# OIL REVENUES AND THEIR ROLE IN THE ECONOMIC DEVELOPMENT OF IRAQ

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### PREFACE

This thesis is an enquiry into the significance and impact of oil revenue in the economic development of Iraq. For the purpose of the enquiry, four questions are examined: (1) the size of the oil revenue and its relative importance, (2) the utilization of revenue, (3) the effects of development expenditure on the economic structure and the human resources of the country, and (4) the appraisal of the development policy pursued by the government of Iraq.

Capital funds are taken in this thesis to be a strategic factor in economic development, though there are other equally important factors such as the supply of labor and skills, advanced technology, and the institutional framework.

Oil revenue accruing to Iraq is made available for public spending on economic development projects through the mechanism of the Development Board. It constitutes the most important source of capital funds for economic development. Iraq is further fortunate that this ample supply of funds comes in the form of foreign exchange badly needed for the importation of goods and services, directly and indirectly called for by the development program.

The procedure of treatment followed in this study is to collect relevant data, and to draw conclusions, with regard to

the nature of the role played by oil revenue in the economic development of the country. However, due to limitations in the availability of data, and the complex nature of the subject treated, it has not been possible to treat in depth all the sides of the problem under treatment. Were it not for the shortage of statistics, the analysis could have been made more profound and of wider coverage, and certain costreturn studies of development projects could perhaps have been undertaken for a more critical appraisal of the total program.

The writer wishes to extend his gratitude to his supervisor, Dr. Yusif A. Sayigh, without whose help, encouragement, and patience in reading and correcting the material, this work would not have been available in the present form. However, the shortcomings of this thesis remain the sole responsibility of the writer.

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### ABSTRACT

The thesis is aimed at a study of oil revenue accruing to Iraq from oil companies operating in the country, the utilization of this oil revenue for economic development, the effects of the spending of this revenue on development projects, and the evaluation of the development policy of Iraq.

Iraq receives annually appreciable amounts of revenue in the form of foreign exchange. These have reached the relatively high level of ID. 70 million a year. A Development Board was established in 1950, to which now 70 per cent of the oil revenue is allocated. Revenue is allocated in accordance to the requirements of development plans of several years each, each plan appearing as a law passed through constitutional procedure.

The plans have always had the avowed purpose of developing the country's resources and helping raise the national
income and the level of living of the people. The projects
which have received most attention, efforts, and funds by
the Development Board have been for irrigation, flood-control,
drainage, land reclamation, communications, public buildings,
electricity, and social services.

The work undertaken by the Development Board has increased the national income of Iraq appreciably - indeed

national income in 1956 was almost double that of 1950. There was only a slight increase in the general price level simult-aneous with this marked rise in national income.

Consumption expenditure has increased as a result of the increase in incomes associated with the development program. Part of this increase in consumption expenditure has been directed toward foreign goods; consequently imports have risen steadily over the last half decade. Moreover, as a result of the irrigation projects, the area under cultivation has increased, and land settlement projects have provided farmers with land to own and cultivate. Thus, agricultural production has also risen and has provided an added factor against inflation.

The effect of the works on the development of human resources has been less marked than on physical resources, as the development programs have not provided as much for the development of human, as of physical, factors. Unfortunately, adequate indicators are not available for measuring the exact impact of development programs on labor and other human resources.

The conclusion drawn in this thesis is that Iraq is using its oil revenue in a constructive manner, by spending this revenue on projects that will both lead to an increase in production and national income as well as provide the country

with sources of regular and lasting income to replace revenue from oil when the oil resource becomes seriously depleted.

However, although the total effect of the development programs is appreciable, yet the programs have been criticized in that they are not well-balanced between sectors to be developed. They have also been criticized in some of their aspects and the principles underlying them. Thus, although the development projects in Iraq are set to meet the needs of the country as far as dams and other large projects aiming at increasing social overhead capital are concerned, they are wanting on other equally important aspects of the country's development needs - predominantly, human resources. Furthermore, the programs are not the product of economic surveys and studies of the needs and the possibilities of the country, or a clear philosophy of planning and a means-ends relationship. Only if a balanced approach to planning is adopted, whereby economic and social questions receive as much emphasis as purely technical questions, will Iraq be maximizing to itself the usefulness of oil revenue.

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### CHAPTER I

### ROLE AND SOURCES OF CAPITAL FUNDS

elopment of Iraq can be examined, it is necessary to evaluate the importance and locate the sources of capital funds in a country. The treatment of such questions is bound to be of a general nature, insofar as the difference between countries with regard to the importance and sources of capital funds is only a matter of degree. Once the general treatment has been made, it becomes possible to appraise the importance of oil revenues accruing to Iraq from the oil industry in the economic development process of the country, and to establish the relative significance of these resources among sources of savings open to the country.

### A. Role of Capital Funds

The supply of capital funds is a strategic factor in economic development. There is no agreement among writers as to what is the most important or crucial factor in economic development, whether that factor is capital, technology and education, efficient government and efficient administration, entrepreneurial and managerial skills, or other factors in a list that can be extended still further. However, although capital may not be the most important factor in economic development, yet it is one of the important factors. As a prominent economist has expressed it, "Capital is a necessary but not a

(1)sufficient condition of progress". In addition to capital, "Economic development has much to do with human endowments, social attitudes, political conditions - and historical accid-One cannot generalize and say this factor is more ents". "In particular countries one or the other crucial than others. While an economist like Frankel may be the crucial factor" stresses the "whole social and economic complex" of a country's a United Nations group of experts state that activities. "there cannot be rapid economic progress unless the leaders of a country at all levels - politicians, teachers, engineers, business leaders, trade unionists, priests, journalists - desire economic progress for the country, and are willing to pay its price, which is the creation of a society from which economic, political, and social privileges have been eliminated. On the other hand, given leadership and the public will to advance, all problems of economic development are soluble.

<sup>(1)</sup> R. Nurkse, <u>Problems of Capital Formation in Underdeveloped Countries</u>, (Oxford, Basil Blackwell, 1955) p. 1.

<sup>(2)</sup> Ibid.

N. Buchanan and H. Ellis, Approaches to Economic Development, (New York, Twentieth Century Fund, 1955), p. 67.

<sup>(4)</sup> S.H. Frankel, The Economic Impact on Underdeveloped Societies, (Oxford, Basil Blackwell, 1955), pp. 100 ff.

<sup>(5)</sup> U.N. Group of Experts, <u>Measures for the Economic Development of Underdeveloped Countries</u>, (New York, 1951), p. 16.

To this group of U.N. experts, economic development is mainly a matter of "public will" and of leadership. According to such a philosophy, the crucial factor in economic development is not capital but leadership and the public will to advance.

Iraq, the country under study here, is fortunate in having an ample supply of capital funds, coming to it in the form of royalties and other revenues from companies holding concessions to extract oil from certain areas in the country. Thus capital is not a bottleneck holding up economic development in Iraq. Other factors, however, such as the supply of labor and skills, advanced technology, and the institutional framework, may be the stumbling blocks on the road of economic development. This matter will be treated later in this study. At this juncture it is convenient to quote a U.N. report: "As a general rule, revenues derived from concessions or royalties payable for permission to utilize natural resources should be devoted to economic development. Unless the productive capital of an underdeveloped country is increased at least as much as its natural resources are depleted, ultimate impoverishment will result."

### B. Sources of Capital Funds

The major sources of capital funds-or financial resources - on which an underdeveloped country can draw will now be surveyed.

<sup>(1)</sup> U.N., Methods of Financing Economic Development in Underdeveloped Countries, (Lake Success, New York, 1949), p. 17.

The position of oil revenues will be located under the appropriate category of sources.

Two main methods of financing are possible, external and internal. Among external methods there are: (1) loans from foreign governments, (2) grants-in-aid, (3) loans from international agencies such as the International Bank of Reconstruction and Development and (4) private foreign investment. These methods will only be enumerated here; however, stress will be put on internal methods of financing.

Among the internal methods of financing there are: (1) use of private savings, (2) taxation, (3) inflation and (4) use of idle resources. These methods will now be discussed.

l. <u>Use of savings</u>: Saving is a major source of finance for economic development. Saving depends upon a variety of factors, among which are: the magnitude of the national income; the distribution of the national income among classes and individuals in the society; socio-cultural factors influencing consumption patterns; and institutional factors, such as the presence of and accessibility to savings institutions.

In underdeveloped countries it can be safely stated that savings are at a very low level, due to the following causes:

(a) The lower-income groups can only eke a mere subsistence out of a meagre income barely sufficient to keep body and soul together. The high proportion of indirect taxes, whose impact

<sup>(1)</sup> The term "oil revenues" is used to denote the complex of oil royalties, taxes, and other forms that payments by oil companies to the government usually takes.

lies heavily on the lower-income groups, makes it more difficult for them to save. (b) The higher-income groups, on
whom little progressive taxation is imposed, should normally
save a great deal. But this tendency is offset by a high propensity to consume in a conspicuous manner. The more or less
unplanned saving done by these groups, however, goes to investment in real estate and purchase of land to secure stable
future revenues. (c) Corporate savings, which constitute a
largepart of aggregate savings in developed countries, are not
sizeable in underdeveloped countries since the corporate form
of business is not developed in the underdeveloped areas.

2. Taxation: Taxation is really a special form of saving - it is compulsory saving, in the sense that the government orders people in effect to reduce consumption and increase savings. However, in an underdeveloped country little dependence can be made on tax revenues for financing economic development, since these revenues will barely be sufficient to meet the ordinary expenditure of the state. As long as income in underdeveloped countries is at a very low level, it is not advisable or desirable to attempt to raise taxation rates tangibly or to impose onerous new taxes. Incomes of the bulk of the population will be so low that they will only be sufficient to meet necessary expenditure. Thus what the government can reasonably take in the form of taxation from the average taxpayer will be very little in absolute terms. However, it must be conceded that with some revision of taxes,

of taxed subjects, and of tax schedules, and with improved tax collection and appropriate application of taxation laws, revenues from taxes may increase appreciably in relative terms. Governments also may take advantage of an improvement in the terms of trade, when these occur, and impose an export tax, in order not to let the exporters or producers get the full benefit of the increased prices of their goods in foreign countries. But, "the difficulty is to know what part of the proceeds can safely be used to finance capital formation, and what part must be held in reserve against cyclical deterioration of the terms of (1) trade."

In the case of Iraq, the oil revenues might be considered as a sort of taxation imposed on the profits of oil companies. And in this case the government, instead of the people, is doing the necessary saving.

3. <u>Inflation</u>: Because of the inadequacy of savings in an underdeveloped country and the difficulty of directing the savings made into productive investment, there is a temptation for governments to find the funds for investment through deficit-financing, the expansion of bank credit, and the printing of money. The three processes tend to be inflationary in the absence of offsetting measures, or expansion in the supply

<sup>(1)</sup> U.N. Group of Experts, Op.cit., p. 40.

<sup>(2)</sup> The Government, as will be discussed in a later section, reserves 70 per cent of oil revenues for economic development purposes, and adds the balance to revenue in the ordinary state budget.

of goods and services. And the tendency is all the stronger in underdeveloped countries because of rigidities and bottle-necks that hold up production in such countries.

The rationale of an inflationary policy is that inflation seems to act favorably on each of the elements essential to an increase in investment. By raising money profits, inflation raises materially the return from investment and induces enterprises to expand the scale of their operations. Moreover, the expansion of bank credit facilities for businessmen provides them directly with the means of acquiring the initial financial resources for investment. Lastly inflation brings about a redistribution of real income, unless all prices and incomes rise proportionately and at the same time, in such a way that investment incentives increase.

Inflation benefits the entrepreneurial class, traders and industrialists; the savings out of the profits of businessmen enable them to maintain a high level of investment, since they are assumed to have a propensity to invest above the average for the community. These claims for the beneficial effects of inflation look great; they must, however, be analyzed for their real worth.

In principle it is indisputable that in appropriate circumstances, particularly when inflation is controlled and kept within narrow bounds, the process of inflation may bring about a redistribution of income in favor of individuals and classes who are likely to save a larger part of the income

transferred. However, the beneficial effects of inflation are easily exaggerated and as a general method of financing economic development, inflation may in fact be quite undesirable and may prove to be self-defeating and disastrous. little reason for believing that inflation can set a cumulative and sustained process of growth. Moreover, the process of rising prices - not to mention price-wage spirals - and of depreciating exchange rates which accompanies inflation tends to encourage the kinds of investment that are least desirable from the viewpoint of sound economic development. Some writers believe that a moderate degree of inflation may be a useful means of acquiring investible funds, and that the problem arises only when the inflation is at the point of being uncontrolled. Once underway, however, inflation is extremely difficult to be kept within narrow limits, as there are forces and pressures to let it go further. In practice, "the chance of an inflation being held down within narrow limits depends: (a) on whether the inflation redistributes income towards the classes who save, (b) on what they do with these savings and (c) on how soon the new output of consumer goods becomes available." Moreover, the use of inflation to increase the ratio of savings to total income may result in lower future levels of income, instead of a higher future level of savings.

<sup>(1)</sup> W.A. Lewis, The Theory of Economic Growth, (London, Allen and Unwin, 1955), p. 222.

It is sometimes held that "if a government has an efficient administration service, it can try to prevent inflation from getting out of hand by fixing maximum prices, by rationing essential consumer goods, and by licencing new invest-The argument underlying such a contention is that people will save what they cannot spend because of rationing. However, the argument is based on unrealistic assumptions such as the presence of an efficient rationing authority, the nonappearance of uncontrolled luxury goods and of black markets, and the avoidance of corruption. In fact, the reverse is likely to happen, and money is likely to lose much of its value. Thus, as Lewis, remarks, "if inflation is to be used for capital formation, it is best done in small doses at a time, rather than continuously .... We may add that (inflation) should be used only for investments which can be completed quickly and which are then very productive."

4. <u>Use of idle resources</u>: Recently, a way was suggested whereby development works can be achieved without inflation, (3) taxation or saving. The way is to persuade people to work on capital projects without payment. It is maintained that this is possible in overpopulated countries with a surplus of rural population. Due to the presence of large-scale disguised

<sup>(1) &</sup>lt;u>Ibid</u>., p. 223.

<sup>(2) &</sup>lt;u>Ibid.</u>, p. 225.

<sup>(3)</sup> R. Nurkse, Op.cit., pp. 36 ff.

unemployment, a large part of the population engaged in agriculture could be removed without reducing agricultural output, even with unchanged techniques of agriculture. This is possible because a number of people working on farms do not contribute anything to the output: they are simply subsisting on a share of their family's income. In technical terms, the marginal productivity of labor, over a wide range, is zero. Thus the possibility exists of taking surplus people away from the land; anything they could produce elsewhere would be an addition to the national income.

How are these people to be fed when they are set to work on capital projects? According to Nurkse there are two possibilities: (a) they can be fed through normal voluntary or compulsory saving; this, most likely, will be inadequate.

(b) Disguised unemployment means that unproductive surplus laborers are fed by productive laborers; the latter are therefore performing "virtual" saving. They produce more than they consume. This saving runs to waste because it is offset by the "unproductive consumption" of the people who contribute nothing to the output. If these unproductive laborers were sent to work on capital projects and were still fed by the productive laborers, then the "virtual" saving would become "effective" saving, and the "unproductive" consumption of surplus rural population would become "productive" consumption. Thus disguised unemployment can be manipulated to finance capital

formation within the system, but with the proviso that the productive farmers remaining on the land do not increase their consumption.

Two brief comments will be made at this point, although the scheme is worthy of fuller treatment. (a) The scheme is possible only if it is of strictly local interest; (b) the government has to provide materials that are not easily available locally, and also has to pay for skilled labor or other technical help required in the works. Here again we are begging the question of supply of capital funds, since the government has to supply appreciable amounts of capital for the scheme to work.

After having surveyed the importance and sources of capital funds, we can now turn to a discussion of the oil revenues accruing to Iraq and to the way this source of finance is used for economic development. It must be remembered, in this connection, that these revenues are nothing but community savings placed in the hands of government as the community's agent through taxation and other royalty payments.

### CHAPTER II

### OIL REVENUES ACCRUING TO THE

### GOVERNMENT OF IRAQ

### A. Revenues Before the Profit-Sharing Agreement

Before 1951, royalty payments of the oil companies to the government of Iraq were at the rate of 4 shillings (gold) per ton of crude oil produced. After 1951 the profits accruing from the operations of the oil companies began to be divided equally between the government and the companies, bringing the government's share to about 40 shillings per long ton of crude oil produced.

Four stages can be discerned in the history of Iraqi
Oil Concessions before this important date of 1951. Each was
characterized by a different royalty arrangement.

- 1. In 1925, the agreement between Khanaqin Petroleum Company and the government of Iraq provided for royalty payments on a percentage of profit basis 16 per cent of profit was to accrue to the government. However, in 1926 the agreement was revised, and the royalty payments were to be made at the rate of 4 shillings (gold) per ton of crude oil produced.
- 2. The concession of Iraq Petroleum Company
  (I.P.C.) dated March 14, 1925 was amended on March 24, 1931.
  Originally, in 1925, the agreement stipulated a royalty rate of 4 shillings (gold) per ton of crude oil produced. This

<sup>(1)</sup> Then known as Turkish Petroleum Company (T.P.C.)

rate was to prevail until the passage of 20 years after the exporting of oil by sea had started. For each 10 years following the 20-year base period the 4 shilling royalty rate was to be increased or reduced - as the case may be - by a percentage figure. This percentage figure was to be the percentage by which the profit or loss of I.P.C. during the previous five years of the 20-year base period had been greater or less than during the first 15 years of the base period. The agreement specified, however, that the minimum rate of royalty was to be 2 shillings, and the maximum rate of royalty was to be 6 shillings.

The 1925 agreement with I.P.C. was revised, as stated above, in 1931. The royalty rate remained at 4 shillings (gold) per ton, but with the proviso that annual payments would not fall below £ 400,000. Until the commencement of exports, the company was to pay the sum of £ 400,000 (gold) every year; half of this sum was to be considered dead rent, and the other half was to be paid from future royalties in excess of £ 400,000, no interest charge being included. Moreover, in consideration of the company's exemption from taxation, the company was to make an annual payment of £ 9,000 (gold) up to the time of export, and thereafter of £ 60,000 (gold) on the first 4 million tons produced, and £ 20,000 (gold) on every additional million tons produced.

3. The concession of British Oil Development Company

(B.O.D.) was signed on April 20, 1932. This agreement also prescribed a royalty rate of 4 shillings (gold) per ton. This rate was to prevail until the passage of 20 years after the commencement of exports, but with a minimum annual payment of £ 200,000 (gold). For each 10-year period thereafter the 4 shillings rate was to be increased or diminished by a percentage figure corresponding to the percentage by which the profit or loss of B.O.D. during the last 15 years of the 20-year period was more or less than profit or loss in the first year of the 20-year period. But it was stipulated, as in the case of I.P.C., that the minimum rate of royalty was to be 2 shillings (gold) and the maximum rate of royalty was to be 6 shillings (gold). The company, in consideration of its exemption from taxes, was to pay the government annually and until commencement of commercial production a sum offl,000 (gold); after commencement of commercial production, the company was to make an annual payment of £ 15,000 (gold) for every million tons produced until the limit of 4 million tons, and £ 20,000 (gold) thereafter on every additional million tons produced. The company was also to pay as dead rent, pending production, £ 100,000 (gold) in 1933, increasing this sum by £ 25,000 (gold) annually up to the limit of £ 200,000 (gold). In addition, the government was entitled to take free of charge, from well head, 20 per cent of oil produced for consumption or for resale to the company.

The B.O.D. agreement showed a greater advantage to the government. I.P.C. did not like this concession, and, consequently, it managed to transfer the B.O.D. rights to the Mosul Petroleum Company (M.P.C.), one of its subsidiaries created in 1941.

4. The concession of Basrah Petroleum Company (B.P.C.), another I.P.C. subsidiary, dated July 29, 1938 provided also for a royalty rate of 4 shillings (gold) per ton of crude oil. The government, however, was guaranteed a minimum of £ 200,000 (gold) annually. The company was to pay the sum of £ 200,000 (gold) as dead rent, annually, until the commencement of exports. Furthermore, the government was to receive annually the sum of £ 1,000 (gold) in payment for commuted taxation. In addition, the government was entitled to 20 per cent of oil produced, free of charge, for consumption.

It appears from the above survey of the agreements made between the oil companies operating in Iraq and the government that the royalty rate provided for was 4 shillings (gold) per ton of crude oil extracted. However, in 1950 the companies agreed to raise the basic royalty rate from 4 shillings (gold) to 6 shillings (gold).

### B. Revenues After the Profit-Sharing Agreement

The petroleum industry in Iraq has made striking progress during the post-war period. Production and exports

increased sharply following the construction of pipelines to the Mediterranean shores. As a result of the increasing output of petroleum and the revision of the terms of payment, the oil revenues of Iraq have multiplied. Revenue coming in the form of sterling, together with the substantial and rising foreign exchange disbursements of the oil companies for local expenditures, have increased considerably the foreign exchange supplies of the country.

There was a continued attempt in Iraq to amend the agreements made between the government and the oil companies. The government announced on November 11, 1950, after long negotiations with the companies, that these negotiations had resulted in an increase in the royalty rate from 4 to 6 shillings per ton of crude oil produced. But no agreement was reached on the question of the devaluation of the shilling, (2) and the government decided to take the issue to court.

However, due to three important events, the whole situation with regard to the negotiations between the government and the oil companies changed and Iraq, instead of taking

<sup>(1)</sup> After the devaluation of the sterling in 1949 the government wanted the conversion of the gold shilling agreed upon in the concession at the market rate and not at the official rate (which was lower than the market rate). This has come to be known as the "gold question".

<sup>(2)</sup> B. Shwadran, The Middle East, Oil and the Great Powers (New York, Frederick A. Prager, 1955), p. 259.

a fixed royalty per ton, demanded an equal sharing of the profits realized by the oil companies. These events were:

(a) the tremendous rise in petroleum prices in the post-war period; (b) the declaration of the fifty-fifty profit-sharing basis agreed upon by Arabian American Oil Company and the Saudi Arab Government in 1950; and (c) the nationalization of oil in Iran. The result of negotiations between the government and the companies was a new agreement signed in February 1952 (retroactive to January 1, 1951) between the government and the I.P.C. and its wholly-owned subsidiaries, the M.P.C. & B.P.C. The agreement prescribed the following:

1. The government share was to be 50 per cent of the profits resulting from the operations of the oil companies in Iraq. The payment was to be made before the deduction of foreign taxes. For purposes of calculation, profit was defined in the agreement as "the difference between the Iraq border value per ton of such oil and the actual costs or fixed costs per ton as the case may be ... multiplied by the number of tons of oil exported." The agreement stated, in reference to values and costs, that "Iraq border values means the values (expressed in shillings per ton) of Iraq crude oil at the point of export from Iraq." It was agreed that the values of oil of Kirkuk quality (36° A.P.I.) on January 1, 1952 were 94 shillings per long ton at the Iraqi-Syrian border

and 81 shillings and 9 pence at Fao on the Arabian gulf, with provision for future adjustment by agreement between the government and the companies in case of subsequent world price changes. On the other hand, costs were taken to include:

(a) operating expenses and overheads, and (b) depreciation of all physical assets in Iraq at the rate of 10 per cent per annum and amortization of all capital expenditure in Iraq at the rate of 5 per cent per annum, until such assets and expenditures are fully written off. Following this formula, the agreement fixed costs at 23 shillings per long ton in 1951, 17.5 shillings per long ton in 1952, and 13 shillings per long ton in 1953 and subsequent years. If fixed costs are to differe in the future from actual costs in any one year by more than 10 per cent, the actual costs will be applied.

2. The I.P.C. undertook to produce a minimum of 20.75 million tons of crude oil annually beginning January 1, 1954; the M.P.C. guaranteed a minimum production of 1.25 million tons a year beginning also January 1, 1954; and the B.P.C. undertook to produce a minimum of 8 million tons annually beginning January 1, 1956. Altogether, the minimum quantity produced would be 30 million tons a year beginning January 1, 1956. The quantities of oil referred to would include any amount which the government chose to take in kind; oil supplied by the I.P.C. for local requirements would not be included in the above minimum quantities.

- 3. The oil companies guaranteed to the government that its share in each year would not be less than 25 per cent of the net production at posted prices of the I.P.C. and M.P.C., and  $33\frac{1}{3}$  per cent of the B.P.C.
- 4. The oil companies "jointly and severally" guaranteed that the government's share in profits in each year shall not be less than £ 20 million for the years 1953 and 1954, and not less than £ 25 million in 1955 and subsequent years. However, should circumstances of <u>force majeure</u> impose a suspension or reduction of oil production in the country, the government would receive from the companies a minimum of £ 5 million, provided that the total amount did not exceed £ 10 million, i.e., the government in such cases can receive from the companies annually £ 5 million only for two years.
- 5. The government, if it so decided, was entitled to take in kind up to 12.5 per cent of the net production of each of the three companies as part of its share of profit. The government is free to sell this oil to any buyer and at whatever price it can obtain, and it can sell it back to the companies at current world prices. This procedure has two possible advantages: (a) in case of oil shortage on the world market, it may be possible for the government to obtain a premium above posted prices, and (b) the government might be able to sell part of its share against dollars or other hard currencies, whereas the amounts due from the oil companies

(1)

are to be paid in sterling.

- 6. The companies agreed to pay a lump sum of £ 5 million in settlement of past disputes.
- 7. The government was to receive annually from the companies the sum of £ 20,000, in lieu of all central government and municipal taxes.
- 8. If in future agreements between oil companies and neighboring governments royalties were increased, Iraq had the right to ask for similar increases.

Having surveyed the main items of the profit-sharing agreement, we can now see how the agreement has reflected itself in production and revenues. This will be shown in Table (2)

1 below. Production figures presented below show that the rise in oil revenues after 1951 was not due only to the better terms of payment, but also to the increase of oil production and export.

<sup>(1)</sup> C. Iversen, Monetary Policy in Iraq, (National Bank of Iraq, 1954), p. 103.

<sup>(2)</sup> See Appendix to this chapter for tables showing Development of Crude Oil Production Since 1928 (Table A) and Oil Revenues Accruing to the Government of Iraq since 1927 (Table B).

Table 1

# Production of Oil and Oil Royalties Under the 1952 Agreement

	-	2000	* 87.5	133	104 (07)
Minimum ome coment	Un- Condition	£ mn.	5	Ŋ	Ω
Guaranteed Minimum Income of Government	Conditional on absence of force majeure	£ mn.	1		25
	rotal	£ mn.	14.6	35.3	58.4
Government's Total Income From	M.P.C.	£ mu•	,	3.2	13.8
Govern Total	M.P.C.	£ mu•	14.6	32.1	44.6
Government's Share in Profits Per Long Ton Of	Produc-	sh.	1 -	32 8	34 8
Governme Share Profits Long Ton	M.P.C. Production	sh.	35.5	38.25	40.5
Production P.C. B.P.C.	mn.long tons			2	ω
Produ I.P.C.	M.P.C. mn.long tons		8.2	16.8	22
Year			1951 (2)	1952 (3)	1956

- (National Bank of Iraq, 1954) p. 104. C. Iversen, Monetary Policy in Irag, Source:
- Calculated on the basis of 1951 values and costs at Iraqi border (as specified in the agreement). E
- The distribution of production between the companies is estimated. (2)
- In 1956, total production amounted actually to 31 million tons, and not 30 million tons as it appears in the table. Iversen made his calculations according to the required minimum of production stipulated by the 1952 agreement. Since the difference between the actual figure and the required minimum is not substantial, no change in the figures was made and the table is left as it appeared in Iversen. (3)
- m The discrepencies between these figures and those for corresponding years in Table figures. The Appendix are probably in the main due to the fact that this table is calculated on the basis of calendar years, whereas table B refers to financial years. Furthermore figures in Table 3 include the government's share in the (probably small) profit resulting from the companies operations in Iraq apart from export of crude oil. (4)

## C. Comparison of Oil Revenues With Other State Revenues

By far, the most important source of government revenue in Iraq is oil revenue. This will be shown by reference to actual budget figures. Until April 1, 1951 all oil revenues were included in the ordinary budget, but since then only 30 per cent has been diverted to the ordinary budget, the remaining 70 per cent being directed to the budget of the Development Board.

The major budgetary revenues in the financial years 1938/39 - 1955/56 are shown in the following table. These financial years have been chosen because actual figures and not only estimates are available for these years.

Examination of these figures shows that the ratio of oil revenues to total state revenue is quite high. The relative importance of oil revenues has been increasing in recent years. In 1938/39 they were equal to about 20 per cent of total revenues; this ratio decreased during the war years to about 10 per cent, but has risen recently to about two-thirds of total government revenue.

Table 2 Major Sources of Revenue in Iraq

(In ID.Million)

Financial Year	Oil Revenue	Direct Taxes	Indirect Taxes	Other Revenue	Total Revenue	Percent of Oil Revenue to Total Revenue
1938/39	1.98	0.45	4.25	0.87	7.55	20.6
1942/43	1.56	1.19	7.29	5.73	15.77	9.8
1945/46	2.32	2.35	9.87	5.73	20.27	11.4
1946/47	2.33	2.17	15.32	5.08	24.90	9.3
1947/48	2.35	2.27	14.55	3.11	22.28	10.5
1948/49	2. 0	3. 4	13. 8	4. 0	23. 2	8.6
1949/50	3. 2	3. 6	15. 8	4. 4	27. 0	11.8
1950/51	5. 3	3. 8	18. 2	6. 2	33. 5	15.8
1951/52	13.3	3. 4	20. 3	7. 2	44. 2	30.0
1952/53	32.5	3. 6	19. 4	17. 9	73. 4	44.2
1953/54	49.9	3. 4	22. 4	6.8	82. 5	60.4
1954/55	57.2	3. 6	25. 3	6. 1	92. 2	62.0
1955/56	84.4	3. 7	28. 2	8. 1	124. 4	76.5

Source:

United Nations Department of Economic Affairs, Public Finance Information Papers, Iraq (New York, 1951), p. 20, for the figures of 1938/39 - 1947/48;

International Bank for Reconstruction and Development, The Economic Development of Iraq (The Johns Hopkins Press, 1952, 1 p. 175, for the figures of 1948/49 and 1949/50;

Source: (Cont'd)

U.N.R.W.A., Quarterly Bulletin of Economic Development No. 13 (Beirut, Lebanon, 1956), pp. 51 - 52 and p. 72, for the figures of 1950/51;

Quarterly Bulletin of the Central Bank of Iraq, January-March 1957, No. 21, p. 35, for 1951/52 figures of revenue included in the budget of the Development Board;

Quarterly Bulletin of the Central Bank of Iraq, October - December 1956, No. 20, p. 33, for 1951/52 figures of revenue in the ordinary budget;

Quarterly Bulletin of the Central Bank of Iraq, April - June 1957, No. 22, p. 35, for revenue figures of 1952/53 - 1955/56 included in the budget of the Development Board;

Quarterly Bulletin of the Central Bank of Iraq, April - June 1957, No. 22, p. 33, for 1952/53 - 1955/56 figures of revenue in the ordinary budget.

(1) Provisional figures.

APPENDIX I

Table A Development of Crude Oil Froduction Since 1928

			IRAQ	
par	Total World Froduction mn. metric tons(1)	Froduction 1000 metric tons	Percentage increase or decrease over Freceding Year	Percent of World Total
-	1 173	94		0.06
928	171	115	4.1(2)	0.07
933	175		795 <b>.7</b>	0.56
934	184	1,030	255.7	1.82
935	201	3,664		1.83
936	219	4,011	9.5	1.68
937	256	4,255	6.1	
938	250	4,298	1.0	1.72
939	254	3,963	<b>-</b> 7.8	1.56
940	262	2,514	- 36.6	0.96
	270	1,566	- 37.7	0.58
941	253	2,595	65,7	1.03
942		3,572	37.7	1,28
943	279		16.1	1.32
944	315	4,146	11.1	1.39
.945	332	4,607		1.31
.946	336	4,680	1.6	1.21
.947	390	4,702	0.5	
1948	441	3,427	- 27.1	0.78
1949	436	4,067	18.7	0.93
1950	487	6,479	59.3	1.33
1951	545	8,630	. 33.2	1.58 3.28
1952	• 574	18,843	118.3	4.68
1953	602	28,200	49.7	4,38
1954	686	30,073	6.6	4.31
1955	770	33,209	10.4	3.71
1956	838 881	31,093 21,000	- 6.3 - 32.4	2.38

Source: C. Iversen, Monetary Policy in Iraq, (National Bank of Iraq, 1954), p. 92 - 1953; L'Economie Libenaise et Arabe, No. 63, March 1958, pp. 40-41 for 1954 - 1957.

World production figures for 1928 - 1953 exclude the U.S.S.R., while the 1954 - 1957 figures include the Communist Countries. (1)

<sup>(2)</sup> Average for 1928 - 1933.

- 26 (APPENDIX CONT'd)

Table B
Oil Revenues Accruing to the Government of Iraq

Year	Payments (in I.D. million)	Year (1)	Payments (in I.D. million)
1927-33 (average)	0.60	1945	2.32
1934	1.00	1946	2.33
1935	0.60	1947	2,35
1936	0.60	1948	2.01
1937	0.73	1949	3.24
1938	1.98	1950	5.291
1939	2.01	1951	13.75
1940	1.58	1952	39 <b>.</b> 29
1941	1.46	1953	51.30
1942	1.58	1954	68.30
1943	1.88	1955	76.00
1944	2.22	1956	68.859
		1957	48.920

Source: B. Shwadran, The Middle East, Oil and the Great Powers, (New York, Frederick A. Prager, 1955), p. 277 for the figures of 1927 through 1936; C. Iversen, Monetary Policy in Iraq (National Bank of Iraq, 1954), p. 97, for the figures of 1937 through 1952; U.N.R.W.A., Quarterly Bulletin of Economic Development, No. 13 (Beirut, 1956) p. 47, for the figures of 1953, 1954 and 1955; and Middle East Economic Digest, Vol. I, No. 43, January 24, 1958, p. 7. (for 1956 and 1957).

- (1) Figures are for financial years beginning 1 April of the year stated, except for 1956 and 1957 which are taken as calendar years.
- (2) Including ID. 5.0 million for settlement of previous claims.

#### CHAPTER III

## THE USE OF OIL REVENUES

#### A. Background

Oil revenues were allocated to capital works before the establishment of the Development Board in 1950. These capital works, and the yearly plans on which they were based, were subject to frequent changes, due mainly to discontinuity in government resulting in the emergence of different outlooks and attitudes with regard to economic policy. Thus there was little persistence in development policy, and frequent changes in governments made development virtually impossible. The additional fact that there was a shortage of funds to be allocated for development projects accentuated the difficulty of sustained development.

The receipt by the government of greater revenues made possible by the increased production of crude petroleum and by a more remunerative rate of revenue to government, and the urge to spend these revenues constructively, made it clear that a special autonomous agency, independent of ministerial changes, should be set up to plan, undertake, and supervise the expenditure of oil revenues on development projects. Furthermore, when the International Bank for Reconstruction and Development was requested in 1950 to advance a loan for the execution of the Tharthar project, it made the loan conditional on the establishment of a development agency to be responsible for expenditure

on the project. Thus several reasons led to the establishment of a Development Board in 1950.

Table 3 below shows the division of government expenditure between "current expenditure" and "capital expenditure" in selected years before 1950. The table is intended to show the lines of expenditure in the period preceding the establishment of the Development Board. Expenditure on capital works was voted separately from the ordinary budget, and capital expenditure was provided for in the so-called "Capital Works Budgets". The main items of capital expenditure were for irrigation, flood-control, roads and other communications, and public buildings including schools, hospitals and military constructions. (Expenditures on social services and military constructions were included in the capital works budgets).

It can also be seen from Table 3 that capital expenditure declined during the war years from ID. 2.46 million in 1938/39 to ID. 0.98 million in 1942/43, but rose to ID. 3.05 million in 1946/47. However, relatively speaking, there was no real recovery in the post-war years, since capital expenditure which had dropped from 28 per cent of total expenditure in 1938/39 to below 10 per cent in the war years, remained around that level until 1950.

## B. Development Laws and Agencies

There are two sets of laws concerning development policy:
(a) Law No. 23 of 1950 (under which the Development Board was

first created), amended by Law No. 6 of 1952; and (b) Law no. 27 of 1953 under which the Ministry of Development was established.

Table 3

Government Expenditure in Selected Years

Prior to 1950

Financial Year	Current Ex	rpenditure Percent of Total	Capital E	Percent of Total	Total Expenditure  I.D. mn.
1938/39	6.29	72	2.46	28	8.75
1942/43	10.26	91	0.98	9	11.24
1945/46	19.27	93	1.54	7	20.81
1946/47	21.85	88	3.05	12	24.90
1947/48	22.99	87	3.57	13	26.56
1948/49	25.24	89	3.25	11	28.49
1949/50	27.61	91	2.80	9	30.41

Source: U.N. Department of Economic Affairs, Public Finance Information Papers, Iraq (New York, 1951), p. 15.

The decision to establish a Development Board after long controversy was an "evidence of the government's determination to see the extraordinary oil revenues used for developing the country's resources and raising the standard of living and

to insure some continuity in development which frequent changes (1) in governments have made virtually impossible,"

#### 1. Task of the Development Board

Article 3 of Law No. 23, 1950 as amended by Law No. 6, 1952, stipulated that the duties of the Development Board were:-

- and parliament of "a general economic and financial plan for the development of the resources of Iraq and the raising of the standard of living of her people. This plan shall define a general program of the projects to be undertaken by the Board and shall include in its scope, but shall not be limited to, projects in water conserving, flood control, irrigation, drainage, industry and mining as well as projects for the improvement of communications by river, land and air. The Board shall indicate in its program the priority of such projects, their approximate cost and the period required for their execution".
- (2) For the purpose of presenting the general program, the Board shall "undertake a general survey of the exploited and unexploited resources of Iraq...."
- (3) After the development program is approved by parliament, "the Board shall proceed to carry out the projects mentioned in the program and shall prepare the details, plans,

<sup>(1)</sup> International Bank for Reconstruction and Development, The Economic Development of Iraq, (The Johns Hopkins Press, 1952) p. 169.

and specifications for these projects and proceed to execute them in accordance with their decided priority".

- (4) "The Board shall coordinate the development schemes that may originate in the ministries concerned and which are connected with its program; and it shall consider any other matters submitted to it by the Prime Minister that may, in his opinion, lead to an increase in the wealth of the State".
- (5) "The Board shall before the end of March in each year present to the Council of Ministers for presentation to parliament (a) a supplementary program indicating the revisions and extensions; and (b) a report on its operations for the preceding year".

These were the duties of the Board as set forth in the first law. However, Law No. 27 of 1953 pointed out in a more compact and comprehensive manner to the duties of the Development Board. In brief, the duties of the Development Board as stated in the 1953 Law are to investigate the country's possibilities, productive resources and natural wealth. In the light of research work and extensive studies, the Board will draw up a general plan to exploit and develop the country's resources and wealth, with a view to increasing the national income and raising the standard of living of the people. Each plan should be implemented within a period of not more than seven years. These plans are to include projects of irrigation,

drainage, water storage and control; mining, electricity and industrial projects; construction, expansion and improvement of road, sea, river and air communications; building houses for public establishments and for low and middle income classes; and short term projects for irrigation, drainage, improvement of village and rural conditions and other projects contributing towards increasing the national income directly or indirectly. Hence, the new law demands that the projects included in the Board's programs be divided into long-term, or major, projects, and short-term, or minor, projects. Another innovation introduced by the 1953 law is that it limited the programs of the Development Board to such activities which could be executed within a period not exceeding seven years.

What has been said above is the task of the Board provided for in law. Actually, however, "the Board has not undertaken any economic planning, though it was set up for this purpose. It has confined itself to financial programming allocating its total revenues in advance in large sums under different headings. Its main job is to approve proposals put forward by the ministries, obtain the approval of parliament for specific expenditures, arrange surveys, invite tenders, and then

<sup>(1)</sup> The difference between major and minor projects is the following: major development projects are studied, financed and implemented by the Development Board; while minor development projects are financed and supervized by the Board, but are implemented by the ministries and government departments concerned.

award the contract to a firm, usually foreign. Where the work can be undertaken by an Iraqi authority the Board sanctions the expenditure by the appropriate ministry or other public authority. It also grants loans to municipal and other public (1) undertakings.

## 2. Powers of the Development Board

The Development Board was empowered by law to exercise uncontrolled supervision over all day-to-day aspects of economic and social development. Thus Article 2 of the 1950 Law as amended by the 1952 Law, stipulated that:

- (1) "The Board shall have a juristic personality and may enter into contracts for the hiring of services or the purchasing of supplies connected with investigations, with any local or foreign person, corporation, concern, or institution. The Board may also acquire such immovable property as may be necessary for its program".
- (2) "The Board is empowered to contract loans, issue bonds, mortgage its assets or borrow funds, etc., in its own rights. Any obligation so undertaken, whether domestic or foreign, shall be considered obligations of the state. The Minister of Finance is authorized to guarantee such loans and bonds as government obligations, under such terms and conditions

<sup>(1)</sup> Doreen Warriner, Land Reform and Development in the Middle East (London: Royal Institute of International Affairs, 1957), p. 127.

as the Council of Ministers may approve, provided that approval of parliament shall be obtained before the loan contracts or the guarantee agreements become effective".

# 3. Administrative Set-up of the Development Board

The 1950 Law, as amended by the 1952 Law, provided that the Development Board be constituted under the presidency of the Prime Minister. The members of the Board were to be the Finance Minister and six full-time executive members, one of whom was to act as a vice-president. Among the executive members there must be an expert on finance and economics, an expert on irrigation and an expert in one other field to be prescribed by the Council of Ministers. Executive members were to be appointed by the Council of Ministers and their term of office was set up at five years liable to prolongation by a decision on the part of the Council of Ministers. An executive member could not be removed from office except in two cases: (a) "if he commits an offence or a delict derogatory to honor" and (b) "if he becomes incapable of performing his duties because of ill -health or absence for more than one month without permission from the Board".

However, Law No. 27 of 1953 (which provided for the establishment of a Ministry of Development) added a new voting member to the Board, who was to be the Minister of Development; the Minister of Development became the Board's respresentative on the Council of Ministers and the link between the Parliament

and the Board. The new law changed the organizational framework of the Board; it transferred the secretariat of the Board to the Ministry of Development and, consequently, the Minister of Development became the Secretary-General of the Board, signing its contracts, executing its decisions and performing all other works provided for in the Law.

The technical sections were also transferred to the Ministry of Development. There are five technical sections for (1) irrigation and drainage, (2) roads, bridges and buildings, (3) industry, mining and electricity, (4) agriculture, forests, artesian wells and land reclamation, and (5) housing.

Thus the 1953 Law contradicted the aim originally set of keeping the Board independent from government, by linking the Board closely to the government. The Prime Minister now is the President of the Board, the Minister of Finance is a member, and the Minister of Development is both a member and the Secretary-General. In addition to these links, the Law stated further that "in discussing projects having relations with a certain ministry the Board shall invite the minister concerned with a view to hearing his views". Moreover, the 1953 Law stipulated that the meetings of the Board could not be held "unless six of its members are present, two of whom shall be the minister members". (Article 36). These two last provisions, it appears, were made to further tighten the link between the Board and the government. The new law has thus resulted in restricting the independent power of the Board and increasing the authority of the government.

over development policy.

#### 4. Finances of the Development Board

The Development Board has its own separate budget. The Board was originally assigned all revenues accruing from the oil companies, according to the 1950 Law. But this provision was changed by the amending law of 1952, which gave the Development Board 70 per cent of oil revenues instead of all oil revenues. This change was based on the argument that the government ought to be able to carry minor capital works and improvements without having to let the plans pass through the Development Board.

In addition to oil revenues, the Board's finances consist also of sums allotted to it by parliament from time to time, and of proceeds of any loans, domestic or foreign, contracted by the Board or by the government on its behalf; the Board, however, has to meet any interest, commissions or other charges, and amortization of the principal of such loans from its budget. No money allotted to the Board can be spent except in accordance with the provisions of its annual budget and for the purposes authorized in the budget.

It appears that the Board was explicitly given the possibility of financing some of its projects by issuing and selling bonds. But this right has not been used so far and it is difficult for one to see, at least for financial reasons, how and why this right must be used. The same argument applies

to foreign loans; with ample revenue in the form of oil revenue accruing to the Board, there is no need for the contracting of foreign loans. One foreign loan of \$ 12.8 million was contracted with the International Bank for Reconstruction and Development in 1950 to finance the Tharthar project. At that time, oil revenues were at a low level due to a low level of production and of royalty terms. However, with increased oil production and better terms provided for in the profit-sharing agreement with the oil companies, in 1952, the Board felt that there was no need for this loan. Hence, only \$ 6.3 million were drawn and \$ 6.5 million remained undrawn; all of the outstanding loan, however, was repaid to the International Bank in March 1955 out of the unspent balances of the Board.

## C. Development Programs of the Board

The programs of the Development Board are not comprehensive plans where account is taken of the various factors in the economy. The Board simply allocates its share from oil revenues anticipated over a certain number of years, to economic projects in the various economic activities. Little study is made, however, of the direct and indirect effects of the execution of projects. Nor are the sums allocated to the various categories of expenditure based on adequate studies and surveys necessary to the formation of a particular integrated economic development program. This is one reason why in the span of five years (1951-56) four multi-year plans have been prepared, none of which lasted for

the entire period it had been intended to cover.

Another observation one can make is that revenues are underestimated in drawing up development programs, a fact which calls for revisions and changes in the programs. Furthermore, according to Lord Salter, "the timing of expenditure in separate years was also misleading. It is possible to budget for ayyear, because such a period can be foreseen; or perhaps for six years as a whole because what falls behind in one year can be made up later. But to forecast what will happen in six years (the period of the programs) is impracticable; and to purport to do so is only to mislead."

Thus economic planning and programming in Iraq is really budgeting for the expenditure of the oil revenues accruing to the Development Board from the oil companies. operating in the country, with little rational, integrated planning. The programs may thus be described as expenditure programs. Up till now, four expenditure programs were prepared by the Development Board and approved by parliament. The first program, prepared in 1951, covered the five financial years 1951 - 1955; the second program (which was introduced as an amendment to the first) was introduced in 1952 to cover the six financial years 1951 - 1956; the second program was broken off in 1955 when a new five-year program covering the financial years 1955 -

<sup>(1)</sup> Lord Salter, The Development of Iraq, (Iraq Development Board, 1955), p. 127.

1959 was drawn. A fourth program was approved early in 1956 as an amendment to the 1955 program, and was to cover the six financial years 1955-1960. Hence, from a practical angle, we can safely say that only two programs were prepared by the Board and approved by parliament, since the second program was an amendment of the first, and the fourth program was an amendment of the third. Nevertheless, we are going to describe and discuss the four programs. In all these, high priority was put on irrigation and flood control schemes, as these have been held to be the key to the agricultural and general development of Iraq.

#### 1. The first Program

The first program of the Board was approved in 1951 to cover the financial years 1951, 1952, 1953, 1954 and 1955. Revenues of the Board during this period were estimated at I.D. 95,075,000. Allocations for expenditure were estimated at I.D. 65,654,000. Table A in the Appendix at the end of this chapter points out in a detailed manner to the proposed revenues and expenditures of the development Board as envisaged in the first program. However, Table 4 below summarizes the general lines of revenue and expenditure under the first program.

## 2. The Second Program

With the advent of greater revenues, the first program was amended early in 1952 and was extended by one more year. The second program covered the six financial years 1951, 1952, 1953, 1954, 1955 and 1956. The revenue of the Board during this period was estimated at ID. 168,740,000.

General Lines of Revenue and Expenditure Under the First Program

Covering the Years 1951 to 1955

_1	tem		I.D. 1000	Percent of Total
Α.	Rev	enue:		
	1.	Oil Revenue	91,110	95.8
	2.	Proceeds of Tharthar Project Loan	3,965	4.2
		Total Revenue	95,075	100
				-
•	Exp	enditure:		
	1.	Irrigation and Flood Control		
		Projects	30,044	47.2
	2.	Roads and bridges (1)	15,806	24.0
	3.	Buildings	12,618	19.0
	4.	Reclamation of land and other	ě	
		projects (2)	6,216	9.0
	5.	Administration, studies and		
		organization expenses (3)	970	1.4
			65,654	100

Source: Law No. 35, 1951, al-Waqai' al-Iraqia, (No. 2984, 1951).

 Including hospitals and health establishments, schools, houses for junior officials and workers, public and other buildings.

(2) Including forests, artesian wells, reclamation of land and other agricultural schemes.

(3) Including salaries, cost of services, studies, and other administrative services.

(4) Figures do not add up to 100 exactly because of rounding.

The sum of ID. 155,374,000 was allocated to the execution of projects included in the program. Table B in the Appendix at the end of the present chapter shows in a detailed fashion the proposed revenue and expenditure under this program. However, Table 5 below points out the general lines of revenue and expenditure.

#### 3. The Third Program

The second program, which was to be carried out in the financial years 1951-1956, was terminated in April 1955, and replaced by a new five-year plan covering the years 1955 - 1959. The causes of the termination of the previous program were that "the cost estimates of the old plan were no longer realistic, ... the 1953 revision of the Development Law changed the basis for financing projects of other agencies and necessitated different procedures, and ... the Development Board wanted more latitude in programming, as experience showed that obligations (1) lagged behind plans and expenditures fell behind obligations."

The 1955 program was to cover the financial years 1955, 1956, 1957, 1958 and 1959. The program, in accordance with the 1953 Development Law, included two categories of projects; (1) major projects and (2) minor projects.

Revenues over the period of the plan were estimated at ID. 215,685,000, while expenditures were put at ID. 304,306,100.

<sup>(1)</sup> United Nations Department of Economic and Social Affairs, Economic Developments in the Middle East, 1945 to 1954, (New York, 1955), p. 122.

<sup>(2)</sup> Of which ID. 266,181,100 was allocated to major projects and ID. 38,125,000 was allocated to minor projects.

Table 5

General Lines of Revenue and Expenditure

Under the Second Program

Covering the Years 1951 to 1956

	Ite	m	I.D. 1000	Percent of Total
	Re	venue:		
	1.	Oil revenue	164,640	97.5
	2.	Proceeds of Tharthar Project loan	3,965	2.3
	3.	Miscellaneous revenue	135	0.008
		Total revenue	168,740	100
•	Exp	penditure:		
	1.	Irrigation and flood control projects	53,374	34.3
	2.	Industries	31,050	19.9
	з.	Roads and bridges	26,766	17.1
	4.	Reclamation of land and other projects	22,986	14.8
	5.	Buildings	18,018	11.5
	6.	Administration, studies and organization expenses	3,180	2.0
		Total expenditure	155,374	100 (1
		*		

Source: Law No. 35, 1951 as amended by Law No. 25, 1952, al-Wagai' al-Iragia, (No. 3076, 1952).

<sup>(1)</sup> The figures do not add up to 100 exactly because of rounding.

Details of the third program are presented in Table C in the Appendix, while Table 6 below points to the general lines of revenue and expenditure under the program.

General Lines of Revenue & Expenditure Under the Third Program
Covering the Years 1955 to 1959

It	em		ID.1000	Percent of Total
•	Rev	Venue:		
	1.	Oil revenue	215,000	99.6
	2.	Proceeds of Tharthar Project loan	10	:
	3.	Interests	600	: 0.40
	4.	Miscellaneous revenue	75	:
		Total revenue	215,685	100
	Exp	enditure:		
3	1.	Irrigation, flood centrol, drainage and reservoirs	107,935	35.5
	2.	Communication, roads, airports, railroads and bridges	74,200	24.5
	3.	Buildings and institutions (1) major and minor	60,800	20.0
4	4.	Industry, mining and electricity	43,571	14.3
į	5.	Development of animal and vegetable wealth and underground water	6,475	2.1
(	6.	Administration, studies and organiza- tion expenses	5,450	1.8
7	7.	Miscellaneous projects - minor	5,875	1.8
		Total Expenditure	304,306	100
		N .		

Source: Law No. 43, 1955, al-Waqai' al-Iraqia, (No. 3593, 1955).

Including health institutions, scientific and educational institutions, housing projects, public buildings and summer resorts and rest houses.

#### 4. The Fourth Program

The 1955 program was amended in 1956 such as to cover the financial years 1955, 1956, 1957, 1958, 1959 and 1960. The amended program put greater emphasis than previous ones on projects which bring immediate and obvious benefits. The largest relative increase was in housing, bridges and roads, and industries. In fact, the 1956 program was a continuation of the 1955 program except that the funds allocated for work during the period were greater than the funds allocated in the 1955 program by about 50 per cent.

The reasons for amending the 1955 program were: (1) growth of oil revenues, (2) completion of certain important studies, especially those connected with housing and drainage, and (3) the decision to act upon the recommendation of the economic expert, Lord Salter, to draw up a more flexible (1) program covering a wider scope.

The revenue of the Development Board under the fourth program was estimated at I.D. 390,054,444, while expenditure (2) was put at I.D. 500,007,327. Details of the fourth plan are presented in Table D in the Appendix of this chapter, while Table 7 below points to the general lines of revenue and expenditure.

<sup>(1)</sup> Explanatory note of Law no. 54, 1956 amending Law No. 43, 1955.

<sup>(2)</sup> Of which I.D. 430,732,327 was allocated for major projects and I.D. 69,275,000 for minor projects.

General Lines of Revenue and Expenditure Under the Fourth Program

Covering the Years 1955 to 1960

	Ite	m	I.D. 1000	Percent of Total
Α.	Rev	venue:		
	1.	Oil revenue	385,081	98.7
	2.	Interests	4,764	:
	З.	Proceeds of Tharthar Project loan	39	: 1.3
	4.	Miscellaneous revenue	170	:
		Total revenue	390,054	100
3.	Exp	enditure:		
	1.	Irrigation, flood control, drainage and reservoirs	153,755	30.7
	2.	Buildings and institutions(1)_ major and minor	123,229	25.0
	3.	Communications, roads, bridges, airports, railroads and ports	124,168	25.0
	4.	Industry, mining and electricity	67,119	13.4
	5.	Development of animal and vegetable wealth and underground water	14,287	2.8
	6.	Administration, studies and organization expenses	7,350	1.4
	7.	Miscellaneous projects - minor	9,900	2.0
		Total Expenditure	500,000(2)	-

Source: Law No. 54, 1956 amending Law No. 43, 1955, al-Wagai' al-Iragia, (No. 3813, 1956).

- (1) Including health institutions, educational institutions, public buildings, housing projects and summer resorts and rest houses.
- (2) Total expenditure does not add exactly to ID. 500 million because of rounding.
- (3) Figures do not add up to 100 exactly because of rounding.

It will be noticed that the last two programs involved a larger expenditure program than the revenues warrant. This is not the result of a policy of deficit financing, as the deficit involved is more than offset by increases in revenues above the estimated level and by savings in expenditures which were expected to fall (and in the past did fall) below their planned level. This can be illustrated from the Board's experience in the five-year period (1951-1955), as will be shown presently.

#### D. The Board's Experience in 1951 - 1955.

During the financial years 1951 - 1955, the period for which actual budget figures are available, actual expenditure fell short of planned expenditure, and actual revenue was ahead of anticipated revenue. In this section, we will first present actual revenue and expenditure year by year, Then we will compare actual revenue and expenditure, year by year, with planned revenue and expenditure. Lastly, we will indicate the directions into which surpluses go.

#### 1. Actual Revenue and Expenditure

Table 8 presents actual figures for revenue and expenditure. From the table we gather that the Board had a budgetary surplus in each year. This surplus amounted to about ID. 4 million in 1951/52, 11 million in 1952/53, 23 million in 1953/54, 20 million in 1954/55, and 27 million in 1955/56. Total actual expenditure in all these years was ID. 83.1 million, while total actual revenue was ID. 168.3 million. Hence, there was a total surplus of ID. 85.2 million.

Actual Revenue and Expenditure of the Development Board in the Years 1951-1956

_			I.D. 1000	)			
			1951/52	1952/53	1953/54	1954/55	1955/56
i.	Rev	venue:					
	1.	Oil Revenue	6,702	22,876	34,823	40,039	59,081
	2.	Miscellaneous revenues	765	1,123	454	690	1,681
		Total Revenue	7, 467	23,999	35,277	40,729	60,762
	Exp	enditure:					
	1.	Administration, studies and organization.	100	214	302	277	2,745
	2.	Irrigation projects	841	2,491	4,795	8,519	10,940
	3.	Principal roads and bridges	630	1,752	1,917	4,267	8,433
	4.	Buildings and establishments	788	2,265	2,451	2,735	1,830
	5.	Land reclamation	772	1,035	2,331	3,052	630
	6.	Industries	-	81	461	2,045	2,883
	7.	Other expenditure		5,000	_	_	6,564
		Total expenditure	3,131	12,838	12,257	20,895	34,025
		Surplus	4,336	11,161	23,020	19,834	26,737

Source: Quarterly Bulletin of the Central Bank of Iraq, January - March, 1957, No. 21, p. 35 (for the 1951/52 figures);

<u>Ibid.</u>, April - June, 1957, No. 22, p. 35 (for the figures of 1952/53 - 1955/56).

# 2. Comparison of Actual and Planned Revenue and Expenditure

Actual revenue in the period under consideration was ahead of planned, or anticipated revenue. Actual revenue

amounted to I.D. 168.2 million, while planned revenue amounted to I.D. 160.8 million, i.e., actual revenue was I.D. 7.4 million above planned revenue.

Actual expenditure in the period under consideration fell short of planned expenditure. Thus while actual expenditure amounted to I.D. 83.1 million, planned expenditure was put at I.D. 136.4 million -- planned expenditure was I.D. 53.3 million above actual expenditure. Some of the unspent balance was lent to municipalities and various government enterprises. Table 9 will present the comparison of actual with planned revenue and expenditure.

The lag in the expenditure of allocated funds was the result of several causes. The more important are:

(1) delay in the approval of the 1951 plan by parliament,

(2) the inability of the different government departments,

especially in the first two years, to execute the projects

entrusted to them by the Development Board, and (3) the need

for adequate time for studies, surveys and preparation of

cost estimates and of specifications in readiness for

(1)

tenders.

<sup>(1)</sup> United Nations Department of Economic and Social Affairs, op.cit., p. 113.

Actual Compared with Planned Revenues and Expenditures in the

Years 1951 to 1956

		1000)		
Financial Year	Estimated Revenues Rev	venues Actual Revenues	Di	fference
1951/52	10,472	7,467	_	
1952/53	20,548	23,999	+	3,005
1953/54	33,920	35,277	+	3,451
1954/55	34,975	40,729	+	1,357
1955/56	60,904	60,762	-	5,754 142
Total	160,819	168,234	+	7,415
Financial Year	Authorized Expenditur	nditure e Actual Expend	itur	e Difference
1951/52	9,364	3,131		+ 6,233
1952/53	20,460	12,838		+ 7,622
1953/54	28,390	12,257		+ 16,133
1954/55	31,600	20,868		+ 10,732
1955/56	46,607	34,025		+ 12,582
Total	136,421	83,119		+ 53,302

Source: Law No. 35, 1951 as amended by Law No. 25, 1952, al-Waqai al-Iraqia, No. 3076, 1952. (For figures on estimated revenue and authorized expenditure in the financial years 1951-54);

Law No. 54, 1956 amending Law No. 43, 1955, Al-Wagai'

#### 3. Loans and Advances of the Board

It has been shown that there was a surplus in the Board's actual accounts, arising from the difference between actual revenues and actual expenditures. The surplus in the 1951 - 1955 period amounted to I.D. 85.2 million. This surplus is usually "held partly in loans to quasi-government institutions and the remainder in the (1) Board's various accounts".

The loans advanced by the Development Board to municipalities and government institutions stood at I.D. 17,298,000 at the end of the financial year 1955 - 1956. These loans are listed in Table 10 below.

Al-Iraqia, No. 3813, 1956. (For figures on estimated revenue and authorized expenditure in the financial year 1955):

Quarterly Bulletin of the Central Bank of Iraq, January - June, 1957, No. 21, p. 35. (For the actual revenue and expenditure in the financial year 1951);

Ibid., April - June, 1957, No. 22, p.
35. (For actual revenue and expenditure in the financial years 1952 - 1955).

(1) Salter, op.cit., p. 148.

#### Table 10

# Loans of the Development Board

#### As on March 31,1956

(I.D. 1000)

Basrah Municipality  Agricultural Machinery Administration  Government Oil Refinery Administration  Mosul Municipality  Najaf Municipality  Kirkuk Municipality  Sulaimaniyah Municipality  Rawanduz Municipality  Arbil Municipality  Amanat al Asimah  Baghdad Water Board  Martyrs Fund Administration  Industrial Bank  400  400  400  400  400  400  400  4		Borrower	Amount Borrowed
Agricultural Machinery Administration 500 Government Oil Refinery Administration 6,535 Mosul Municipality 128 Najaf Municipality 190 Kirkuk Municipality 107 Sulaimaniyah Municipality 67 Rawanduz Municipality 15 Arbil Municipality 41 Amanat al Asimah 2,000 Baghdad Water Board 665 Martyrs Fund Administration 400 Industrial Bank 250 Others 5,000	1.	Baghdad Bus Service	1,000
Government Oil Refinery Administration 6,535 Mosul Municipality 190 Kirkuk Municipality 107 Sulaimaniyah Municipality 67 Rawanduz Municipality 15 Arbil Municipality 41 Amanat al Asimah 2,000 Baghdad Water Board 665 Martyrs Fund Administration 400 Industrial Bank 250 5,000	2.	Basrah Municipality	400
Mosul Municipality  Najaf Municipality  Kirkuk Municipality  Sulaimaniyah Municipality  Rawanduz Municipality  Arbil Municipality  Amanat al Asimah  Baghdad Water Board  Martyrs Fund Administration  Industrial Bank  Others  128  190  107  107  108  109  109  107  109  109  109  109  109	З.	Agricultural Machinery Administration	500
Najaf Municipality  Kirkuk Municipality  Sulaimaniyah Municipality  Rawanduz Municipality  Arbil Municipality  Amanat al Asimah  Baghdad Water Board  Martyrs Fund Administration  Industrial Bank  Others  190  107  67  15  400  665  400  5,000	4.	Government Oil Refinery Administration	6,535
Kirkuk Municipality  Sulaimaniyah Municipality  Rawanduz Municipality  15  Arbil Municipality  Amanat al Asimah  Baghdad Water Board  Martyrs Fund Administration  Industrial Bank  5,000	5.	Mosul Municipality	128
Sulaimaniyah Municipality 67 Rawanduz Municipality 15 Arbil Municipality 41 Amanat al Asimah 2,000 Baghdad Water Board 665 Martyrs Fund Administration 400 Industrial Bank 250 Others 5,000	6.	Najaf Municipality	190
Rawanduz Municipality  Arbil Municipality  Amanat al Asimah  Baghdad Water Board  Martyrs Fund Administration  Industrial Bank  Others  15  41  2,000  65  65  50  65  65  65  665  665	7.	Kirkuk Municipality	107
Arbil Municipality  Amanat al Asimah  Baghdad Water Board  Martyrs Fund Administration  Industrial Bank  Others  Analysis Analysi	8.	Sulaimaniyah Municipality	67
Amanat al Asimah  Baghdad Water Board  Martyrs Fund Administration  Industrial Bank  Others  5,000	9.	Rawanduz Municipality	15
Baghdad Water Board  Martyrs Fund Administration  Industrial Bank  Others  5,000	LO.	Arbil Municipality	41
Martyrs Fund Administration 400 Industrial Bank 250 Others 5,000	ı.	Amanat al Asimah	2,000
Industrial Bank 250 5,000	.2.	Baghdad Water Board	665
5,000 5,000	3,	Martyrs Fund Administration	400
	4.	Industrial Bank	250
Total 17,298	5.	Others	5,000
Total 17,298			
		Total	17,298

Source: Development Board and Ministry of Development, Annual Report for the Financial Year 1955 - 56, p. 4. (text in Arabic).

# E. Major Development Works of the Board

## 1. Irrigation and Flood-control

The major development projects have been in the field of irrigation and flood-control. Iraq is primarily an agricultural country, with a wide scope for development in the field of agriculture. The cultivated area in Iraq, calculated on the basis of the fallow system of cultivation, (1) is about 13 million mesharas; when all the irrigation projects, now being planned and carried out, have been completed, this area will be extended to about 22 million mesharas. Furthermore, a system of permanent cultivation will be adopted instead of the fallow system now prevailing.

## (a) The Habbaniyah Scheme

The purpose of this scheme has been to control the floods of the Euphrates river by diverting excess water into the Habbaniyah lake, from which it can be fed back into the river further south as required for irrigation, or if there is more water than the lake can contain, to run it into the Abu Dibs depression. This project was finished in 1956, and its total cost amounted to ID. 4.5 million.

## (b) The Tharthar Dam

This project aimed at the control of the recurring floods of the Tigris river by diverting, through a channel,

<sup>(1) 1</sup> meshara equals 2,500 square meters.

a part of the river water discharge to the Tharthar depression. This project was finished in 1956, and its total cost amounted to I.D. 16 million.

#### (c) The Dokan Dam

The Dokan Dam, situated on the Lesser Zab, a tributary of the Tigris, was designed for flood-control, irrigation, and electricity; it is estimated that the area of 1,300,000 mesharas will be put under irrigation as a result of this project, and that the electric power to be generated will be 200,000 kilowatts. Work on this project began in 1954 and is expected to be finished this year. The total cost of the project will be approximately ID. 23 million.

#### (d) The Derbendi-Khan Dam

This dam will be situated on the Diyala river. Its objectives are: protection against the Diyala river floods; storage of water for irrigation purposes; generation of electricity; and reclamation of vast areas of cultivable land for distribution to farmers. Its total cost is expected to be ID. 21 million.

#### 2. Drainage Projects

Drainage is aimed at the combatting of the salinity of the soil. The most important drains are the following.

#### (a) The Dujaila Drain

This drain aims at the drainage of an area amounting to 25,000 mesharas. The total cost of the project now

completed, amounted to ID. 40,000.

## (b) The Saklawiya Drain

The area of 166,000 mesharas of the Sakalawiya and Abi-Ghuraib regions will be drained by this project. Its total cost is estimated at ID. 609,250.

## (c) The Tweirij Drain

The area of land that is involved in this scheme is estimated at 31,800 mesharas and its cost at ID. 61,000.

## (d) Drains of the Musayab Project

The area drained by the Musayab project amounted to 240,000 mesharas and its total cost to ID. 760,000.

#### 3. Land Settlement

In Iraq, there exist large areas of state, or miri sirf land. Much of this land can be made cultivable as a result of the realization of the new irrigation schemes, and small farmers can then be settled on this land.

Land settlement in Iraq has been regulated by
the 1945 and 1951 miri sirf Land Development Laws. The
1945 Law (known as the Dujaila Law) laid down the principles
for the distribution of state lands that were to be opened by
the Dujaila canal. Farmers, according to the Law, could
acquire ownership of holdings of 100 donums after ten years
of occupancy and cultivation, free of rent and other charges.
After ownership of land was acquired, the farmer could not
sell the land or lease it for another ten years period.

The applicants must belong to any of the following categories: farmers of local origin and farming experience, retired officials, ex-service men, and graduates of agricultural schools.

The 1951 Law (of miri sirf land development) regulated the distribution of state land that has been or would be developed or reclaimed. Maximum areas of holdings for different regions and for different types of farming were (1) fixed. Priority in settlement was to be given to local inhabitants. Table 11 shows the results of settlement laws.

## 4. Industrial Schemes

Although agricultural development must be of important concern to Iraqi development policy-makers, yet industrial development must also be sought as it will lead to great benefits to the Iraqi economy. The 1956 plan of the Development Board makes more allocation than previous plans for industry. However, in the past years, emphasis was put on water-control and irrigation projects. The largest industrial projects envisaged are the following.

(a) Electrical stations

Electricity is very important, not only for household consumption, but also for manufacturing industry. Three power-generating stations are planned by the Development Board.

<sup>(1) 500</sup> donums in high pump-irrigated land, 400 donums in irrigated land, 200 donums in low pump areas, and 20 donums in mountainous land with high rainfall.

Table 11

Land Settlement Projects

(Distribution of State Land in Iraq in 1952 - 1954)

Place and Province	Areas distributed (donums)	Number of holdings	No. of persons living on these lands.
Dujaila (Kut)	143,080	1,478	7,390
Shahrazoor (Sulaimaniya)	32,990	497	2,485
Sinjar (Mosul)	1,794,560	6,863	34,315
Hawija (Kirkuk)	45,700	351	1,755
Latafiya (Baghdad)	23,250	465	2,325
Garma	30,000	300	1,500
The Barrage (Kut)	5,200	65	325
Musseyeb River	10,500	175	8 <b>7</b> 5
Makhmur (Kirkuk)	13,340	188	940
Lands in other districts	27,960	384	1,920
Total	2,126,580	10,766	53,830

Source: Doreen Warriner, Land Reform and Development in the Middle East, (London: Royal Institute of International Affairs, 1957), p. 160.

The first station will be located at Dibs; its capacity is estimated at 60,000 kilowatts. The second station will be situated in Baghdad with a capacity of 80,000 kilowatts.

The third station will be located at Basra with a capacity of 45,000 kilowatts. The total cost of these three stations is estimated at ID. 15 million.

(b) Factory for extracting sulfur from natural gas

This factory will be located at Kirkuk. It will extract sulfur from natural gas, and the sulfur produced will be used mostly in a proposed fertilizers factory. The capacity of the factory will be 300 tons per day, and its total cost is estimated at ID. 2.5 million.

## (c) Fertilizers factory

This factory will utilize the sulfur produced from the natural gas for producing ammonium sulfate. Its production capacity will be 250,000 tons a year, and its total cost is estimated at ID. 8 million.

## (d) Paper Factory

It is proposed that such a factory will use sugar cane stalks as raw material. The yearly production of the factory will be 20,000 tons of paper, plus 20,000 tons of cardboard. The total cost of the factory is estimated at ID. 2 million.

## (e) Natural gas project

This project aims at conveying natural gas from Kirkuk to Baghdad for use as fuel; its capacity will be 800,000 cubic meters a day. It is planned that this project will be finished in 1950, and, after the passage of five years its capacity will be raised to 5 million cubic meters per day.

#### (h) Textile factory

A cotton spinning and weaving plant was established at Mosul; in conjunction with existing factories, it would enable Iraq to meet much of its textile requirements. The factory can produce 20 million cubic meters a year, and its total cost amounted to about ID. 3 million.

#### (i) Asphalt factory

The asphalt factory, located at Mosul, is already finished, and produces 60,000 tons of asphalt per annum. Its total cost amounted to ID. 2.2 million.

#### (j) Laboratory

A laboratory for scientific research in Baghdad is planned; its cost will be about ID. 2 million. It has also been decided that an atomic research center will be established, at a cost of ID. 1 million.

## 5. Housing Schemes

Housing schemes were not provided for adequately in development programs preceding 1956. However, more allocation for housing was made in the 1956 plan. The immediate target of the Development Board, manifest in the 1956 plan, is to build 25,000 housing units. Already, 160 of these have been built. Allocation for housing projects was ID. 24 million in the 1956 plan. In addition, a long-term program, that will require some 25 years is being studied; its target is the building of 400,000 housing units.

Housing units have been built in towns the population of which have grown as a result of emigration from the villages, and in localities where dams and other development works are put up or planned. Rural housing is taking place only in state land settlements, but nothing is done for re-housing villagers who live in very unsatisfactory dwellings such as tents, mud houses, and reed huts.

The housing schemes of the Development Board must be internally integrated as well as co-ordinated with general development. Surveys to ascertain the needs of the different parts of the population must be undertaken. A housing Cenus, however, was undertaken in Iraq in 1956. It showed the following results:

Table 12
Results of the 1956 Housing Census

Kind of houses	Number
Brick	111,871
Stone	46,127
Mud	304,296
Sarifa	194,629
Tent	15,282
Other	68,901
Total	741,106
	-

Source: Government of Iraq, Ministry of National Economy, Statistical Abstract, 1956, p. 120.

#### 6. Other Schemes

In addition to the above-mentioned schemes, there are signs of progress in transport, public buildings, and social services (other than housing). A number of roads have been built and 2,000 kilometers more are planned. A number of bridges have been constructed, and many more are planned for the future. The Development Board has already built 12 secondary schools, 110 elementary schools, 15 hospitals, 49 dispensaries, and 449 other public buildings. Drinking water is being provided for, and artesian wells are dug in the northern part of the country and in the desert regions; 100 artesian wells have been dug, and 150 more are underway.

From the brief survey undertaken, it appears that social overhead capital such as dams and other irrigation and drainage works have had the priority rating. Industry, housing and other social services have only recently been receiving considerable attention. However, it will be useful to remember that before development can begin, there must exist in the country a sufficient quantity of social overhead capital of appropriate quality. With the presence of floods and droughts, water-control and irrigation projects become the type of social overhead capital urgently needed in the primary phases of Iraqi economic development. However, as these social overheads

are provided, attention must be turned to other forms of development such as industry and social services. This shift seems to be taking place.

This chapter was aimed to show that the Iraqi government is utilizing its oil revenue in the formation of assets which will help increase production in the future. The effects of development expenditure and the evaluation of development policy will be discussed in the following two chapters.

### APPENDIX II

Table A

# Proposed Revenue and Expenditure of the Development Board as Envisaged in the

# First Program Covering the Financial Years 1951/52-1955/56

(I.D. 1000)

	Frovision for 1951/52	Provision for 1952/53	Frovision for 1953/54	Provision for 1954/55	Provision for 1955/56	Total 1951/52 - 1955/56	Percent of Total
Revenues:	4 202	12 707	19,901	25,333	25,846	91,110	95.8
1. Oil Revenues	6,323	13,707		640	185	3,965	4.2
2. Proceeds of Tharthar Project Loan	320	1,850	970				-
	6,643	15,557	20,871	25,973	26,031	95,075	100
Total Revenues		deplayed and the control of	parent department		-	-	entered de che
B. Expenditures:					200	970	1.4
1. Administration, Studies and Organization	170	200	200	200	200		
2. Irrigation and Flood Control	3,024	6,630	7,390	7,545	5,455	30,044	47.2
3. Main Roads and Bridges	2,066	3,350	3,550	3,460	3,400	15,806	24.0
	2,368	2,300	2,450	2,650	2,850	12,618	19.0
4. Buildings	1,736	1,210	1,240	1,140	890	6,216	9.0
5. Reclamation of land and other Projects		-	-	-	-		300
Total Expenditures	9,364	13,690	14,830	14,995	12,795	65,654	1.00
**************************************				-			

Iaw No. 35 of 1951, al-Wagai' al-Iragia, (No. 2984, 1951).

Source:

Table B

## Proposed Revenue and Expenditure of the Development Board as Envisaged

in the Second Program Covering the Financial Years 1951/52-1956/57.

	(ID.1000	)				-		
	Frovision for 1951/52	Frovision for 1952/53	Frovision for 1953/54	Frovision for 1954/55	Frovision for 1955/56	Provision for 1956/57	Total 1951/52 1956/57	Fercent of Total
			And the second s					
A. Revenues:							7/1 /10	07 5
1. Oil Revenues	10,150	18,690	32,900	34,300	34,300	34,300	164,640	97.5
2. Proceeds of Tharthar Project Loans	320	1,850	970	640	185	-	3,965	2.3
3. Miscellaneous Revenues	2	8	50	35	20	20	135	.008
	All of the Control of	-		-	de la company de la company			
Total Revenues	10,472	20,548	33,920	34,975	34,505	34,320	168,740	100
TO COLL TO VOLUCE	State Conference on the Confer	-		-	anguige interestation	***		
B. Expenditures:								
	170	460	600	650	650	650	3,180	2.0
1. Administration, Studies and Organization	3.024	7,100	10,840	11,950	10,335	10,125	53,374	34.3
2. Irrigation and Flood Control				5,300	5,450	5,450	26,766	17.1
3. Main Roads and Bridges	2,066	3,800	4,700			3,300	18,018	11.5
4. Buildings	2,368	2,650	3,100	3,300	3,300			
5. Reclamation of Land and Other Projects	1,686	3,450	4,150	4,400	4,600	4,700	22,986	14.8
6. Industries	50	3,000	5,000	6,000	8,000	9,000	31,050	19.9
Total Expenditures	9,364	20,460	28,390	31,600	32,335	33,225	155,374	100
			Annal of the color of the colorest					

Law No. 35 of 1951 as amended by Law No. 25 of 1952, al-Wagai' al-Iragia, (No. 3076, 1952).

Source:

### APPENDIX II (Cont'd)

Table C

Proposed Revenue and Expenditure of the Development Board as Envisaged in the Third Program Covering the Financial Years 1955/56 - 1959/60

			ID. 1000)		-				
		Frovision for 1955/56	Provision for 1956/57	Provision for 1957 / 58	Frovision for 1958/59	Provision for 1959/60	Total 1955/56 - 1959/60	Percent of Totel	
A. Revenues:							01.5 000	00. 6	
1. Oil R	evenues	43,000	43,000	43,000	43,000	43,000	215,000	99.6	
2. Proce	eds of Tharthar Froject Loan	10	-	-		1	10	•0004	
3. Inter	ests.	130	200	90'	90	90	600	•02	
4. Misce	llaneous Revenues	15	15	15	15	15	75	.003	
	Total Revenues	43,155	43,215	43,105	43,105	43,105	215,685	100	
B. Expenditu	res:								
Major Tro	jects						an salan	2 4	
1. Admin	istration, Studies, and Organization	650	1,200	1,200	1,200	1,200	5,450	1.8	
2. Irrig	ation and Flood Control	21,700	23,400	22,950	20,800	19,085	107,935	35.5	
3. Roads	and Bridges	10,970	16,200	13,130	8,450	4,950	53,700	17.6	
4. Airpo	rts	500	1,500	1,000	1,000	1,000	5,000	1,6	
5. Railw	rays	5,500	2,500	2,500	2,500	2,500	15,500	5.1	
6. Build	lings and Institutions	4,300	7,450	7,690	5,600	3,150	28,550	9.5	
7. Indus	stry, Mining and Electricity	8,212	12,737	8,322	7,290	7,100	43,571	14.3	
8. Devel	Lopment of Animal and Vegetable Wealth and derground Water	1,665	1,565	1,275	1,185	785	6,475	2.1	
Minor Pro	pjects								
9. Buildings	s and Institutions	6,750	6,750	6,250	6,250	6,250	32,250	10.6	
LO. Miscellar	neous Projects	1,525	1,275	1,025	1,025	1,025	5,875	1.9	
	Total Expenditures	61,772	74,557	65,342	55,210	47,405	304,306	100	

Law No. 43 of 1955, al-Wagai' al-Iragia, (No. 3593, 1955).

Source:

### APPENDIX II (Cont'd)

Table D

# Proposed Revenue and Expenditure of the Development Board as Ehvisaged in the

Fourth Program Covering the Financial Years 1955/56 - 1960/61.

		(ID. 1000)						
	Frovision for 1955/56	Frovision for 1956/57	Provision for 1957/58	Provision for 1958/59	Frovision for 1959/60	Frovision for 1960/61	Total 1955/56 1960/61	Percent of Total
A. Revenues:								
1. Gil Revenues 2. Proceeds of Tharthar Project Loan 3. Interests 4. Miscellaneous Revenues	59,081 39 1,764 20	65,200 - 600 30	65,200 - 600 30	65,200 - 600 30	65,200 - 600 30	65,200	385,081 39 4,764 170	98.7 .008 1.2 .04
Total Revenues	60,904	65,830	65,830	65,830	65,830	65,830	390,054	100
B. Expenditures:								
Major Projects  1. Administration, Studies and Organization 2. Irrigation and Flood Control 3. Roads 4. Dridges	2,950 13,105 6,186 2,590	800 24,000 8,000 4,000	850 27,000 15,000 5,500	900 27,000 18,000 7,000	900 29, <b>250</b> 10,000 2,500	950 33,500 6,500 1,300	7,350 153,755 63,686 22,890	1.4 30.7 12.7 4.6
5. Airports	352 4 <b>,</b> 940	1,500 4,250	1,750 4,350	2,000 4,350	2,250 4,350	1,000 2,700	8,852 24,940	1.8 5.0
6. Railways 7. Ports 8. Health and Establishments 9. Educational Institutions	575 314	950 450	200 2,250 1,000	800 2,500 1,250	1,000 2,700 1,650	2,000 1,000 1,650	4,000 9,975 6,314	0.8 2.0 1.3
10. Public Buildings	1,900	3,600 400	6,500 500	4 <b>,</b> 000	2,550 500	2,350 500	20,900 2,580	4.2 0.5
11. Summer Resorts 12. Housing Projects 13. Industry, Mining and Electricity	85 4 <b>,119</b>	2,000 17,000	6,000 16,000	6,000 11,000	5,000 9,000	5,000 10,000	24 <b>,</b> 085 67 <b>,</b> 119	4.9 13.4
14. Development of Animal and Vegetable wealth and underground water	1,037	3,000	3,000	2,500	2,500	2,250	14,287	2.8
Minor Projects				10.188	77 700	11 1 <i>m</i> E	59,375	12.0
15. Buildings and Institutions 16. Miscellaneous Frojects	6,750 1,525	9,925 2,075	10,175	1,575	1,175	11,175	9,900	2.0
Total Expenditures	46,607	81,950	101,550	99,550	86,900	83,450	500,007	100

Source: Lew No. 54 of 1956 amending Lew No. 43 of 1955, al-Wagai' al-Iragia, (No. 3813, 1956).

### CHAPTER IV

### MAJOR EFFECTS OF DEVELOPMENT EXPENDITURE

The purpose of this chapter is to point out to the major effects of development expenditure in Iraq on the economic structure of the country and its human resources.

However, a brief survey will first be presented of the Iraqi economy mostly influenced by the development program.

### A. Economic Survey

### 1. Area and Population

The area of Iraq is 444,442 square kilometers.

The total population was 4,816,185 according to the 1947

census and 6,538,109 according to the 1957 census. The ratio

of land to population is high in Iraq when compared with

(1)

other Arab countries. According to Doreen Warriner, the

area of agricultural land per head of population is 5 acres

or 2 hectares, somewhat more than in Syria and 20 times the

comparable area in Egypt.

### 2. Agriculture

Iraq is principally an agricultural country;
about 80 per cent of the population derive their living
(2)
directly or indirectly from agriculture, and the bulk of
Iraqi exports (excluding oil exports) consist of agricultural

<sup>(1)</sup> Doreen Warriner, Land Reform and Development in the Middle East, (London: Royal Institute of International Affairs, 1957), p. 115.

<sup>(2)</sup> Royal Institute of International Affairs, The Middle East, A Political and Economic Survey, (London: Royal Institute of International Affairs, 1955), p. 275.

products. The area under cultivation is divided roughly equally between the irrigation zone in the south - the alluvial plain between the two rivers - and the rainfed zone of the north where dry farming predominates. Land in both zones is cropped in accordance with an alternate fallow system, whereby one half of the land is cropped, the other (1) half remaining fallow. Of the total area of Iraq, only 20 per cent is cultivable, and only 30 per cent of the cultivable area is actually under cultivation. Agricultural crops consist mainly of barley and wheat; about 88 per cent of the area under crops is devoted to the cultivation of barley and wheat, 5 per cent for rice, and a little over 2 per cent for maize.

Iraqi agriculture is faced in general with the following problems:

### (a) Floods and droughts

Floods in the irrigated zone on the banks of the rivers are very dangerous as they may destroy crops, while droughts are detrimental in the rain-fed zone. The two problems are being attacked by a large-scale program of flood control and irrigation, respectively.

<sup>(1)</sup> Doreen Warriner, op.cit., p. 116.

<sup>(2)</sup> Royal Institute of International Affairs, op.cit., p. 275.

<sup>(3)</sup> Government of Iraq, Ministry of Economics, <u>Statistical Abstract, 1956</u>, (Baghdad, 1957), p. 84.

### (B) Salinity

Doreen Warriner states that "the irrigation zone is a delta of marine origin, and the subsoil is saline. As a result of seepage from the high level rivers and canals, the water-table is high, and capillary action raises the sub-soil water to the surface, where it evaporates, leaving the salt behind." Salinity is dangerous to the land, as it reduces its productivity and, if the salinity is high, it may throw the land out of cultivation. Salinity may be combatted by drainage aided by pumping.

#### (c) Land tenure

Land tenure and conditions of cultivation may be enumerated as a further problem of Iraqi agriculture. The bulk of the cultivated land is held by big landlords who divide their land in small plots among sharecropper peasants who cultivate the land under the supervision of the agents (2) of the landlords. This inhibits investment and application of new tools and techniques in agriculture. The inhibition is caused by the lack of interest on the part of the landlords in organization and development of agriculture, and by the poverty, insecurity, and lack of incentive on the part of the peasants. The peasant is not motivated to improve the land when the bulk of the yield goes to the landlord.

<sup>(1)</sup> Doreen Warriner, op.cit., p. 113.

<sup>(2)</sup> The share of the peasant may be as little as 30 per cent of the yield.

### 3. Industry and trade

Apart from the oil industry, manufacturing industry is little developed in Iraq. According to the 1954 Industrial Census, only about 5 per cent of Iraqi's working population is engaged in industrial pursuits. Iraqi industry is confined mainly to public utilities, the production of building materials such as cement and bricks, the processing of agricultural products such as dates, and the production of consumer goods for the local market. The major consumer industries are cotton spinning and weaving, tanning, breweries, soapmaking, vegetable oils, and alcohol.

Iraqi imports consist mainly of manufactured goods and industrial raw materials, and exports (apart from oil exports) consist largely of agricultural products. Iraq has an adverse balance of trade if the operations of the oil sector are excluded. But the deficit in the balance of trade is more than offset by the surplus in the operations of the oil sector.

### B. Effect on the National Income

The development expenditure is bound to increase
national income and employment. By national income is
meant "the total value of goods and services becoming available
to the residents of a nation as a result of economic activities."

<sup>(1)</sup> K.G. Fenelon, <u>Iraq National Income and Expend-iture</u>, (Baghdad: Ar-Rabita Press, 1958), p. 13.

Repercussions of development expenditure in the economy are not limited to their primary contributions to the national income. Such expenditures have a multiplying income effect which can be assessed if one can compute the investment multiplier to account for roundabout increases in income.

Development expenditure creates an increase in production, in employment, and thus in income. As the income of people associated with the development program increases as a result of expenditure on investment projects, these people will use part of their income for consumption purposes. The size of this part depends on their marginal propensity The increment in expenditure may be directed to consume. either toward goods locally produced or toward imported goods. (If the demand is directed toward imported goods, further creation of income will occur outside the Iraqi income stream). In so far as demand is directed toward locally made goods, producers will have an added incentive to increase production This will lead either to an actual increase in further. production and therefore in incomes if productive factors are readily available or, if productive factors are not so available, merely to a rise in prices. In both cases money incomes will rise, but in the first case of induced production, real

<sup>(1)</sup> It is expected that the marginal propensity to consume, in a country like Iraq where the standard of living is low, will be high, that is, that people will spend a high proportion of the incremen in their income on consumption. Private consumption expenditure measured at current prices rose from ID. 137.3 million in 1950 to ID. 199.1 million in 1956. (Fenelon, Ibid., p. 18.

(1)

income will also rise.

flow

Leakages in the current income/must be accounted for. They lead to a decrease in the action of the multiplier, as they constitute outward flows from the income stream.

Voluntary savings which, by definition, are unspent income, are one such leakage. Imports of foreign goods are another leakage because they represent income directed to foreign markets. Taxes, unless spent by the public authority, constitute a third leakage.

In view of the above considerations, the question may be asked: has there been an increase in the national income and the standard of living in Iraq? Recent calculations by Dr. Fenelon, the statistical expert of the Ministry of Economics of Iraq, show that there has been an increase in the national income of Iraq as shown in Table 13 below.

The national income in Table 13 presented below, was calculated on the basis of current prices, i.e., prices ruling in the year to which the figures refer. Calculations of the national income at constant prices was made by Dr. Fenelon and the results are shown in Table 14, below, where

<sup>(1) &</sup>quot;The problem is, however, how strong this induced expansion of production, employment and incomes will be, and how far it will go. The answer to this question depends upon a number of circumstances, viz. the character of the original investment, the propensity to consume Iraqi products, and the reactions of the retailers, wholesalers, and producers."

(C. Iversen, Monetary Policy in Iraq, (National Bank of Iraq, 1954), p. 130.)

Table 13

National Income and Expenditure for the Years 1950-1956

	(ID. m	illion					
Calendar Year	1950	1951	1952	1953		1955	(3) 1956
Private Consumption Expenditure	137	157	162	167	178	189	199
General Government Consumption Expenditure	28	30	38	51	57	62	68
Gross Domestic Fixed Capital Formation	17	21	34	46	43	67	89
Increase in Stocks	1	1	1	2	- 1	4	5
Net Export of Goods & Services	14	12	54	79	96	80	46
Expenditure on Gross Domestic Product	197	221	289	345	373	402	407
Net Factor Income from the Rest of the World	-15	-11		(1) -53	-67	-71	-58
Expenditure on Gross National Product	182	210	247	292	306	331	349
Provisions for the Consumption of Fixed Capital	- 9	-10	-13	-15	-16	-17	-18
Indirect Taxes less subsidies	-15	-16	-17	-18	-22	-25	-28
. Total = National Income	158	184	217	259	268	289	303

Source: K.G. Fenelon, <u>Iraq National Income and Expenditure</u>, (Baghdad: Ar-Rabita Press, 1958), p. 14.

- (1) Estimated.
- (2) Flood Year.
- (3) In November and December, damage to pipe line led to cessation of crude oil exports through Syria. Suez crisis also affected trade through Basra Port. There had however been a build-up of merchant's stocks in previous months and there was no shortage of supplies in shops.

the national income for each year in the 1950 - 1956 period is shown both at 1950 and 1956 prices. For the purpose of adjustment, Dr. Fenelon employed a special composite price index number, combining the cost of living index number for unskilled laborers in Baghdad with the wholesale price (1) index. Furthermore, Dr. Fenelon has calculated per capita income in the 1950-1956 period at current prices; he obtained per capita income by dividing the national income for each year by the population resident in Iraq at mid-year, and for that purpose a special estimate of the population was made, (2) based on the 1957 population census.

The calculations of Dr. Fenelon are presented in Table 14 below.

According to these calculations, the national income measured at constant prices, that is the real income, increased appreciably between 1950 and 1956. National income measured at prices of 1956, for example, increased from ID. 165 million in 1950 to ID. 303 million in 1956. Also per capita income has increased from ID. 32 in 1950 to ID. 51 in 1956 - population increase being taken account of.

<sup>(1)</sup> The wholesale price index was given half the weight of the cost of living index because, as Dr. Fenelon states, the latter is more applicable to the prices used in many of the calculations. (Fenelon, op.cit., p. 16).

<sup>(2) &</sup>lt;u>Ibid.</u>, pp. 15 - 19.

Table 14

National Income of Iraq for the Years 1950 to 1956

	_								
	Calendar Year	1950	1951	1952	1953	1954	1955	1956	
1.	National Income at Current Prices, million dinars	158	184	217	259	268	289	303	
2.	Per Capita Income at Current prices, dinars	32	34	39	46	47	50	51	
3.	Composite Price Index, (1956 = 100)	96	103	109	94	92	94	100	
4.	Composite Price Index, (1950 = 100)	100	107	114	97	95	97	104	
5.	National Income at prices of 1956, million dinars	165	179	199	276	291	307	303	
6.	National Income at prices of 1950, million dinars	158	172	190	267	282	298	291	
									_

Source: K. G. Fenelon, <u>Iraq National Income and</u>
Expenditure, (Baghdad: Ar-Rabita Press, 1958), p. 17.

The above table indicates an appreciable increase in the country's real income.

### C. Effect on the Price Level

In this section we will discuss the effects of development expenditure on the price level in Iraq in order to

see whether any inflation has resulted from the spending of the oil revenue discussed in the last chapter. Inflationary process is defined for our purposes as "a process in which the volume of expenditure is increasing faster than the volume of production measured at constant prices."

The fear of inflation in Iraq is based on the contention that shortages of manpower and of materials might arise as a result of the infusion into the economy of the large sums devoted to development and the pull these sums have on available resources, both human and material. Furthermore, shortages may arise in goods which contractors, entrepreneurs, and consumers enjoying higher incomes, will demand. "Inflation in Iraq ... presents a limited, distinctive, and manageable problem. It is to be thought of in terms of probable shortages of available man-power, of certain materials, and of the kind of goods which contractors, entrepreneurs and consumers enjoying higher incomes are likely to buy ... Inflation of this kind, though more manageable and less menacing than other forms of inflation, may still be serious in its effects in view of the scale of the proposed development in relation to the national resources ... The (Development) Board will help much by concentrating its effort on so arranging its work as to reduce

<sup>(1)</sup> Lionel Robbins, The Economist in the Twentieth Century, (London: Macmillan & Co. Ltd., 1954), p. 53.

to a minimum the shortages of labor and material its execution (1) will cause."

In practice, shortages have arisen in the field of dam construction where it is difficult to find labor, and laborers recruited come usually from agricultural land where they are needed. Laborers come from nearby districts; they do not move from faraway places, and therefore the Development Board must "time its work so as not to increase too seriously (2) the simultaneous demands for labor in a given locality."

There are also shortages of material such as cement, and this shortage of cement is making itself more pronounced. Such a shortage may be remedied by the importation of cement from abroad - but not without delay, unless the imports are ordered well in advance of the time in which they are required.

In view of the increased development expenditure in

Iraq, there has been particular increases in wages and prices.

Wage-rates for skilled laborers have increased between

(3)

twenty and thirty per cent. The respective increase in

wages for semi-skilled laborers have been somewhat less;

and only in the case of earth-moving works, in somewhat isolated

localities,

<sup>(1)</sup> Lord Salter, The Development of Iraq, (Iraq Development Board, 1955), pp. 27 - 28.

<sup>(2)</sup> Ibid., p. 29.

<sup>(3)</sup> Ibid., p. 33.

has there been an appreciable increase in wage rates for unskilled (1) laborers. This is presumably due to the high elasticity of supply of labor resulting from the presence of unemployment and underemployment on the land.

Price indices indicate that there has been a slight increase in the general price level in recent years. index numbers show that despite rapidly increasing development expenditure, inflation was kept well in check with price levels actually falling in 1953 and 1954. From 1955 onwards to the latter part of 1957, inflationary tendencies began to show themselves in the general price level, whereas previously these had been largely confined to land values and rents. At the end of 1957 and the beginning of 1958, however, prices were again However, it must be stated that this slight increase in the price level does not constitute an evidence of inflation. We have to compare the change in the price level with the change in the national income, measured at current prices. Thus, although the price level has on the whole increased during the last few years, yet the national income, measured at current prices, has increased proportionally much more than the increase in the price-level. If prices rise, while the national income increases at the same time, then the inflationary pressure of development expenditure is nullified. Thus,

<sup>(1) &</sup>lt;u>Ibid</u>.

<sup>(2)</sup> Fenelon, op.cit., p. 6.

while the national income has increased from ID. 158 million in 1950 to ID. 303 million in 1956, the price level (as shown in the composite price index) has risen only from 100 in 1950 to 104 in 1956. This indicates an increase in real income. It must be stated, however, that population had increased but not to so great an extent as to nullify the increase of the national income.

Table 15 below illustrates what has been said above.

Table 15

National Income and Price Index in the Years 1950 to 1956

Calendar Year	Composite Price Index 1950 = 100	National Income at Current Prices, million dinars
1950	100	158
1951	107	184
1952	114	217
1953	97	259
1954	95	268
1955	97	289
1956	104	303

Source: K. G. Fenelon, <u>Iraq National Income and Expenditure</u>, (Baghdad: Ar-Rabita Press, 1958), p. 17.

### D. Effect on the Balance of Payments

In this section the effect of development expenditure on the balance of payments will be discussed. In a developing country that is undertaking a large expenditure program, there are two influences that will affect the balance of payments of the country: (1) The influence resulting from the contracting of foreign loans, and (2) the influence generated by the expenditure on the development projects. The first case is not of significance for Iraq, because the country is not in need of foreign loans; therefore it will not be discussed here. The second case relates to two types of influences: (1) those bearing on imports and (2) those bearing on exports.

Development expenditure will affect imports, and hence the balance of payments, in two ways: (1) it will directly lead to an increase in imports to the extent that foreign capital goods and services are needed in the carrying out of development projects. Most of the investments in the development projects in Iraq require the importation of capital goods and will therefore amount to a call on balance of payments resources. Thus imports of capital goods amounted to ID. 55.2 million in 1956 (51.5 per cent of total imports), ID. 44.7 million in 1955 (49.2 per cent of total imports), and ID. 23 million as annual average in 1952 - 1954 (40.6 per cent of total imports).

<sup>(1)</sup> The Annual Report of the Central Bank of Iraq, 1956, p. 22.

(2) Development expenditure will also indirectly lead to an increase in consumable imports caused by the increased incomes enjoyed by the consumers, and by the resulting increase in demand for food, clothing, and other consumer goods before the development projects have had time to increase national production. Moreover, many of the projects have only a slight effect, or a long-run effect on the production of consumer goods. Imports of consumer goods amounted to ID. 30.5 million in 1956 (28.5 per cent of total imports), ID. 31.1 million in 1955 (34.2 per cent of total imports), and an annual average of ID. 24.1 million during the years 1952 - 1954. The same class of imports before 1952 amounted to ID. 15.2 million in 1949, ID. 17.5 million in 1950, and ID. 24.4 million in 1951.

It may be said with regard to exports that some projects, especially the agricultural ones, will expand production of goods that can be exported. But exports in Iraq, other than oil exports, have not increased; on the contrary, they have been declining, and this decline can be explained partly by greater consumption at home, and partly by the lack of markets for the goods the production of which is being developed. Exports - apart from oil - amounted to ID. 34.77 million in 1951, ID. 23.51 million in 1952, ID.

<sup>(1) &</sup>lt;u>Ibid.</u>, p. 23.

<sup>(2) &</sup>lt;u>Ibid.</u>, 1952, p. 38.

23.67 million in 1953, ID. 20.68 million in 1954, ID. 16.18

(1)
million in 1955, and ID. 13.65 million in 1956. Dr.

Fenelon states in this connection that "these exports are mainly agricultural products and no doubt the fall can be partly explained by greater consumption at home and in part by the fall in the prices of barley and dates which constitute (2)
the main exports after oil.

If one excludes the operations of the oil sector in Iraqi foreign trade, one will find that there are continuous trade deficits. The trade deficit amounted to ID. 8.20 million in 1951, ID. 25.82 million in 1952, ID. 32.73 million in 1953, ID. 47.65 million in 1954, ID. 76.05 million in 1955, and ID. (3) 91.03 million in 1956. However, these are more than offset by oil revenues. Thus, there was a yearly surplus in the operations of the oil sector. This surplus amounted to ID. 17.65 million in 1951, ID. 47.18 million in 1952, ID. 55.30 million in 1953, ID. 66.39 million in 1954, ID. 93.72 million in 1955, and ID. 79.91 million in 1956. The drop in 1956 was due to the Suez crisis when the pipelines carrying oil to the Mediterranean were blown up late in the year.

<sup>(1)</sup> International Monetary Fund, International Financial Statistics, Vol. X, No. 12, December, 1957, p. 267 (for 1951); and vol. XI, No. 2, February, 1958, p. 265 (for 1952 - 1956 exports).

<sup>(2)</sup> Fenelon, op.cit., p. 6.

<sup>(3)</sup> International Monetary Fund, op.cit., pp. 267 and 265.

<sup>(4) &</sup>lt;u>Ibid</u>.

If the operations of the oil sector are included in the balance of payments, then Iraq has a positive balance of payments as the surplus in the operations of the oil sector exceeds the trade deficit. "At present this (trade deficit) does not ... raise unsoluble problems for Iraq, because the banking system - thanks to the oil royalties - possesses ample supplies of foreign exchange. This is precisely what makes the future look prosperous for Iraq. In most underdeveloped countries a process of expansion in production, incomes and consumption will run up against a shortage of foreign exchange. In Iraq the necessary foreign exchange is available and consequently the expansion will not be hampered by balance of payments difficulties".

At present, Iraq does not face the problem of a shortage of foreign exchange and of international liquidity as a result of the growing activity resulting from its expenditure programs. The problem, as it was pointed out, does not arise, because oil revenue accruesto Iraq in foreign exchange. But it will arise once the expansion of monetary income goes much further. However, "it seems to be likely that Iraq will accumulate holdings of foreign currencies ... It is difficult except to imagine how a serious foreign exchange scarcity could develop in connection with a very severe internal inflation. To increase fixed investments on a scale sufficient to create a shortage of foreign currency would undoubtedly require the simultaneous

<sup>(1)</sup> Iversen, op.cit., pp. 132 - 133.

utilization of domestic factors of production to so large an extent that it could not be met without a considerable increase (1) in the levels of prices and incomes."

### E. Human Resources

In an economic development program, the planners must not only consider the material effects of the development program; they must also consider the human factor. Mental and physical aptitudes and skills are a very important factor in promoting development. "One of the greatest differences between developed and underdeveloped countries is what their people know and can do, more than any difference in their resources."

It is very difficult, if not impossible, to assess the impact of the development program in Iraq on the human side of economic development. Data are lacking in this respect. "The human resources (of Iraq) have never been surveyed. Much more is known about the rivers of Iraq than about its inhabitants ... There has been no long series of investigations into the possibilities of raising living standards comparable to the studies of the land and water potential." Moreover, one does not expect a strong impact on human resources because the development programs have not provided much for that purpose -

<sup>(1) &</sup>lt;u>Ibid</u>., p. 140.

<sup>(2)</sup> U.N., Formulation and Economic Appraisal of Development Projects, (U.N. publications, New York, 1951) Vol. II, p. 570.

<sup>(3)</sup> Doreen Warriner, op.cit., pp. 120 - 121.

there has not been enough investment in human resources in comparison with water control and other projects. However, an appraisal will be made of the impact of the program on human resources.

### 1. Training

It is very difficult to provide estimates of the supply of skilled labor that is available and that which is being trained. Iversen observes that "the efficiency of labor in Iraq is low to-day partly because of insufficient nutrition, partly because of lack of education and training."

Training in Iraq is deficient. It is reported that contractors and enterprises are experiencing much difficulty in recruiting the necessary skilled laborers, because the supply of trained (2) manpower is short.

The technical education provided by the state has been very limited. There are at present three principal types of facilities for labor training. These are: state vocational schools; the training schools and shops of such large organizations as the I.P.C., the Basra Port Authority, and the Iraqi State Railways; and on-the-job training provided by numerous enterprises.

State vocational schools situated at Baghdad,
Basra and Kirkuk graduate about 50 men each year. The fields
of training are carpentry, foundry, metal-working, turning,

<sup>(1)</sup> Iversen, op.cit., p. 145.

<sup>(2)</sup> Salter, op.cit., p. 158.

fitting, and automobile and electrical repair. Training schools run by the I.P.C. graduate a total of about 100 men each year trained as skilled artisans, clerical or technical personnel. The State Railways and the Basra Port Authority graduate about 20 to 30 men each year. Data are not available concerning the number of skilled workers benefiting from on-the-job training provided by manufacturing enterprises. It is maintained that the number of such trained personnel appreciably exceeds the total number produced by the vocational and training schools and represents one of the most significant contributions to (1) the supply of skilled labor.

#### 2. Enterprise

The presence of qualities of entrepreneurship and the willingness to engineer change and to depart from customary or traditional methods and practices, are factors likely to assist the economic development of an underdeveloped country greatly. It is important for economic development that individuals be able and willing to perceive new opportunities for profit, and to exploit such opportunities. The level of economic activity will be raised by the decisions and acts of entrepreneurs or innovators and of those who appreciate the potentialities of new ideas and novel methods and adopt them for local use.

<sup>(1)</sup> Arthur D. Little, A Plan for Industrial Development in Iraq, (Arthur D. Little, Inc., Cambridge, 42, Mass., May, 1956), pp. 359 - 360.

However, in an underdeveloped country such as Iraq there are difficulties in the way of developing and using entrepreneurial qualities. In underdeveloped countries the atmosphere is usually inimical to experiment and innovation because of the force of custom, the rigidity of status and the distrust of new ideas and of the exercise of intellectual activity.

Nevertheless, the development program in Iraq, with its impact on demand and economic activity resulting from the expansion of income, provides a stimulus for the exercise of entrepreneurial qualities. One expects the present economic expansion created by the development program and the prospective rise in earnings resulting from the expansion to attract Iraqis from traditional lines of activity to new industrial and other enterprises, and to quicken the mental transformation of capitalists and businessmen so as to make them willing and able to undertake ventures involving a greater degree of risk and a longer time-range.

The question ought to be asked here: has the entrepreneurial spirit developed in Iraq? It is conceded that indigenous entrepreneurial resources are developing; more and more Iraqis are occupying the higher strata of the entrepreneurial organization. This however, is happening slowly and, mostly, in building and contracting for public works. When it comes to industry, the development is slower and less widespread.

<sup>(1)</sup> Yusif A. Sayigh, Entrepreneurship and Develop-

Iversen states in this connection: "At present it seems ... as if the number of persons in Iraq who are able to run new industrial enterprises and willing to resume responsibility for their success is relatively limited. Even if such persons could be found they might not possess the necessary capital for such ventures, and the commercial banks are apparently not too willing to lend money for these purposes."

The presence of enterprising producers is necessary, since the increasing economic activity will be associated with a new demand for products which are not in general use in Iraq; and the shortage of such enterprising producers may very well prove to be a bottleneck in such fields of activity. This shortage, it may be argued, can be compensated for by dependence on foreign entrepreneurs. In the short run, this may be appropriate. "But in the long run it is an imperative necessity that the nationals of Iraq themselves develop a sufficient amount of enterprising spirit and willingness to take business risks — unless they want foreigners to dominate permanently the economic life of the country."

ment: Private, Public, and Joint Enterprise in Underdeveloped Countries, (Unpublished doctorate dissertation submitted to the Faculty of Philosophy of the Johns Hopkins University, Baltimore, Maryland, 1957), p. 259.

<sup>(1)</sup> C. Iversen, op.cit., p. 142.

<sup>(2)</sup> Ibid.

### 3. Mobility

Labor in Iraq is usually immobile except within a very narrow range, in a geographical and occupational sense. This is due to many factors among which are traditionalism, racial and religious differences, family and other social connections, deficiencies of communications, the shortage of housing, ignorance of opportunities, and fear of the unknown. Work on dams has been drawing labor from local and not from faraway places. For example, "The work at Samarra and Tharthar ... draws its unskilled Iraqi labor almost entirely from local farms, or small centers, and with no contribution from Baghdad ... A labor shortage, with a consequent large increase wages, may well occur in one area where there is still unemployment in others unless means are found to make labour much more easily tranferable."

The main effect of the development program on mobility has so far been an increased rate of migration to the towns (such as Baghdad, Basra, and Kirkuk), and the population of these towns is increasing rapidly as a result of emigration from Amara and Kut provinces where the peasants are most oppressed. The movement to the towns comes usually from the poor provinces, and such poor migrants usually accept low wages. This movement has not so far affected productivity is

<sup>(1)</sup> Salter, op.cit., p. 33.

<sup>(2)</sup> Doreen Warriner, op.cit., p. 132.

#### because

in agriculture very adversely landowners have been able to invest in tractors and combines to replace the workers lost.

The lack of mobility of labor can be remedied in Iraq if the people can be directed somehow to go to the places where they are needed. Occupational mobility, however, is easy in the absence of rigid organizational boundaries between the different trades, and in view of the low level of skills generally. Geographical mobility of labor is slowed through lack of housing facilities in certain parts of the country. By providing adequate housing facilities, Iraq may be partly able to avoid shortages of labor in particular areas. It is also necessary to provide adequate communications so that skilled laborers might accept appointments in remote districts where development work is carried out. Lastly, improvements in the diffusion of information about opportunities will probably enhance mobility.

### F. Other Effects

In addition to the above-mentioned effects of development expenditure, other equally important effects must be pointed
out. These relate to the supply of social overhead capital in
the form of roads, bridges, water-dams, irrigation projects,
drainage projects, schools, hospitals, industries and other
buildings. Land reclamation projects provide reclaimed state
land for distribution to farmers. Funds put at the disposal of

the Industrial Bank made it possible for potential industrial entrepreneurs to launch new manufacturing business. These projects and facilities and their effects were discussed in the last section of the preceding chapter, and hence will not be enumerated here once more.

The Tharthar dam and the Habbaniyah scheme have already succeeded in protecting the crops and towns of Southern Iraq against the floods of the Tigris and Euphrates rivers. Irrigation projects will increase the area under cultivation. Drainage projects remove the salinity of the soil and increase its productivity. Roads and bridges provide a gain to agriculture in lowering transport costs and in providing adequate facilities for transporting agricultural products to the markets. Hospitals and schools increase opportunities of medical treatment and education. Land reclamation and settlement projects provide farmers with land to own and cultivate.

In brief, social overhead capital is important for economic development as it provides the right environment for the expanded exercise of private initiative and enterprise, and provide large-scale economies to private economic activities, Social overhead capital must be provided by the state in an underdeveloped country in the primary phases of development; Iraq has succeeded in adding considerably to the stock of social capital over the past few years.

<sup>(1)</sup> The Appendix at the end of this chapter, however, gives the details of the new areas to be irrigated.

APPENDIX III

# New Areas to be Irrigated (1000 hectares)

Irrigation System	Area affected by dams already started(1)	Other Proposed Areas	Source of Water
Euphrates			
Musayab	48		Habbaniyah
Hilla	80	198	Habbaniyah
Babil		81	Habbaniyah
Shamiya		103	Habbaniyah
Others		53	Habbaniyah
		September 1 and 1	
Total	128	435	
Tigris			
Erbil and Mosul	Not known	Not known	Eski Mosul on Tigris
Tikrit		100	Bekhme dam on Greater Zab
Ishaki	<u></u>	89	Hiski Mosul and Bekhme dams
Makhmur	33		Dokan dam & Hawija barrage on lesser Zab
Hawija	51		Dokan Dam and Hawija barrage on lesser Zab
Adhaim	175	-11	Feeder Canal from Lesser Zab to Adhaim & Damir - Kabu barrage on Adhaim
Lower Nahrawan		223	Derbendi-Khan & Bani Sad dams on Diyala
Dujaila	4-	84	Mosul Excess water from Eski/and Bekhme
Gharraf		429	Excess water from Eski Mosul and Bekhme
Others		59	Excess water from Eski Mosul and Bakhme
	To the second second		
To	tal 259	984	
Grand To	tal 387	1419	

U.N.R.W.A., Quarterly Bulletin of Economic Development, No. 11 (Beirut, 1954), p. 41.

Source:

(1)

#### CHAPTER V

#### CONCLUDING COMMENTS ON THE

#### DEVELOPMENT POLICY OF IRAQ

Iraq is trying to utilize its oil revenue in a constructive manner, i.e., it is trying to spend the oil revenue on development projects that will both lead to an increase in national income and production as well as productivity. This is very important especially when the fact that oil is an exhaustible asset is taken into consideration. One day the oil reserves of the country will be depleted, and oil revenue will then stop accruing to the Iraqi government. Hence it is necessary that oil revenue be put to the maximum use and in such a manner as to increase the national income and the standard of living of the people. Not only that, but also the use chosen must be the most economic among a variety of possible uses, i.e., the best use among alternative uses.

may not be always balanced as between sectors to be developed, and may be criticized in some of their aspects and the principles underlying them, yet the fact remains that the total effect of these programs is appreciable. The development programs, especially those that were drawn before 1956, have been criticized in that little emphasis was put on social services and training. The implication of this criticism is that a healthy, educated, and trained population is more productive than one not so

characterized. Thus, efficiency, productivity, and technical aptitudes are still generally low - a state that has social implications to the extent that the population remains backward, superstitious, and unprepared for social transformation that usually is associated with economic development.

In the following pages some concluding comments and observations with regard to the use of oil revenue in development will be made.

1. The Iraqi Development Board is mostly composed of (2) civil servants; such civil servants are not qualified to be responsible for a comprehensive and well-integrated economic policy. It will be maintained that a group of trained economists must be given the responsibility of drawing economic development policy. An economist can see whether what is technically possible, is also economically desirable under the particular conditions prevailing in the country, and whether what is feasible represents economically the best use of resources.

Plans have been largely based on engineering reports of consultant firms, and the plans have been largely directed to meet

<sup>(1)</sup> Many of these observations have already appeared, though possibly in a different context, in the works of writers such as Iversen, Salter and Warriner.

<sup>(2)</sup> It was, however, specified by law that one executive member of the Development Board must be an expert in economics and finance.

the needs of the country in dams and in other large projects aiming at increasing social overhead capital. However, planning ought essentially to be the product of economic surveys of the needs and the possibilities of the country and to have certain clear ends in view - both economic and social. Such planning requires the presence of a Board with a philosophy and with a staff of economists, engineers, and other experts capable of planning the expenditure of the country's resources most rationally in the light of the pre-conceived principles and ends. Moreover, the political system and the existing social structure must be taken into consideration in order to inject realism into the plans. A backward social structure in which tribal political power is strong will militate against development planning like that described here.

2. The Iraqi Development Board has not yet undertaken any comprehensive and overall economic planning, though it was

<sup>(1)</sup> Doreen Warriner states in this connection that "the Development Board is only a group of civil servants. They cannot be responsible for government policy. Engineers can plan without regard to production and consumption, and this is the only kind of planning that can be undertaken under the present political system and with the existing social structure. At bottom, all the Board's problems are the result of new wine in old bottles". (Doreen Warriner, Land Reform and Development in the Middle East, (London: Royal Institute of International Affairs, 1957), p. 131.)

set up for that purpose. The job of the Board has been confined to financial programming whereby anticipated revenues of the Board are allocated under different headings. The Development Board must be reformed so as to be able to undertake overall economic planning. This will certainly require much improvement in the collection and presentation of statistics that are needed for drawing an overall economic development program. In addition, the Development Board must try to forecast, in general, the probable direct and indirect effects of the realization of the development projects on the various economic activities in the country. The Board must also take stock of the material and human resources in the country. Lastly, the volume of unemployment and underemployment must be assessed and a man-power budget prepared, so that the Board can find out if it can afford its development projects, in the light of the existing labor force.

3. The creation of the Ministry of Development in 1953 defeated the original purpose of the Development Board as an independent body, because the Development Board has become dependent for positive action upon agreement with ministers changing frequently with governments. The influence of politics on matters of economic policy, which the creators of the Develop-

<sup>(1)</sup> Iversen says in this connection: "To neglect this overall economic planning would be most dangerous.

ment Board had hoped to reduce, was instead resumed with the establishment of the Ministry of Development.

4. Development expenditures undertaken by the Development Board, among themselves and between them as a group and other groups of expenditure, still lack coordination, and it is extremely essential that they be coordinated together. Timing and balance are also very important in economic planning. The plans, for instance, of irrigation, flood control and drainage, of new land settlement, of communications, of industrial development, of housing, etc., need all to be adjusted to each other, so that the whole economic development picture is woven into a consistent and coherent pattern.

Drainage should be undertaken simultaneously with irrigation projects, or else the increasing salinity of the soil will nullify the benefits to be reaped from irrigation.

What irrigation and what drainage projects should be undertaken, how, where, and when, must be decided upon. The construction of housing units must be timed, so that when the factories and other development works are underway, houses will be ready for those associated with the works. These housing units must also be located at the places of increasing economic activity.

In addition to the real bottlenecks in the form of scarcities of supply which may be unavoidable it would create any number of other bottlenecks". (C. Iversen, Monetary Policy in Iraq, (National Bank of Iraq, 1954), p. 242).

Communications must correspond to the needs of a growing economy, and must stretch to the agricultural districts, so as to facilitate agricultural development. Reclamation of land for distribution to farmers must be preceded by a consideration of the possibility of finding settlers properly equiped with knowledge and other qualifications for cultivating the land. All these considerations are very important, and form the core of any development policy, Yet they seem to have received little attention by the Board.

5. Development programs undertaken by the Development Board, though detailed and specific, are subject to frequent changes and modifications throughout the period for which they are planned. It is not advisable that these development programs be published or translated into legislation in a form that makes the process of change and modification very difficult. Development programs, according to law, should be presented to and approved by parliament in a way that exact allocation for expenditure under different categories and for different items under each category, would be made for the entire period of the programs. This reveals serious defects in the procedure of the Development Law No. 23 of 1950 as amended by Law No. 6 of 1952. This law calls for a degree precision in programming which is impracticable, and it might lead, and has actually led, to the promise of development projects for which, in some

cases, the necessary investigations were not ready. The precision in programming provided for in the Law might also prejudice or prevent expenditure on projects that were not foreseen when the development program was prepared.

For the above considerations, it would be much better if the Law were modified so that the development programs could be presented only in terms of global sums for the main categories of development expenditure. For example, there would be a total sum for irrigation projects, for industrial projects, and so forth. The exact distribution of allocations for expenditure among the different items under each category of investment expenditure would be presented in an explanatory note attached to the law relative to the development program, but this explanatory note would not constitute a part of binding law. Such a change in procedure would still provide for precision in programming, but would at the same time give the Development Board greater freedom for making necessary changes and modifications in the programs as they are being implemented. The Board would be bound only by the total sums allocated to each broad category of investment, but the exact distribution of expenditures among the various items under each category could be changed if need called for that, since the explanatory note in which the exact distribution of expenditure between different items under each category is made would

not constitute a part of the binding law, and hence modification would not require the approval of parliament.

6. Development programs have put greater emphasis on dams and other water schemes at the expense of other forms of development. Dams, roads, and other forms of social overhead capital are very important for economic development. This fact has been stressed in the previous chapter. However, once these forms of social overhead capital are somehow provided, they then must be put in the right order of priority in relation to the other forms of economic development. Industrialization, for example, was not promoted adequately in early plans. A well-planned industrial program would lead to an increase in the national income (since industrial activity usually enhances productivity and skills), would also aid agricultural development through developed technology and extended demand for agricultural products, and would, by increasing production, help in reducing the inflationary pressure that may arise in the process of development.

This statement may seem to oversimplify matters, as it may be maintained that many prerequisites for industrial development are not satisfied in Iraq. This is true. Yet, the satisfaction of the prerequisites of widespread industrialization such as finance, training, etc., are taken by us to constitute part of the industrial development plan.

inflationary pressure that may arise as development gathers momentum can be combatted through financial, fiscal, and commercial policy more affectively in a country like Iraq where time-lags are great in the economic system than through stepped-up industrialization for which the country is not ready. This is also true. Yet an increase in production that may take place as a result of reasonable industrialization will also moderate inflationary pressure and will help other anti-inflationary measures that may be taken.

7. The Development Board, in its economic programming, has thought primarily in terms of material capital, and has not given human capital its due share of attention. There must be greater investment in human resources through increased expenditure on health, education and other social services if the development program is to be pursued normally. Salter says in this connection: "The Board has confined itself to 'bricks and mortar' development. It has not been influenced by persuasive arguments that there is human capital as well as material, and that capital investment may be suitably, and often most beneficially, made in improving the quality and capacity of human beings". The 1956 program, however, put more emphasis than previous ones on projects of social benefit.

<sup>(1)</sup> Lord Salter, The Development of Iraq, (Iraq Development Board, 1955,) p. 116.

Education and health services, notably, were not promoted adequately. The Board's contribution in these fields has been mainly in building schools and hospitals. Improvement in the educational system, the training of capable teachers, and the spreading of preventive medicine facilities must be undertaken along with physical equipment for these services. In addition to the social implications of health and educational services, there are important economic considerations. An educated and healthy population can acquire skills much more quickly and easily than an uneducated and diseased population, and can improve its efficiency and productivity more quickly. These are important considerations which tend to be overlooked because they are obvious, to the detriment of the whole development of the country.

8. According to Doreen Warriner, the Iraqi planners have yet to learn to do little things; too much is invested in big projects, and not enough in working capital or in human resources. Moreover, only a small part of development expenditure has been devoted to investments that show quick results. (The big dams cannot, except in so far as they prevent crop destruction, show immediate results). A big dam costing millions of Iraqi dinars can be built while tractors lack spare parts and agricultural lands and settlements are

<sup>(1)</sup> Doreen Warriner, op.cit., p. 126.

undrained. "The country", Doreen Warriner states, "is an economist's cloud-cuckoo land, in a Hayekian gap without a crisis, and building Keynesian pyramids without inflation or multipliers. The crisis is avoided because the big expenditure on deep investment need not show a profit. Inflation is avoided because imports have increased, and because the supply of labour (1) is elastic."

9. There has been a stress on long-term production capacity. Iraq should not plan to concentrate all its capital investment in long-term means of production at the expense of means leading to immediate consumption, if the desire by the masses for a higher level of living is not to go unheeded.

The increase in incomes associated with the development program has led to an increase in the level of consumption. If private enterprise (through government encouragement, tariff protection, subsidies, tax exemption, provision of finance, etc.) can respond to the presence of increased consumption demand and can increase investment in consumer industries and increase production of consumer goods, then there will be no problem. Consumer goods, through the action of private entrepreneurs, will then tend to match effective demand directed to consumers goods. But if this does not happen (and it will not be likely to happen fast because of the deficiency

<sup>(1) &</sup>lt;u>Ibid</u>.

of entrepreneurs in Iraq and other inelasticities of supply, as was illustrated in the last chapter) the government must step in and act as an entrepreneur interested in the production of consumer goods. Once private enterprise develops (possibly as a result of imitating the government as an entrepreneur, and/or as a result of a more encouraging business climate), government may be able to withdraw slowly leaving the field to private enterprise. It may be better if jointenterprise (government and private) develops, such that once the field is open, the government can withdraw slowly leaving its share of the activities in private hands. If such a course is not pursued, much more dependence will have to be placed on imports to meet the increased consumption expenditure. The development program must not emphasize solely long-term investment in production-capacity; it must give short-term investment and consumption the planning and the funds they deserve.

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