	Private (mostly Jordan)	External Assistance	Total	
	Experts & Studies	Training	Oper.							
1 Agriculture	105	37	150	26	2,233	256	205	1,350	1,018	2,474
2 Fisheries	7	5	17	114	—	261	141	—	60	201
3 Forestry	40	16	108	6,658	—	7,269	1,433	5,836	7,369	5,559
4 Water Resources	35	5	19	—	550	559	34	250	275	559
5 Mining	—	—	—	—	—	—	—	—	—	—
6 Industry	40	37	45	10	4,152	4,284	108	1,977	2,474	4,359
7 Tourism	31	31	93	213	1,477	1,814	293	1,275	44	1,612
8 Electricity	21	5	17	—	720	763	18	235	424	677
9 Trade & Services	—	—	—	—	400	400	—	400	—	400
10 Transportation	—	13	254	—	3,233	3,600	1,004	100	2,496	3,600
11 Municipal Development	38	5	15	1,200	—	1,258	735	250	273	1,258
12 Education	43	11	71	503	—	628	119	—	628	628
13 Health	79	24	164	559	—	826	119	707	826	826
14 Social Affairs	7	4	138	81	—	239	62	99	160	239
15 Communications	—	20	7	648	—	695	95	600	600	695
16 Construction	7	—	—	—	125	3,732	—	—	132	3,732
17 Financial Institutions	—	—	19	10	—	29	14	15	—	29
18 Fiscal Program	—	7	11	—	—	18	11	—	7	18
19 Govt. Administration	17	4	22	—	—	43	32	—	11	43
20 Statistics	18	2	57	—	—	77	29	—	48	77
	1,004	194	1,202	13,400	13,187	28,982	4,463	9,451	15,049	28,982

See Table 23. 3. Notes and Reconciliation for analysis of differences in expenditure and financing and for other notes.
Government of Jordan financing includes municipalities in Water and Municipal Development Program. - See Table 23. 3.

Table 23.2 D

ESTIMATED DEVELOPMENTAL EXPENDITURE BY TYPES AND BY SOURCES OF FINANCING

TOTAL FOR FISCAL 1965

(Thousands of dinars)

Program	EXPENDITURES						FINANCING			
	Expenditures in Public Sector			Private Capital Inv.	Total Expenditures	Govt. of Jordan	Private (mostly Jordan)	External Assistance	Total	
	Experts & Studies	Training	Expanded Oper.							
1 Agriculture	100	37	167	16	2387	237	1400	984	2621	
2 Fisheries	—	—	—	—	—	—	—	—	—	
3 Forestry	68	2	20	142	—	232	—	55	232	
4 Water Resources	412	10	113	5507	—	6642	1320	4722	6642	
5 Mining	35	5	19	—	550	609	300	275	609	
6 Industry	69	46	47	—	4257	4390	118	2765	4733	
7 Tourism	27	7	133	210	873	1243	300	750	1120	
8 Electricity	7	2	19	—	470	501	19	235	12	
9 Trade & Services	—	—	—	—	400	400	400	—	400	
10 Transportation	—	13	305	2844	200	3362	830	200	2332	
11 Municipal Development	14	5	15	1500	—	1534	835	—	1534	
12 Education	28	2	167	953	—	1150	256	—	894	
13 Health	55	22	265	280	—	522	231	391	622	
14 Social Affairs	—	4	213	108	—	325	114	105	207	
15 Communications	—	20	8	867	—	895	95	800	895	
16 Construction	7	—	—	250	3700	3957	—	257	3957	
17 Financial Institutions	—	—	19	10	—	29	14	15	29	
18 Fiscal Program	17	4	28	—	—	18	11	—	18	
19 Govt. Administration	14	2	42	—	—	49	38	—	49	
20 Statistics	824	184	1591	12687	12837	28123	4463	8955	14505	

See Table 23.3. Notes and Reconciliation for analysis of differences in expenditure and financing and for other notes.

Government of Jordan financing includes municipalities in Water and Municipal Development Program. See Table 23.3.

Table 23.2 E

ESTIMATED DEVELOPMENTAL EXPENDITURE BY TYPES AND BY SOURCES OF FINANCING

TOTAL FOR FISCAL 1966

(Thousands of dinars)

Program	EXPENDITURES						FINANCING			
	Expenditures in Public Sector			Private Capital Inv.	Total Expenditures	Govt. of Jordan	Private (mostly Jordan)	External Assistance	Total	
	Experts & Studies	Training	Expanded Oper.							
1 Agriculture	93	37	173	15	2621	2939	254	1550	964	
2 Fisheries	49	2	28	171	—	250	207	—	43	
3 Forestry	130	10	105	4969	—	5214	1102	4112	5214	
4 Water Resources	35	2	20	—	550	607	35	300	272	
5 Mining	—	—	—	—	—	—	—	—	—	
6 Industry	32	48	51	—	1956	2087	123	1811	458	
7 Tourism	27	177	190	979	1373	292	600	101	1193	
8 Electricity	7	20	20	—	285	312	20	143	7	
9 Trade & Services	—	—	—	—	400	400	400	400	400	
10 Transportation	—	13	355	704	400	1472	505	400	567	
11 Municipal Development	—	5	15	1700	—	1720	935	—	755	
12 Education	26	2	23	1215	—	1506	379	—	1127	
13 Health	42	17	235	235	—	383	221	171	383	
14 Social Affairs	—	4	300	135	—	439	174	192	261	
15 Communications	—	20	10	856	—	895	95	800	895	
16 Construction	7	—	—	400	3800	4207	—	3600	4207	
17 Financial Institutions	—	—	19	10	—	29	14	15	29	
18 Fiscal Program	—	7	11	—	—	18	11	—	18	
19 Govt. Administration	10	4	32	—	—	46	42	—	46	
20 Statistics	7	2	36	—	—	45	33	—	45	
	465	171	1856	16459	10991	23942	4433	9411	10098	

See Table 23.3. Notes and Reconciliation for analysis of differences in expenditure and financing and for other notes.

Government of Jordan financing includes municipalities in Water and Municipal Development Program. See Table 23.3.

Table 23.2 F
ESTIMATED DEVELOPMENTAL EXPENDITURE BY TYPES AND BY SOURCES OF FINANCING
TOTAL FOR FISCAL 1967
(Thousands of dinars)

Program	EXPENDITURES						FINANCING				
	Expenditures in Public Sector						Total Expenditures	Govt. of Jordan	Private (mostly Jordan)	External Assistance	Total
	Expenditures in Public Sector	Expenditures in Public Sector	Expenditures in Public Sector	Expenditures in Public Sector	Expenditures in Public Sector	Expenditures in Public Sector					
	Expenses & Studies	Training	Oper.	Capital Inv.	Private Civilian Inv.						
1	98	37	178	15	2,755	3,083	264	1,700	964	2,228	
2	1	—	—	—	—	—	—	—	—	—	
3	1	12	36	200	—	252	236	—	16	352	
4	130	13	110	2,100	—	2,350	460	350	1,890	2,350	
5	35	2	21	—	600	658	36	—	272	658	
6	32	50	57	—	2,632	2,771	131	2,450	458	3,039	
7	187	27	165	943	—	1,322	253	800	152	1,179	
8	7	—	22	—	285	314	22	142	7	314	
9	—	—	—	—	500	500	—	500	—	500	
10	—	13	406	1,328	600	2,347	584	600	1,163	2,247	
11	—	5	15	1,800	—	1,820	1,035	—	785	1,820	
12	18	—	1362	1,200	—	1,600	501	—	1,099	1,600	
13	42	14	265	75	—	386	239	—	157	396	
14	—	4	392	136	—	558	238	178	315	731	
15	—	20	12	1,178	—	1,210	130	—	1,080	1,210	
16	7	—	—	550	3900	4,457	—	3,900	557	4,457	
17	—	—	19	10	—	29	14	15	—	29	
18	—	7	11	—	—	18	11	—	7	18	
19	10	4	35	—	—	49	45	—	4	49	
20	7	2	36	—	—	45	33	—	12	45	
	427	170	2,164	8,803	12,215	23,779	4,232	10,635	8,912	23,779	

See Table 23.3. Notes and Reconciliation for analysis of differences in expenditure and financing and for other notes.
Government of Jordan financing includes municipalities in Water and Municipal Development Program. See Table 23.3.

THE FINANCIAL SUMMARY

Table 23.3
Notes and Reconciliation of Expenditures and Financing
(all figures in thousands of JD's)

A) Sources of financing for the Industrial Development Corporation are shown in the Program for Industry but expenditures are also expected in the Program for Tourism and for Electricity. The transfers are as follows:

	1963	1964	1965	1966	1967	Total
Industry to Electricity	—	86.2	235	142.5	142.5	606.2
Industry to Tourism	139.3	202.3	122.8	178.8	143.4	786.6
Total subtracted from Industry financing	139.3	288.5	357.8	321.3	285.9	1392.8

B) The Program for Social Affairs contains a contribution to financing in the paid-up capital and surplus of cooperatives. All advances of cooperatives are classified under either agriculture or industrial cooperatives.

	1963	1964	1965	1966	1967	Total
Social Affairs to Industry	12.3	13.5	14.8	16.3	17.9	74.8
Social Affairs to Agriculture	59	82.5	86.6	171.4	154.6	554.1
Total subtracted from Social Affairs financing	71.3	96.0	101.4	187.7	172.5	628.9

C) Municipal Water Development Projects are included under the Program for Water Resources and additional municipal financing is included under the head, Government of Jordan, to the extent shown below:

	1963	1964	1965	1966	1967	Total
Municipal Water Projects under Water Program	1060	1060	710	360	360	3550
Financing called for from Municipalities under Government of Jordan financing	901	1046	1029	1016	1116	5008
	367					

ERRATA

The Planning Division of the Jordan Development Board regrets that the pressure of a rapid printing schedule has permitted a number of typographical errors to remain uncorrected. The earliest possible printing was desired to permit the Ministries to take into account the provisions of the program in making final budget plans and to inform others concerned with Jordan's plans for economic development.

This Errata listing includes those errors which may cause misinterpretation. Line numbers from the top of the page are followed by small **t**; line numbers counting from the bottom of the page are followed by small **b**. Corrections for the tables are given at the end of the list.

Page	Line	Present Text	Corrected Text
14	16 t	six-year	five-year
14	21 t	six	five
15	6 b	JD 90 million for 1961 to approximately JD 144 million for 1967.	JD 96 million for the fiscal year 1961-2 to approximately JD 145 million for fiscal 1960-7.
15	5 b	60 per cent	over 50%
15	4 b	10 per cent	8 per cent
43	12 b	for the research program at its present level and for pro-	procedures for developing a coordinated research effort,
62	5-6 b	Director, Rural Development Department	Chief, Horticulture Section
62	6 t	Horticulture Section	Director, Rural Development Department
62	9 b	Director, Rural Development Department	Chief, Horticulture Section
62	8 b	Horticulture Section	Director, Rural Development Department
64	10 t	to study	the study
79	13 t	5,00 dunums	5,000 dunums
84	8 b	(2) the afforestation - such	(2) the afforestation - and other vegetative - needs of the entire northern region, such Director of CWA
99	5 b	Direcor of SWA	Director of CWA
101	14 t	fut	full
131	2 b	is that	that is
162	9 t	"world-of-mouth"	"word-of-mouth"
163	8 t	Such tourists who like their	Such tourists are not likely
165	8 b	to say longer	to stay longer

