

**REVIEW
OF ECONOMIC CONDITIONS
IN THE MIDDLE EAST
1951-52**

Supplement to World Economic Report



UNITED NATIONS

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**UNITED NATIONS
DEPARTMENT OF ECONOMIC AFFAIRS
New York, March 1953**

E/2353/Add.1
ST/ECA/19/Add.1

February 1953

UNITED NATIONS PUBLICATION

Sales No.: 1953. II.C. 1

Price: \$U.S. 1.75; 12/6 stg.; Sw. fr. 7.00
(or equivalent in other currencies)

FOREWORD

This *Review of Economic Conditions in the Middle East, 1951-52*, forms part of the survey of the world economic situation prepared by the Secretariat of the United Nations and issued as *World Economic Report, 1951-52*. The review complements the series of annual surveys prepared by the secretariats of the Economic Commission for Europe, the Economic Commission for Asia and the Far East, and the Economic Commission for Latin America. The present report is a continuation of the earlier *Summary of Recent Economic Developments in the Middle East*, for 1950-51, and *Review of Economic Conditions in the Middle East*, covering 1949-50.

Certain aspects of the economic situation of Middle East countries have been given particular attention in this report. Problems of production and prospects for economic development are touched on in the "Introduction" and are more fully dealt with in the first three chapters, on agriculture, industry and petroleum. An effort has been made to give an over-all picture of industry—its progress and its limitations, its structure and its place in the economies of various Middle East countries—and further details are contained in the appendix describing the major industries of the region. It has also appeared desirable to assemble information on the aid given to Palestine refugees by the United Nations (chapter 8), and on the contribution made to the economic development of the region during recent

years by international organizations and foreign countries, both in the form of capital (chapter 7), and of technical assistance (appendix B). Because of lack of data, comprehensive treatment was not possible in the case of foreign capital in the region. For the same reason, chapter 4 on price movements is also brief. Chapter 6 contains only a short summary of foreign trade aspects, since a detailed study of this subject is in progress. A study of public finance, a subject which has not been dealt with in detail in previous reviews, has been included in chapter 5 of this report.

The *Review* was prepared by the Division of Economic Stability and Development of the Department of Economic Affairs, with the assistance of the Statistical Office of the United Nations. The Fiscal Division of the Department of Economic Affairs furnished the chapter on public finance. The chapter on the refugee problem was contributed by the United Nations Relief and Works Agency for Palestine Refugees, and data on agriculture were supplied by the Food and Agriculture Organization of the United Nations. The appendix on technical assistance was compiled from documentation furnished by the Technical Assistance Administration and the Technical Assistance Board of the United Nations, and from governmental reports on technical assistance provided under bilateral agreements.

EXPLANATION OF SYMBOLS

The following symbols have been used throughout the report:

Three dots (...) indicate that data are not available or are not separately reported

A dash (—) indicates that the amount is nil or negligible

A blank in a table indicates that the item is not applicable

A minus sign (—) indicates a deficit or a decrease

A full stop (.) is used to indicate decimals

A comma (,) is used to distinguish thousands and millions

A slash (/) indicates a crop year or fiscal year, e.g., 1950/51

Use of a hyphen (-) between dates representing years, e.g., 1934-38, normally signifies an annual average for the calendar years involved, including the beginning and end years. "To" between the years indicates the full period, e.g., 1947 to 1951 means 1947 to 1951, inclusive.

References to "tons" indicate metric tons, and to "dollars" United States dollars, unless otherwise stated.

Details and percentages in tables do not necessarily add to totals, because of rounding.

Information regarding rates of exchange may be found in issues of the United Nations *Monthly Bulletin of Statistics*.

"Israel/Palestine" indicates the area after the establishment of the State of Israel, and, prior to that time, the territory of the Palestine Mandate. The designation "Jordan" refers to the Hashemite Kingdom of Jordan and, in the earlier period, to Transjordan. Unless otherwise indicated, the Sanjak of Alexandretta is included in Syria before June 1939, and in Turkey thereafter.

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INTRODUCTION

The impact of international economic events varied markedly during 1951 and 1952 in different countries of the Middle East.¹ In general, the rise in prices of raw materials following the outbreak of hostilities in Korea improved the region's terms of trade, while the reversal of this trend towards the end of 1951 and the beginning of 1952 tended to remove the stimulus to economic activity provided by higher export prices. Such repercussions were most noticeable in countries whose staple exports registered the greatest price fluctuations—for example, cotton in the case of Egypt and the Anglo-Egyptian Sudan—and in such countries as Lebanon, where the economic life is most closely linked with the world economy. In some countries internal factors tended to intensify the effects of international trends, while in others such factors exerted an offsetting influence. For example, economic activity in Iran was largely influenced by the loss of oil revenues and the *de facto* devaluation of the rial in 1951 and 1952; in Israel the main problem continued to be the integration of mass immigration into the national economy; and in the oil producing countries, though petroleum prices remained unchanged, greater output and larger royalties increased the availability of foreign exchange and the possibilities for increased investment.

In the region as a whole, economic development made only slow progress in 1951 and 1952. Certain countries, however, made advances, and some of the prerequisites

for future development were attained. Agricultural production showed a small rise, record output in Turkey in 1951 more than offsetting poor crops harvested in most countries of the Fertile Crescent—Iraq, Israel, Jordan, Lebanon and Syria. Output of crude oil increased in spite of the almost complete cessation of production in Iran, but in 1951 the region's share in world production fell off slightly. Production in other industrial sectors also rose, though there were marked divergencies in various branches of industry among the different countries. Some of the measures undertaken in 1951 and 1952 were expected, during the coming years, to ease the task of economic development to some extent. Revisions in petroleum agreements, coupled with increased oil production, more than doubled the funds available for development, and steps were taken, notably in Iraq, to use such funds for that purpose. Several agrarian reform laws which were adopted were expected, when implemented, to lead to an increase in agricultural production and farm income. A growing number of Middle Eastern countries requested technical assistance in an increasing variety of fields from the United Nations, the specialized agencies and other international organizations, while assistance by France, the United Kingdom and the United States under bilateral agreements was also expanded. The Arab League continued its efforts to promote economic co-operation among its members, as did the International Islamic Economic Organization.

Summary of Major Economic Trends

In the region as a whole, agricultural production in 1951 was slightly above that of 1950; available information indicates that the harvest of 1952 was, in general, satisfactory. In 1951, the share of the major crops of the Middle East in world production was somewhat higher than in the preceding year. There were, however, marked differences among various countries of the region. While there was favourable weather in certain parts of the area, as in Turkey, the countries of the Fertile Crescent suffered a severe drought, which reduced crop yields and output. The cultivated area was larger in some countries, including Turkey, Iraq, Syria, Israel and Saudi Arabia; but in many countries the size

of the cultivated area remained stationary. Cereal yields exceeded the 1934-38 average in Turkey, but in most countries they were below pre-war levels. As in previous years, the volume of domestic agricultural production was insufficient to meet the needs of the growing population in several countries, notably Egypt and Israel, and in spite of cereal surpluses in Iraq and Turkey the region was a net importer of cereals as well as sugar and other foodstuffs. Regional cotton production was fairly stable, increases in Syria and Turkey offsetting some decline in Egypt. Fruit and vegetable production increased in Egypt, Israel and Lebanon.

General agricultural conditions in 1951/52 were similar to those of previous years. Comparison of 1947-51 with the pre-war situation indicates an increase in agricultural output in most countries; this rise was due principally to additional cultivated area, since average

¹ The following countries have been included in the study: Afghanistan, Egypt, Iran, Iraq, Israel, Jordan, Lebanon, Saudi Arabia, Syria, Turkey, Yemen; the Anglo-Egyptian Sudan; Aden Colony, Aden Protectorate, Bahrein, Cyprus, Kuwait, Muscat and Oman, Qatar and Trucial Oman.

yields remained at the same level as before the war, or declined. Agriculture continued largely undiversified, in spite of the increased cultivation of cotton, tobacco, fruits and vegetables. There were widening differences among the countries of the region with respect to progress in production, increase in cultivated area, improved techniques in cultivation and agrarian reforms—contemplated or under way.

Industry maintained its upward trend during the period under review. Output in 1951 was greater than in previous years, and available figures for 1952 indicated a further rise. This increase may be attributed mainly to expansion in purchasing power caused by larger crops or by higher export prices; in Israel the widening of the market by large-scale immigration stimulated industrial growth to a marked degree. Industrial investment was high in Israel and Turkey, both of which benefited from substantial foreign financial assistance, but in the other countries of the region, industrial investment appeared to have declined from the level attained during the immediate post-war period.

Progress in manufacturing was uneven. Some branches of the two principal industries of the region, textiles and food processing, showed only a slight increase, while in others output actually declined. The construction and cement industries, which expanded steadily from the end of the war to 1951, slowed down during 1952. Mining and certain more recently established industries, however, such as metallurgy, chemicals and engineering, developed rather rapidly.

Urban unemployment continued high, the decline in textile and construction industries offsetting increased employment elsewhere. Other special factors tending to raise unemployment were, in Egypt, the withdrawal of workers from the Suez Canal zone during the disturbances late in 1951; in Iran, the almost complete stoppage of work in the oil industry and the slowing down of public works owing to lack of funds following the nationalization of the petroleum industry in 1951; in Israel, large-scale immigration; in Jordan, Lebanon and Syria, the presence of a large number of Palestine Arab refugees; and in Turkey, the influx of refugees from Bulgaria.

The petroleum industry of the Middle East continued to grow in 1951 and 1952. In spite of the cessation of exports from Iran, the crude oil production of the region increased by 10 per cent in 1951 and 8 per cent in 1952, owing to marked increases in supplies from Iraq, Kuwait and Saudi Arabia made possible by the extension of pipelines and other facilities. The share of Middle East crude oil in expanding world production declined slightly in 1951 but rose again in 1952; however, with over half of the proved world oil reserves, the Middle East accounted for only 17 per cent of world production in 1952, a figure slightly higher than those of 1951 and 1950. The production of refined prod-

ucts decreased approximately 17.5 per cent in 1951 compared with 1950, because of the closing of the Abadan refinery; consequently, the share of the Middle East in world production of refined products declined much more than its share of crude oil output. The resumption of oil operations in Iran was not accomplished, except to a limited extent.

The benefits derived by other Middle East countries from oil activities showed a considerable increase. Owing both to expanded production and to new profit-sharing agreements between the oil companies and the local governments, direct payments to governments by oil companies increased from nearly \$190 million in 1950 to \$260 million in 1951 and to approximately \$440 million in 1952. Moreover, the oil companies spent large sums in the region to purchase materials and to pay wages and salaries. Non-producing countries in the area derived some benefits from transit and other fees on pipelines and from expanded purchases by the companies and their employees. In 1951, the consumption of oil by the countries of the Middle East amounted to a little less than one-fifth of the region's output in terms of crude oil; most of this was in non-producing countries. Preliminary studies have been undertaken of the possibility of utilizing the natural and refinery gases which are the by-products of oil operations; all but a small part of this important source of energy has remained unused because of lack of markets and facilities.

The terms of trade of the Middle East countries improved markedly in both 1950 and 1951, the chief exceptions being Iran and Israel. Export prices, which in 1950 were generally well above those of 1949, rose further during 1951. Import prices increased steadily during the period under review, but in most countries the rise was less than in export prices. There appeared to be a reversal of this situation and a distinct deterioration in the terms of trade at the end of 1951 or the beginning of 1952.

In general, the quantity of exports did not increase in 1950 and in 1951, while the quantity of imports rose appreciably. Import surpluses increased somewhat in 1951, owing to a 25 per cent rise in the total value of imports, and available figures for 1952 showed a marked increase in import surpluses, measured in dollars, and a still greater relative rise when measured in the local currencies which were devalued at the end of 1951 or the beginning of 1952.

The most striking change in the composition of Middle East exports was the rise in shipments of cotton, which in 1951 formed the leading export item of Iran, Syria and Turkey, as well as the Anglo-Egyptian Sudan and Egypt. As regards imports, there was a large increase in purchases of cereals, owing both to the growth of population and to the diversion of land to cotton. Imports of cotton piece-goods continued to decline in some countries as a result of greater local production.

The high level of construction resulted in a rise in imports of metals and metal manufactures in 1950, but in 1951 the tighter supply situation and the increase in local production reversed this trend in Egypt and Turkey. Imports of machinery and appliances showed an over-all rise, reflecting the gradual growth of industry in the region.

Exports to the sterling area, the United States and France rose more than imports from these areas. Owing to stockpiling of such raw materials as cotton and chrome in the United States, that country's relative importance as a market for Middle East goods increased in 1951, as it had in 1950. Western Germany's trade with the Middle East grew very rapidly, its exports rising about sixfold between 1949 and 1951 and its imports increasing almost as much; western Germany became the most important supplier and the largest customer of Turkey and played a leading part in the trade of Egypt and Iran. In the first half of 1952, the trade of the Union of Soviet Socialist Republics with Iran rose appreciably, and its trade with Egypt showed a slight increase. There was a further decline in the already reduced volume of trade within the region.

During the period under review, the balance of payments situation was largely determined by changes in raw material prices, increases in royalties paid to governments of oil producing countries and the flow of foreign funds into Israel and Turkey. These factors enabled practically all Middle East countries to add to their holdings of foreign exchange in the second half of 1950 or the first half of 1951, but rising import surpluses and loss of oil revenues in Iran necessitated heavy withdrawals; reserves for the latter part of 1952 in all countries which did not produce petroleum on a large scale were well below the 1949 level. The incomplete date for oil producing countries pointed to a rise in their foreign exchange reserves. Available in-

formation indicated that the reserves of major oil producing countries would continue to grow while those of other countries would dwindle, and that this difference would have important implications for their respective prospects of development.

During recent years, aid to the Middle East under the technical assistance programmes of the United Nations and the specialized agencies has increased; on 1 December 1952, 273 experts were in Middle East countries, compared with 105 at the end of 1951, and the number of fellowships increased from 63 to 307 in the same period. France, the United Kingdom and the United States, in addition to their contributions to these programmes, have provided direct technical assistance to certain countries of the region under bilateral agreements. Technical assistance by France was furnished principally through expert missions, the number of which in the region had reached forty-nine by the end of 1952. The United Kingdom has given direct financial aid to Egypt and Jordan, has rendered technical assistance to most Middle East countries through the British Middle East Office and has established special projects, such as the Desert Locust Control Organization and the Cyprus Forestry College. Technical assistance by the Technical Cooperation Administration of the United States under the "Point Four" programme expanded rapidly in 1952, and the amount of the United States contribution from 1951 to the end of the 1952/53 fiscal year was expected to reach \$72.6 million. Similar substantial technical assistance was provided for Turkey through the Organisation for European Economic Co-operation. Thus, through these and other channels, such as the direct recruitment of experts by Middle East governments and private industrialists, the countries of the region increasingly availed themselves of the experience of economically developed countries in attempting to solve their problems of economic development.

Problems of Economic Development

Differences in trends in agricultural and industrial production among the various countries of the region, as well as the divergent movements in balances of payments and foreign exchange reserves mentioned in the preceding paragraphs constitute some of the numerous aspects of the rapidly increasing diversification of the Middle East, a diversification which no analysis of economic development in the region can ignore. While the Middle East was never a highly integrated area, there was until recently a fundamental similarity among its component parts. Much of this similarity remains but, as a result of differences in the origin, nature and pace of economic development in various countries, increasing diversity is evident. At the present time, therefore, while the countries have to overcome many identical problems in their economic development, each has

several no less important problems which are peculiar to the country as a consequence both of long-term trends and of the events of the past few years.

Similarities among parts of the Middle East arise from a number of causes—political, physical, economic and social.² The Ottoman Empire controlled most of the region for several centuries, and though its authority over some of the outlying provinces was slight, the greater part of the area was subject to the same economic, commercial and monetary policies, and there were few barriers impeding the movement of persons and goods between its various centres. As to physical conditions, the scarcity of rainfall in most of the region

² See United Nations, *Review of Economic Conditions in the Middle East*, Supplement to *World Economic Report, 1949-50*, Sales No.: 1951.II.C.3.

has resulted in much the same pattern of agriculture throughout, with a sharp contrast between rain fed cultivation and intensive irrigation; it has led farmers to concentrate on the same range of crops, chiefly wheat, barley, cotton and certain kinds of vegetables and fruits; and it has brought about the formation of groups of nomads who fulfil identical economic functions and present similar social and political problems. Economically, the Middle East is awakening from a secular economic stagnation which was dispelled only in the latter part of the nineteenth or in the twentieth century. Agriculture and animal husbandry occupy by far the greater part of the population—between 75 per cent and 90 per cent in most of the countries; industry remains secondary, except in the special case of petroleum, which is exploited mostly by foreign concerns, and in even the most developed countries certain branches of industry have not progressed beyond the stage of handicrafts; nearly everywhere output is low and agricultural yields, except for a few export crops of high value, are unsatisfactory. Mineral resources have been only partially surveyed. As in other under-developed regions, local savings are very small, owing to poverty, and are imperfectly channelled into productive investments. Apart from petroleum, two or three agricultural commodities form the bulk of the export trade, and the value of exports fluctuates greatly, depending as it does on conditions in world markets, where they constitute a minor element. The utilization of natural and human resources is extremely limited; there is a shortage of qualified manpower and of entrepreneurial and managerial skills, while concealed unemployment is widespread, especially in agriculture. In most countries the population is growing at a rapid rate which, from the scanty evidence available, seems to be outstripping the increase in the volume of domestic production, and which seems unlikely to slow down in the foreseeable future, with improving conditions in public health. Finally, the social structure is characterized by marked inequalities; between the very rich, who are few in number, and the very poor, who comprise most of the population, there is a small middle class whose size and importance, while growing, is very limited.

While this similarity in the economic and social background of the Middle East countries is still the dominant feature, an element of diversity has been introduced, as stated earlier. With the development of the region it has steadily gained in importance. This diversity arises from a number of circumstances.

Foreign capital, the original stimulus to development in most countries of the region, was invested in various fields, at different times, and on a varying scale. In the second half of the nineteenth century a large amount of capital was invested in Egypt, mainly from France and the United Kingdom, permitting expansion in output and exports of cotton, establishment of an adequate banking system and development of a close network of

railways and harbours. The same process took place, but to a lesser degree, in Lebanon and Turkey. Investment in the petroleum industry in the Persian Gulf area, begun shortly before the First World War, and accelerated in recent years, has reached nearly \$2,000 million and has made the area one of the world's leading oil centres; indirect but substantial impetus has thus been given to the development of other economic activities in oil producing countries. During this period, the influence of Jewish immigrants and capital in Palestine also resulted in rapid economic expansion, which was accelerated after the establishment of the State of Israel. In addition, foreign aid, mainly under the United States Economic Cooperation Act, the Mutual Security Act and the Greek-Turkish Aid Act, stimulated the development of Turkey.

These incentives to economic development had one characteristic in common: their influence was localized, rarely extending beyond the boundaries of the country in which they operated. The progress registered in one part of the region had little or no effect on nearby countries. One reason, of decreasing importance, was geographic. The Middle East has been aptly compared to an archipelago, and a glance at a vegetation map of the region shows it to consist of many relatively small areas of cultivation (such as the Nile Valley, the Levant, Mesopotamia, Arabia Felix, the coastal belt of Anatolia and the rim of the Iranian plateau) interspersed with vast stretches of desert. Until these deserts had been spanned by railways and modern highways, and the intervening zones made safe, communication between the main centres was necessarily tenuous and precarious.

After the First World War, transport systems improved rapidly, and the physical barriers to communication were to an increasing extent overcome. But new barriers then arose, in the shape of State frontiers. At the present time, the hundred million inhabitants of the region live in no fewer than twenty political entities, more than half of which are sovereign states. As each country gained political independence, it sought to promote its economic well-being through policies designed to develop its own resources as fully as possible. Preoccupied with its own economic problems, no government has modified either its course of action or its plans in the light of developments in other parts of the region. This tendency continued after the Second World War. Under the mandates there were no tariff barriers between Lebanon, Palestine, Syria and Transjordan, but the achievement of independence broke the monetary and fiscal ties holding some of these areas together. In 1950 the customs union between Lebanon and Syria was also brought to an end. As a consequence of the conflict in Palestine, economic relations between the Arab countries and Israel were severed.

There have been practically no international arrangements for the co-ordination of economic development policies in the region, with the important exception of

an agreement on the division of Nile waters among the riparian States. Under the impact of the Second World War, when the Middle East was cut off from its main suppliers and markets, and aided in part by the activities of the Middle East Supply Centre, economic relations became closer and the volume of trade within the region increased appreciably; however, the reopening of international trade channels after the war led to a reversal of this trend. At present intraregional trade constitutes less than 10 per cent of total trade, about the same as the pre-war proportion. The only developments which have had appreciable effects on neighbouring countries have been some of the oil projects. The expansion in purchasing power in certain oil producing countries benefited neighbouring countries which supplied goods and services. As a result of the construction of pipelines from the Iraqi and Saudi Arabian fields to the Mediterranean coast, employment rose somewhat in Lebanon, Palestine and Syria, increasing royalties were paid to the governments whose territories the pipelines crossed, and refineries supplying fuel for local needs at more favourable terms were built, or are under construction, at the Mediterranean terminals.

This exception is still of limited importance and, so far, has not given rise to uniform trends in the economic development of the different countries. Moreover, the diversity arising from the factors mentioned has tended to be amplified in the post-war period by several others. As countries have begun to intensify their economic development, differences in their resources tend to differentiate them more and more. For instance, the availability of additional cultivable land is strikingly different in Egypt and Israel, on the one hand, where practically all progress depends on irrigation, and in Iran, Iraq, Syria and Turkey, on the other, where wide areas may be made cultivable without irrigation. Although the region has not been thoroughly surveyed, the availability of mineral resources also appears to differ widely from one country to the other. The rate of population increase also varies, mainly because of the inflow of immigrants or refugees into some countries and because of divergences in health standards. The relationship of different Middle East countries with the major Powers has not been identical, a fact which has had important economic consequences and has contributed to the diversity of their problems. Thus, owing to both long-term trends and recent changes, the problems of development in the countries of the Middle East appear increasingly different.

In Egypt, development policies are conditioned by the fact that, unlike other Middle East countries, it has carried out an agricultural revolution, based on elaborate and costly irrigation projects, lavish use of fertilizers, careful selection and breeding of cotton strains and intensive application of labour to the land. This has raised the country's yield per acre far above the regional level, and has enabled it to support a much

greater density of population. The income of this population, which during the past thirty years has been growing more rapidly than the acreage of cultivated land, has become mainly dependent on the value of cotton in the international market; and the standard of living has tended to fluctuate with the price of cotton while the population increase has exerted a downward pressure. At present the main object of Egyptian economic policy, like that of most Middle East countries, is to expand agricultural production and to stimulate industry, so that the rate of rise in national income will be greater than the rate of population growth. Progress in agriculture is impeded by the fact that all the land which can readily be cultivated is already under the plough, and that further extension is dependent on large expenditures for irrigation; moreover, agricultural methods have improved so much that there is no longer scope for a spectacular increase in yields but only for a continuation of the steady advance of the past few decades, interrupted by the war. In both respects, Egypt differs from most other Middle East countries, but it shares with them the usual obstacles which hinder the industrialization of under-developed regions. The agrarian reform law adopted in 1952 provided the legislative basis for transfer of one-tenth of the cultivable area to small farmers or landless farmers, and was intended to raise agricultural production and stimulate industry both by widening the domestic market and by diverting capital from the purchase of land to industrial investment.

In the Anglo-Egyptian Sudan, as in Egypt, cotton constitutes the greater part of the exports. The Sudan, however, does not suffer from the same population pressure as Egypt; while the entire Egyptian economy rests on cotton, in the Sudan most of the population is engaged in subsistence agriculture or animal husbandry and has few dealings in the market. Hence, fluctuations in cotton prices mainly affect some thirty thousand families, tenants under the Gezira scheme, and other cotton growers. The recent cotton boom has been of great benefit to farmers and has provided the Government with relatively large funds for economic and social development projects.

In Israel, economic development has been intensified to absorb the increase in population, which has taken place on a larger scale than in any other country of the region. Between May 1948 and the end of 1952, Israel received 717,000 immigrants and its population rose by about 120 per cent. Output has not kept pace with the growth in numbers; thus, in September 1951 the Minister of Finance estimated that industrial and agricultural production had increased by 80 per cent since the establishment of the State, while population had more than doubled. Moreover, the standard of living has been maintained at a much higher level than that of surrounding countries. This has been made possible by a very large import surplus, financed by a large-scale

inflow of foreign funds in the form of donations, inter-governmental loans and a \$500 million Israel government bond issue floated in the United States. In order to increase production and eventually balance its foreign trade, Israel has kept investment at a rate equal, in recent years, to one-third of the national income, with resulting powerful inflationary pressure. The basic economic dilemma of Israel consists in the fact that a high level of investment, necessary to increase output, tends to aggravate its balance of payments difficulties and to reinforce inflation, while reduction of the deficit in foreign trade reacts adversely on both production and the standard of living. Various measures taken to deal with the situation include import licensing, differential rates of exchange, high taxes on individual and corporate incomes, and rationing of food and some consumer goods.

The population of Jordan, including the incorporated districts of Palestine, has increased by about two-thirds, owing to the inflow of Arab refugees from Palestine. The problem presented by these refugees has overshadowed all others. So far, the burden of supporting them has been borne chiefly by the United Nations Relief and Works Agency for Palestine Refugees and by other international agencies, and it is clear that the refugees cannot be integrated into the economy of Jordan unless large-scale economic development takes place. A beginning has been made in this direction in the form of a multiple-purpose project on the Yarmuk River.

Israel's northern neighbours, Lebanon and Syria, also have a large Arab refugee population; here, too, international aid has more or less insulated the refugees from the national economies. The main issue preoccupying these two countries, during the past three years, has been the dissolution of the customs union binding them until March 1950. This change has necessitated profound adjustments in both economies, which had been complementary to each other in many important respects. Thus, several Lebanese industries marketed most of their output in Syria, while Lebanon was Syria's principal customer for agricultural products.

Lebanon is adapting itself to changed conditions by expanding its output of fruits and opening new markets for them, and by increasing the scope and volume of its services, notably to tourists and transit traffic, through banking and foreign exchange services and entrepôt trade. In this it has been helped by the construction of the largest airport in the region and by excellent port facilities. The increase in the flow of oil to Mediterranean terminals has also had favourable effects, both direct and indirect, on the Lebanese economy.

In Syria, the mainspring of development has, in recent years, been the increase in cotton production. Between 1949 and 1951, cotton acreage rose sevenfold and output threefold. Markets have been found in western Europe, and the rise in cotton prices following the

outbreak of hostilities in Korea resulted in a substantial increase in national income. This, in turn, provided an internal market for several new industries, established in the post-war period, which had faced considerable difficulty both from foreign competition and from the insufficiency of local purchasing power. Progress in other agricultural fields, though substantial, has not occurred on a scale comparable to that in cotton, and Syria still has a large potential of untilled cultivable land.

With the exception of Iran, the oil producing countries of the Persian Gulf have experienced a great increase in royalties and other income derived from petroleum. Most of this increase in government revenues has been used for current expenditure, or to build up balances, but a growing proportion is now being devoted to development projects. In Saudi Arabia, railways, highways, airports and harbours have received the greatest share, but appreciable progress has also been made in irrigation, public utilities and social services. In Kuwait, development has occurred mainly in social services, hospitals, housing and provision of drinking water. In Iraq, a comprehensive development plan has been drawn up under a board to which 70 per cent of all oil revenues are allocated. Included in the plan are irrigation and drainage works, highways, bridges, public buildings, and agricultural and industrial projects; a start has been made on several of these.

A common characteristic of the major oil producing countries in 1952 was that the obstacles to development were no longer financial. Thus, in Iraq, in so far as progress on the development plan was slower than anticipated, the main reason was shortage of materials and of administrators, technicians, skilled workers and semi-skilled labour. Kuwait presented an extreme case in point. With an area of 21,000 square kilometres, very poor in natural resources, and with a population of only 170,000, Kuwait received about \$140 million in oil revenues in 1952. Clearly the expenditure of an appreciable fraction of this sum might generate rapid and powerful inflation and its concomitant difficulties.

Since the nationalization of Iran's petroleum industry, initiated in March 1951 and resulting in a cessation of oil exports, economic changes in Iran have been entirely different from those in other oil producing countries. The loss of income from oil, which in recent years accounted for more than a tenth of the national income and about half the budget of the seven-year development plan, had wide repercussions on development. Direct payments by the petroleum company constituted between one-sixth and one-fifth of all government revenue, while the foreign exchange resulting from the company's operations formed between one-half and two-thirds of the country's total receipts. Moreover, the oil industry employed 70,000 workers of the total industrial labour force of 300,000. Consequently, the years 1951 and 1952 were characterized by exten-

sive unemployment; by a large deficit in the balance of payments, offset only in part by a small rise in agricultural and industrial output; by a decline in foreign exchange reserves; and by the stopping of development projects undertaken by the Government. It is not possible to say whether the flow of oil exports and the financing of development projects from the proceeds of petroleum revenues will be resumed in the near future or whether the Iranian economy will succeed in adjusting itself to the loss of revenue from the oil industry and will find other sources for financing development.

Owing to a combination of favourable factors, including abundant and varied natural resources, together with large-scale aid from the United States and loans from the International Bank for Reconstruction and Development, Turkey has carried out an unprecedentedly large development programme during the period from 1948 to 1952. In recent years, public investment alone has amounted to about one-tenth of the national income. In contrast to the previous five-year plans, which had devoted a major share of projects to industrialization, current public expenditure is chiefly for transport, mining, power, public works and agriculture. The foreign aid received by Turkey has enabled it to have a continuing import surplus, thus counteracting the inflationary effects of a high investment rate and budget deficits. Large investments, and technical assistance, have at least partially overcome such obstacles to development as inadequate transportation, shortage of technical and managerial skills, and rural conservatism; their effects have already begun to be felt in certain sectors. Industrial production and mineral output have shown a steady and appreciable increase. The area under cultivation has expanded substantially, and while crop yields continue to fluctuate violently because of weather conditions, a general upward trend may be discerned. Available information also points to an increase in the consumption of staple goods.

The two countries at the eastern and south-eastern extremities of the Middle East, Afghanistan and Yemen, are among its least developed States. In Afghanistan, a development plan for irrigation, power and certain

industries was launched in 1949. Execution has been slowed by financial difficulties, shortages of technicians and administrators, and inadequacies in the surveys on which the plan was based. As for Yemen, it has, up to the present, remained largely unaffected by the trends which have led to the development of other parts of the region.

The preceding broad analysis indicates that in the process of economic development in the Middle East, countries are becoming more differentiated and, to a small but increasing degree, complementary. Today, some of them have precisely those resources whose absence impedes the progress of others. Thus, while some countries suffer increasingly from over-population, others are very sparsely populated and have plenty of unused or under-utilized land which could grow some of the food and raw materials needed by the former group. Again, most of the region lacks capital, but some of the oil producing countries are receiving more funds than can usefully be invested within their own frontiers. Natural gas released as a by-product in the course of petroleum extraction, which is at present burned because of lack of facilities for utilizing it in oil producing countries, might either be piped to some of the more developed countries or be used to produce fertilizers, which are badly needed by the entire region. Most of the rivers of the Middle East pass through more than one country, and can be fully utilized only by mutual agreement. In certain fields, such as cotton cultivation, a few countries have acquired skills which might be of great benefit to others trying to develop along similar lines. Laboratory research and field experiments for obtaining better seed and improved animal breeds, as well as control of plant diseases and locusts, are best carried out on a wide scale, rather than in a limited area. It is also probable that the removal or lowering of some tariff barriers would stimulate increased industrialization, since the narrowness of the separate national markets has been one of the principal limiting factors. It would therefore seem that a greater degree of regional co-operation in the economic field would permit the Middle East to benefit more fully from its none too abundant resources.

Chapter 1

AGRICULTURE

The situation with respect to Middle East agriculture in recent years appears, in general, to have improved somewhat as compared with that of the pre-war and immediate post-war periods. The improvement was, however, not of the same magnitude in different countries, nor, in any single country, was it stable from one year to another; in most cases it was not sufficient to meet increasing needs. In this discussion of the situation in 1951, the following points are dealt with briefly: changes in agricultural output in the Middle East in comparison with the pre-war period; adequacy of gains achieved by recent increases in agricultural production, taking into account the growth of population; the extent to which the relative inadequacy of agricultural

production is due to inefficient use of land under cultivation or failure to bring cultivable land into production; the expansion of cotton production, which is of special interest in the agriculture of the region; and recent efforts to improve the agricultural situation, especially with respect to land tenure.

Obstacles to agricultural development are not retraced in detail in this report; they were summarized in the previous *Review of Economic Conditions in the Middle East*¹ and, in more detail, in various documents prepared by the Food and Agriculture Organization of the United Nations in connexion with the Near East regional meeting on food and agricultural programmes and outlook, held in Bloudane, Syria, in August 1951.

Increase in Production

It is difficult to measure recent changes in the agricultural production of Middle East countries in quantitative terms. Available statistics are fragmentary and often unreliable; in the case of many crops the gaps in data represent an appreciable part of total production; a large part of the harvest is consumed on the farm and the amount is difficult to estimate. Over-all indices of the quantity of agricultural production have been published only for Egypt, Israel and Turkey. Since harvests vary considerably from one season to the next, it is difficult to evaluate progress or decline in agricultural activity in a given country over a short period.

Subject to these reservations, available information indicates that agricultural production has increased in most countries of the Middle East since the pre-war period; that this increase can be regarded as likely to last, since the average five-year figures for 1947-51 are higher than those for 1934-38; and that output in 1951 has been favourable in the Middle East as a whole, despite certain exceptions.

COMPARISON WITH PRE-WAR LEVELS

Average production figures for major crops during the five-year period 1947 to 1951 (table 1), showed an increase in agricultural output in the Middle East as a whole, as compared with pre-war levels, in both food and commercial crops, but especially in the latter.²

¹ Supplement to *World Economic Report, 1950-51* (United Nations Publication: 1951.II.C.3).

Although wheat output increased, the gain was less than 10 per cent. Rice production rose sharply while maize and barley production was stable or declined slightly. The output of citrus fruits rose, despite a decline in Israel production, because of increases in Egypt, Iran, Lebanon, Syria and Turkey. Production of olive oil was greater, particularly in Lebanon, Syria and Turkey. The output of pulses also tended to rise, though to a lesser extent. Production of dates in Iraq was also higher.

Among the industrial crops, cotton production increased slightly—5 per cent—during the period from 1947 to 1951 as compared with the pre-war level, owing to the development of cotton growing in Syria and Turkey, which more than offset a decline in Egyptian production. Tobacco harvests were far above the level of the pre-war period, owing to the expansion of Turkish production. The output of raw sugar in this period was about 80 per cent above the pre-war level.

Livestock products, especially milk, also tended to rise during the period 1947 to 1951, in comparison with the pre-war period. While the total number of livestock appeared stationary in Syria, in the other countries for which figures are available there was an increase, particularly in the case of buffaloes and goats in Egypt, cattle in the Anglo-Egyptian Sudan, cattle and sheep in

² For figures on output of principal cereals, agricultural products other than cereals, and number of livestock and draught animals, see tables 9, 10 and 11, respectively, at end of chapter.

Table 1. Output of Major Agricultural Products of the Middle East,^a
1934-38, 1947-51, 1950 and 1951

(Thousands of metric tons)

Product	1934-38	1947-51	1950	1951
Grains:				
Wheat ^b	7,670	8,380	8,750	10,000 ^c
Barley.....	4,000	3,950	4,280	4,700
Maize.....	2,200 ^e	2,130	2,050	2,400 ^e
Rice ^d	1,300	1,900	2,050	1,300 ^e
Pulses.....	700 ^e	800 ^e	700 ^e	700 ^e
Sugar (raw).....	224	402	410	494
Citrus fruits.....	765	825	871	926
Olive oil.....	59	71 ^e	63	64
Oil-seeds (oil content).....	226	295	345	312
Cotton (lint).....	547	577	675	662
Tobacco.....	81	115	119 ^e	114 ^e

Source: Food and Agriculture Organization of the United Nations.

^a Excluding Afghanistan.

^b Wheat production of Afghanistan was estimated at

1.7 million tons in 1948.

^c Partially estimated.

^d Rice production of Afghanistan was estimated at 333,000 tons in 1948.

Iraq and cattle in Turkey. For the period from 1946 to 1949, the production of livestock products in Egypt and Turkey was estimated at 118 and 108, respectively, on the basis of 1934-38 equals 100.³ The decline in livestock in Iran resulting from heavy losses during the Second World War seems to have been overcome in recent years.

The total increase in food crops and livestock products between the immediate pre-war years and the five-year period 1947 to 1951 may be estimated at a little over 10 per cent for the Middle East as a whole.⁴ However, while quantitative figures for agricultural production show a general rise between 1934-38 and 1947-51, there were wide variations with respect to individual products, countries and years.

With respect to products, increases during this period were small in the case of grain crops, except rice, and of pulses; larger increases were recorded in crops of secondary importance in the total, such as potatoes, sugar-beets, citrus fruits and tobacco. In Egypt, the output of animal products increased more than grain production. In some countries, the output of certain products, for example, tobacco in Iran and barley in Egypt, declined. There appeared, especially in Turkey, a tendency to shift from monoculture to more diversified production; this trend is especially favourable in the Middle East, wherever irrigation or sufficient rainfall is available, since the region is not particularly suited to the cultivation of grain, but has certain natural advantages for growing such crops as tobacco, cotton, olives, oil-seeds, fruits and vegetables.

Production increased at widely differing rates in

³ Food and Agriculture Organization of the United Nations, *Current Development of, and Prospects for, Agriculture in the Near East* (Rome, 12 July 1951).

⁴ On the basis of 1934-38=100, production of major food crops has been estimated at 104 in 1947/48, 118 in 1948/49, 106 in 1949/50, 116 in 1950/51 and 123 in 1951/52, an average of about

various countries of the region from the pre-war period to 1947-51. During this interval, the most marked advance over pre-war years occurred in Turkey, which increased its production of wheat by 18 per cent, of tobacco and cotton by still higher percentages, and more than doubled its output of sugar and oil-seeds. In this interval, production of wheat in Syria rose approximately 50 per cent while that of barley was rather stable; production of barley in Iraq increased much more than wheat output. Output of wheat, maize, cotton and other agricultural products in Egypt was below the pre-war level, but the production of citrus fruits and sugar-cane increased substantially and rice production almost doubled. Israel has greatly increased its agricultural production since the founding of the State, but statistics are not available to compare production in the same territory before the war.

OUTPUT IN 1951

Agricultural production in the region as a whole was slightly higher in 1951 than in 1950, when output was higher than in any other post-war year in a number of countries. The rise in 1951, however, was due largely to bumper crops in Turkey, where the level of agricultural production had reached 122 in 1950/51 (pre-war=100) as against 106 in 1949/50,⁵ and the grain harvest was more than a third higher than the harvest of 1950. Animal production also increased and there was a substantial rise in 1951 in the production of potatoes, sugar-beets and certain oil-seeds.

In the other countries of the region, the results varied from a slight improvement to a moderate decline, as

113 for the period 1947-51 in the Middle East as a whole (including Eritrea, Ethiopia and the Somalilands). Food and Agriculture Organization of the United Nations, *State of Food and Agriculture, 1952* (Rome).

⁵ Food and Agriculture Organization of the United Nations, *Yearbook of Food and Agricultural Statistics* (Rome, 1951).

compared with 1950. In Egypt, where the index of agricultural production was 118 in 1950/51 (pre-war=100), compared with 119 in the previous year, cotton production was 10 per cent below the 1950 level, and rice production declined by one-half because of the water shortage; however, the production of cereals other than rice was higher than in 1950. In Iran, wheat and barley production declined nearly 20 per cent in 1951. Grain production was hampered by severe drought in Cyprus, Israel, Jordan, Lebanon and Syria and in parts of Iraq and Saudi Arabia. In Syria, the levels of wheat and barley production were much lower than in 1950, and wheat exports were prohibited. In Iraq, harvests as a whole, and wool produc-

tion as well, were at levels similar to those of 1950, except that the date harvest was estimated at 300,000 tons—an average crop but below the record level reached in 1950. In Israel, the index of agricultural production reached 185 for the season ending in September 1951, compared with 172 for the previous season (1947/48=100), in spite of the sharp reduction in grain crops. In the region as a whole, output of cotton and tobacco was stable while sugar production rose. The production of citrus fruits was slightly above the 1950 level. Output of pulses remained unchanged at about pre-war levels. The fish catch approximately doubled in Israel, as compared with 1950, and also increased in Egypt.

Relative Gains Resulting from the Rise in Output

The share of Middle East agricultural production in world output remained fairly stable in the post-war years, compared with the pre-war period, and the rate of increase in agricultural production was lower than the rate of growth of population in the region. Although imports of foodstuffs tended to increase to cover the inadequacy of domestic production, per capita consumption in the region as a whole did not rise in relation to the pre-war period. However, the situation has been somewhat more favourable in recent years.

SHARE OF MIDDLE EAST IN WORLD PRODUCTION

Table 2 shows percentage changes in certain important agricultural products of the Middle East in relation to world output (excluding that of the Union of Soviet Socialist Republics). The percentage share of these

food products remained fairly steady when measured by five-year pre-war and post-war averages. The maintenance of the Middle East share in an increased world production was due chiefly to expansion in the output of rice, sugar and potatoes in the region, and to the high level of Turkish production in 1950 and 1951. The contribution of wheat and maize production to world totals tended to decline. Production in 1950 and in 1951 was relatively high for the region as a whole, and the share of the Middle East in world production increased somewhat. During the period from 1947 to 1951, Middle East cotton occupied a slightly more important position than before the war in world production (excluding that of the Soviet Union); the percentage was 12.6 in 1950 and 9.8 in 1951, compared with 9.1 in the pre-war period.

Table 2. Share of Eight Middle East Food Crops in World Production,^a
Pre-war, Post-war, 1950 and 1951

Crop	(Percentage of world total)			
	Pre-war	Post-war	1950	1951
Wheat.....	7.3	7.2	7.3	8.2
Barley.....	9.8	8.9	9.3	9.6
Rye.....	1.6	2.6	2.3	3.1
Maize.....	2.0	1.6	1.6	1.8
Oats.....	0.5	0.6	0.7	0.7
Rice.....	0.9	1.3	1.4	0.9
Sugar.....	0.8	1.3	1.2	1.4
Potatoes.....	0.2	0.6	0.6	0.7
Total wheat equivalent of above crops.....	3.2	3.2	3.3	3.5

Source: Food and Agriculture Organization of the United Nations, *Statistical Yearbook, 1951* (Rome), and monthly bulletins. Pre-war and post-war figures

represent five-year averages.

^a Excluding output of the Union of Soviet Socialist Republics.

AGRICULTURAL OUTPUT AND POPULATION

Estimates of the extent to which the rate of population growth in the Middle East exceeded the rate of increase in agricultural production must be regarded

as tentative because of the inadequacy of population statistics in various countries in the region. However, there is no doubt that population growth has been more rapid than the rate of increase in the volume of produc-

tion during the past decade, nor does the more favourable output of recent years alter the general conclusion. During the past ten or fifteen years the rate of natural growth of the population was 1.5 per cent a year in Cyprus, 1.9 per cent in Egypt and 1.7 per cent in Turkey; in addition, certain countries, especially Israel, have received large numbers of immigrants. It is reasonable to assume that these rates represent the general order of magnitude of population increase in the region as a whole, and would indicate a total increase of about 20 to 25 per cent during the past fifteen years. This rate is higher than the rate of increase in food production. As mentioned earlier, the order of magnitude of this increase, including food crops and livestock products, appears to be a little above one-tenth for the region as a whole during the period 1947-51 as compared with pre-war but the general average hides important differences in the rate of increase among the various countries. The gap between population growth and the rise in food production thus increased in the post-war period at a rate which varied from country to country; it appeared particularly wide in Egypt, Iran and, in recent years, in Israel. The gap grew smaller, however, in the region as a whole, in 1950 and 1951, owing to good crops.

If, instead of crop volume, the value of agricultural production, deflated by the cost of living index, is used as a measure, the gap appears somewhat smaller or may even disappear in some years for certain countries in the region, because of the rise in the prices of agricultural exports. In general, the value of cereal and other food crops is reflected in the curve of living costs because the influence of such crops on the level of domestic prices is substantial, but prices of exportable cash crops have increased during recent years to a greater extent than the cost of living, and there was a time lag before the cost of living rose. The value of agricultural production therefore generally increased to a greater extent than the volume. It is impossible to determine the exact amount of this increase, but the resulting increase in revenues made it possible, by expanding imports, to reduce to some extent the gap between the growth in population and the increase in food production. This was especially noticeable in the case of cotton and wool products; and also, though to a lesser extent, of tobacco and of citrus and other fruits, the export prices of which increased less markedly. However, such increases were uncertain since they depended on the maintenance of the high level of export prices, which was bound up with the international situation. The decline in world prices in the second half of 1951, particularly for cotton, lowered the revenues of Middle Eastern countries.⁶

The fact that there was a gap between the rise in agricultural output and population growth does not necessarily mean that the pressure of population on

⁶ See other aspects of this development in chapter 6, dealing with foreign trade and balance of payments.

resources was great in every country of the region. Although it was true of such countries as Egypt, in certain countries the population was insufficient to exploit all cultivable land, and means were lacking to open up new land or to intensify production on land already under cultivation. Thus, Iraq and Syria could probably absorb a considerable gain in population without increasing their agricultural problems. Of course, if the necessary capital and organization for expanding output and crops were not available, the increase in population would accentuate existing difficulties, even in countries where a large area of potentially cultivable land remains, and where the margin for improving yields is great.

EXTERNAL TRADE IN FOODSTUFFS

A corollary to the inadequacy of the increase in food crops in relation to population growth is the change which has come about in the external trade in foodstuffs during the past fifteen years. In the pre-war period, the Middle East as a whole was a net exporter of cereals, but the position changed during the post-war period. Tables 12, 13 and 14 at the end of this chapter show net foreign trade in cereals, including rice, and in sugar and citrus fruits, of most countries in the region before the war and in recent years.

The region as a whole was a net exporter of cereals during the pre-war period and became a net importer during the period from 1947 to 1951, as the following figures (in thousands of metric tons) indicate:⁷

	1934-38	1947-51
Bread grains	25	-950
Coarse grains	450	210
Rice	75	235
TOTAL	550	-505

In 1951, net imports of cereals reached a new high of 950,000 tons owing to stockpiling and to poor crops in the area of the Fertile Crescent.

The region as a whole imported about 375,000 tons of refined sugar in 1947-51—approximately double the pre-war figure. Potato exports increased only slightly during the period in spite of expanded production. Neither output nor exports of citrus fruits by the major producer, Israel, have reached pre-war levels in Palestine since the end of Arab-Israeli hostilities; in the other countries of the region production has increased but exports have declined somewhat.

Trade in agricultural products by the Middle East as a whole⁸ during 1949, 1950 and 1951 is shown in the following indices⁹ of net imports and exports of agricultural products (1934-38=100).

⁷ Food and Agriculture Organization of the United Nations; minus signs indicate net imports. The figures are exclusive of Afghanistan.

⁸ Including Eritrea, Ethiopia and the Somalilands.

⁹ Food and Agriculture Organization of the United Nations, *Monthly Bulletin*, August 1952; based on quantity.

Year	Food products		Total agricultural trade ^a	
	Exports	Imports	Exports	Imports
1949.....	121	247	111	218
1950.....	103	291	129	237
1951.....	86	291	107	243

^a Including fibres, coffee and tobacco.

The countries in the region which were the major net exporters of bread grains and coarse grains before the war—Iran, Iraq, Syria and Turkey—either were net importers during the 1947-51 period or had sharply decreased surpluses, except in the case of Syrian wheat and Iraqi coarse grains. The areas which were net importers of bread grains and coarse grains before the war, such as Egypt, Palestine and the Arabian peninsula, and Cyprus with reference to wheat, had still larger deficits during the period 1947 to 1951. Egypt was a striking example: its imports of bread and coarse grains were negligible before the war—31,000 tons in 1934-38—but they averaged about 650,000 tons in the period 1947 to 1951. This item represented the most important single import of the country in value.

In the case of rice, net exports of the region as a whole have increased substantially as compared with the pre-war period. The increase, however, is due solely to the expansion of Egyptian rice exports, which rose from an annual average of about 100,000 tons before the war to an average of 270,000 tons in 1947-51. If Egypt is excluded, the situation is similar to that for bread and coarse grains, most of the countries showing a decrease in their surpluses, like Iran, or an increase in their deficits. With respect to sugar, all countries of the region, except Egypt, were net importers of refined sugar before the war. In spite of increased regional production, deficits increased in nearly all the countries during the 1947-51 period, and Egypt became a net importer. However, in 1950 and 1951, Turkey produced enough sugar to meet domestic needs.

In most of the countries, the trade pattern in 1951 was similar to that of the preceding period. The net deficit of Egypt in bread and coarse grains exceeded one million tons. Egyptian rice exports of 314,000 tons in 1951 were nearly double those of 1950; in 1952, however, rice exports fell abruptly, owing to a poor crop. Israel and Lebanon also had to import large quantities of grain in 1951. Exports of cereals from Syria dropped sharply, since the crop was decidedly smaller than in 1950, and the export of wheat was prohibited. In Iraq, exports were high, owing to favourable prices abroad; this led to a domestic shortage and a ban on wheat exports in February 1952. Turkish grain exports, partly to nearby countries where crops were poor, were also unusually high. On the whole, the dependence of the region on grain imports was accentuated during 1951.

FOOD CONSUMPTION

Available information concerning production, imports and population tends to indicate that increases in imports and in production in certain Middle East

countries have merely counterbalanced the effects of population growth, and that in other countries not even this result has been achieved. It is doubtful whether increases in output and in imports have balanced the growth in population in the region as a whole since the war, although the situation in this respect has improved somewhat in recent years.

In the period from 1946 to 1949 there was a drop in levels of food consumption in the countries for which information is available, with the exception of Cyprus (see table 3). This decline was in all cases less than 10 per cent from the pre-war level, and was generally less than 5 per cent, but it was nevertheless substantial if account is taken of the fact that the pre-war levels were low, and that the figures represent averages which are above the levels of real consumption among the poorer strata of the population. Moreover, the average diet was inadequate from a nutritional point of view. Consumption increased somewhat in 1950 and 1951. The rise in grain and sugar imports, together with the relatively high level of domestic food production during these years, led to an increase in available food per capita, as compared with pre-war levels in the region as a whole.¹⁰ It should be noted, however, that this gain in food supplies has not been large enough to have a substantial effect on average living standards throughout the region during the past five years. Moreover, the gain was limited to the countries which had abundant crops or larger oil revenues, and in several instances prevailing trends towards higher living costs contributed towards limiting the benefits to small sections of the population.

¹⁰ The increase has been estimated at 12 per cent in 1951. Food and Agriculture Organization of the United Nations, *State of Food and Agriculture, 1952*.

Table 3. Calorie and Protein Content of Food Supplies Available for Human Consumption, 1934-38 and 1946-49
(Average daily per capita amounts, at retail levels)

Country and period	Calories	Protein (grammes)	
		Animal	Total
<i>Cyprus:</i>			
1934-38.....	2,345	10.9	65.1
1946-49.....	2,483	13.9	70.7
<i>Egypt:</i>			
Pre-war.....	2,411	12.2	76.4
1946-49.....	2,294	11.6	69.4
<i>Iran:</i>			
1934-38.....	2,010	9.9	64.4
1946-49.....	1,811	8.6	57.4
<i>Iraq:</i>			
1934-38.....	2,224	9.9	68.5
1946-49.....	1,942	9.7	61.2
<i>Turkey:</i>			
1934-38.....	2,594	26.0	90.8
1946-49.....	2,475	23.5	84.0

Source: Food and Agriculture Organization of the United Nations, *Current Development of, and Prospects for, Agriculture in the Near East, 1951*.

Factors Affecting the Increase in Agricultural Output

The inadequacy of the increase in agricultural production during the post-war period was partly due to insufficient expansion of areas under cultivation in certain countries of the region or failure to expand at all. However, the chief cause lies in the failure to improve the yield per acre for most crops, with the result that per capita production declined.

AREA UNDER CULTIVATION

The diversity of agricultural conditions in the Middle East is particularly striking when the extension of areas under cultivation is considered. For the region as a whole, the area under cultivation has increased considerably since the pre-war period, though it is difficult to estimate the increase in quantitative terms. The increase from 1934-38 to 1947-51 in the area under grain

has been estimated at between 20 per cent and 25 per cent. However, this figure is higher than the increase in the area under cultivation as a whole, because the area devoted to other crops, such as vegetables and pulses, increased at a lower rate. The increase in area under cultivation was fairly wide-spread during the war because efforts were made in all these countries to increase food supplies without resorting to imports. During the post-war period, expansion in acreage has been limited to Cyprus, Iraq, Saudi Arabia, Syria and Turkey, where it resulted chiefly from wider use of tractors, pumps and other agricultural machinery, as well as more favourable prices. The total area under the chief crops, especially cotton, was greater in 1951 than in 1934-38 and was higher than the average for 1947-51 in all countries for which information is available (table 4).

Table 4. Area under Principal Crops, 1934-38, 1947-51, 1950 and 1951
(Thousands of hectares)

<i>Country and crop</i>	<i>1934-38</i>	<i>1947-51</i>	<i>1950</i>	<i>1951^a</i>
<i>Egypt:</i>				
Cereals.....	1,665	1,839	1,694	1,757
Cotton.....	746	701	829	832
Other crops ^b	199	204	193	177
TOTAL	2,610	2,744	2,716	2,766
<i>Iran:</i>				
Cereals.....	2,409	3,034 ^c	3,695	...
Cotton.....	158	105 ^c	130	150
Sugar-beets.....	12	29 ^c	34	42
TOTAL	2,579	3,168 ^c	3,859	...
<i>Iraq:</i>				
Cereals.....	1,556	2,381 ^d	2,196	2,910 ^d
Cotton.....	16	17	32	44
TOTAL	1,572	2,398	2,228	2,954
<i>Israel:^e</i>				
Field crops (not irrigated).....	...	107 ^f	178 ^e	211 ^h i
Fodder and other crops (irrigated).....	...	6 ^f	8 ^e	12 ^h
Potatoes.....	...	...	2 ^e	2 ^h
Other vegetables.....	...	4 ^f	5 ^e	6 ^h
TOTAL	...	120 ^f d	193 ^e	231 ^h i
<i>Syria:</i>				
Cereals ⁱ	777	1,316	1,371 ^d	1,716 ^d
Cotton.....	32	73	78	217
Other crops ^k	43	74 ^c	78	...
TOTAL	852	1,463	1,528	2,015 ^d
<i>Turkey:</i>				
Cereals.....	6,435	7,933	8,095	8,717
Pulses.....	261	265	266	260
Cotton.....	249	378	448	642
Other crops ^l	83	121	127	138
TOTAL	7,028	8,697	8,936	9,757

Source: Food and Agriculture Organization of the United Nations; for Israel: Central Bureau of Statistics, *Statistical Bulletin of Israel* (Jerusalem). Data cover important crops for which precise information is available.

^a Preliminary figures.

^b Broad beans, lentils and potatoes.

^c 1947-50.

^d Partly estimated.

^e Including farming by both Arabs and Jews.

^f Figures for 1948/49.

^g 1949/50.

^h 1950/51.

ⁱ Excluding 44,000 hectares in the Negeb which were ploughed at the beginning of the year and prepared for sowing in the winter of 1951/52.

^j Excluding millet.

^k Broad beans and lentils.

^l Sugar-beets and potatoes.

Changes in the area under cultivation during the past five years have been fluctuating and uneven. The range of fluctuation in area of land used annually for the chief agricultural products from 1947 to 1951 was as high as 10 per cent, when compared with the five-year average, in Syria and Turkey, and it was even higher in Iran and Iraq. These fluctuations are the result, to some extent, of climatic conditions, which make the cultivation of marginal land profitable one year and unprofitable the next. On the other hand, in Egypt, where all farm land is irrigated, variations in the total area devoted to the chief crops did not exceed one per cent of the five-year average between 1947 and 1951. Changes took place in the use of cultivated land for certain crops owing chiefly to variations in the profit to be expected and the action of the authorities in encouraging the growing of crops most necessary to the economy of the particular country. Thus, the area reserved for cotton growing increased almost tenfold in Syria between 1947 and 1951 and tripled in Turkey in the same period. After a sharp decrease during the Second World War, cotton acreage also expanded greatly in Egypt until steps were taken by the Government in 1950 and 1951 tending to halt such expansion. In 1952, the Egyptian Government set the minimum area to be devoted to wheat during the subsequent three years at 40 per cent of all cultivated land in Upper Egypt and 30 per cent in Lower Egypt, at the same time guaranteeing prices and offering premiums in order to encourage its cultivation.

Recent increases in land under cultivation in the region as a whole have been inadequate, primarily because certain countries in which population pressure is particularly heavy have achieved only small gains. In Egypt, as previously noted, the total area devoted to the chief crops remained almost constant between 1947 and 1951; such increases as occurred earlier were made possible by additional water supplies which were made available just before or during the war. The area under cultivation in Iraq, which had increased greatly during the Second World War because of better water supplies and wider use of agricultural machinery, has expanded less rapidly during recent years. The extension of cultivated areas in Israel resulted chiefly from tilling land which had been left uncultivated since 1948, when the Arab owners fled the territory during Arab-Israeli hostilities. It was also due in part to the cultivation of hitherto uncultivated land, particularly in the Negeb. The expansion was rapid, the cultivated area increasing from 167,000 hectares in 1948/49 to 242,000 in 1949/50, 354,000 in 1950/51 and 385,000 hectares in 1951/52.¹¹ The area under principal crops in Turkey increased approximately 10 per cent from 1950 to 1951; in 1947-51 the total was more than a fifth above the pre-war level. In Syria, the area planted to cereals and cotton increased by about 70 per cent between 1934-38 and 1947-51.

¹¹ Israel Information Office, *Four Years of Israel's Statehood: Development of Agriculture* (New York, April 1952).

With these exceptions, the increase of the area under cultivation during the past ten years seems small in the region as a whole in relation to the extent of potentially cultivable land. Table 5 gives an estimate of this potential. The total unused but potentially productive area in the Middle East has been estimated at about 55 million hectares, that is, more than the area actually under cultivation, subject to the following reservations.

This estimate of 55 million hectares includes land in widely varying conditions; the immediate potential of the region is much lower than the estimate for several reasons. In the first place, though the figures for each country have been derived largely from official government information, their comparability is limited. "For instance, the figure of 700,000 hectares shown for Egypt should, according to recent official reports, be interpreted as a conservative estimate of the potential expansion in cultivated area to be achieved over the next few decades. In contrast, data for countries like Iran and, to some extent, Iraq, refer to the maximum possible development of land resources, which for varying reasons is unlikely to be attained within the foreseeable future."¹²

In the second place, natural conditions limiting expansion of the area under cultivation vary greatly from country to country. In Egypt, any expansion of the cultivated area implies added irrigation facilities. An integrated programme of development has been prepared for the Nile basin as a whole, with provision for construction of dams, reservoirs and canals. The same is true of Israel, where, at least in the Negeb, bringing additional land into cultivation requires costly irrigation work. In Turkey, on the other hand, it is estimated that at least 7 million hectares of land now under pasture could be converted into arable land without new irrigation projects. The situation is similar in Syria, where necessary water could be supplied from the Euphrates, the Orontes and the Khabur. Iran and Iraq also have vast reserves of land and water still unused. This diversity in natural conditions also accounts for the uneven expansion of areas under cultivation in recent times. For example, land devoted to the principal crops of Egypt, which in 1934-38 represented about 18 per cent of the total area under cultivation (not including fallow land) in the chief producers of the region, was only 15 per cent of the total in 1947-51, in spite of the fact that the needs of the country increased at a rate comparable to that of the other countries.

Increased agricultural production involving the opening up of additional agricultural areas also depends to a large extent upon the improvement and extension of necessary transport, especially road transport, and marketing facilities, to overcome both the inadequacy

¹² Food and Agriculture Organization of the United Nations: *Current Development of, and Prospects for, Agriculture in the Near East*.

Table 5. Cultivated, Irrigated and Potentially Productive Land^a
(Thousands of hectares)

Country	Cultivated land		Unused potentially productive land	Unused potentially productive land as percentage of cultivated land
	Total	Irrigated		
Aden Protectorate.....	110 ^b	...	...	...
Afghanistan.....	6,400	...	...	...
Anglo-Egyptian Sudan.....	1,700	716	600	35
Cyprus.....	434	59	...	...
Egypt.....	2,445	2,445	700	29
Iran.....	16,760	1,600	33,000	197
Iraq.....	2,650	1,750	9,350	353
Jordan.....	480	25	...	...
Lebanon.....	239	30	180	75
Palestine ^c	697	40	...	...
Syria.....	2,500	333	3,400	136
Turkey.....	14,774	80	7,000	47
TOTAL	49,189	7,078	54,230	110

Source: Food and Agriculture Organization of the United Nations, *Current Development of, and Prospects for, Agriculture in the Near East* (Rome, 1951).

^a Data refer to latest post-war year for which statistics are available. Cultivated land comprises arable

land, including orchards and fallow land. Data not available for Bahrein, Kuwait, Muscat and Oman, Qatar and Yemen.

^b Area planted to principal crops only.

^c Prior to partition.

and the high cost of transportation. The importance of transport has been recognized in the development programmes of the countries in the area; expenditure on transport, particularly roads, represents a substantial item in these programmes.

Lastly, there is the difficulty of drafting and implementing a plan for integrating "such matters as new or modified terms of land tenure, the economical use and development of water for irrigation, the successful settlement of newly opened agricultural areas, the financing of capital works, such as dams for irrigation and control of flood water, and of the production and marketing of new agricultural produce".¹³

In view of these important reservations, and because of numerous obstacles which stand in the way of expanding the area under cultivation, it would appear that, in the region as a whole, with a few exceptions, such as Turkey and Syria, the expansion achieved in recent years has not been commensurate with the recognized potentialities of the region or the needs of its population.

CHANCES IN CROP YIELDS

During recent years crop yields in the Middle East have continued to show the wide variations from year to year that were experienced in the past, the chief cause being the dependence of yield on climatic conditions. A change in the volume of rainfall substantially alters the harvest forecast. Thus, the abundant and well-distributed rainfall of the last quarter of 1951 and the

beginning of 1952 caused substantial revision of the first estimates for crop yield in Syria and Jordan. More than normal rainfall leads to the cultivation of marginal land which would otherwise have been left fallow, and of land where the yield is usually small. Variations in wheat yield per hectare from 1949 to 1950 amounted to more than 20 per cent of the 1949 figure in Syria and Turkey; the same was true of barley, sugar-beets and cotton in Iran and of rye and oats in Turkey. From 1950 to 1951 the change was more than 20 per cent of the 1950 figure for wheat, maize, rye and sugar-beets in Turkey, rice in Iraq, and cotton in the Anglo-Egyptian Sudan and Syria.¹⁴ In Israel, the wheat yield in 1951 was less than half that of 1950. Variations were particularly large in the case of non-irrigated crops; in Egypt, where crops are irrigated, the change was usually far less marked. For example, variations in the wheat yield in Egypt between 1947 and 1951 appeared smaller than 12 per cent of the five-year average. However, even in that country, the cotton yield declined about one-quarter from 1949 to 1951. The consequences of such fluctuations on the stability of farm income and the economy of the country are obvious.

If measured in averages for several years, agricultural yields in the Middle East have not increased during the past fifteen years. In nearly all cases increases in agricultural production have been due to expansion of the area under cultivation rather than to improvement of the yield per hectare. Since yields are generally low, however, they could probably be improved, given the necessary technical aids, except for Egyptian cotton, which already ranks highest in the world in yield per hectare. Cereal yields in Egypt are

¹³ "Agriculture in Iraq", paper presented by the Iraqi delegation at the conference of the Food and Agriculture Organization of the United Nations, held at Bloudane in 1951. This comment applies to most of the countries of the region.

¹⁴ Available figures indicate changes of 28 per cent or more.

Table 6. Cereal and Cotton Yields per Hectare, 1934-38, 1947-51, 1950 and 1951

(Hundreds of kilogrammes per hectare)

Crops and country	1934-38	1947-51 ^a	1950	1951
<i>Wheat:</i>				
Anglo-Egyptian Sudan.....	7.6	12.0	11.1	11.4
Cyprus.....	7.9	6.7 ^b	7.5	...
Egypt.....	20.1	17.8	17.7	19.2
Iran.....	12.0 ^c	9.6 ^b	9.1	...
Iraq.....	7.2	4.1	5.5	4.5
Israel/Palestine.....	4.0	...	7.3	3.3
Lebanon.....	5.2	7.2 ^b	7.5	...
Syria.....	9.7	8.5	8.4	7.1
Turkey.....	9.9	9.0	8.6	11.5
<i>Barley:</i>				
Egypt.....	19.8	18.6	18.6	19.8
Iran.....	12.4 ^d	10.1	9.5	9.5
Syria.....	10.6	7.5	7.7	4.5
Turkey.....	11.0	10.3	10.8	13.1
<i>Maize:</i>				
Egypt.....	24.9	20.8	21.4	20.4
Syria.....	12.5	...	13.8	13.6
Turkey.....	12.6	11.8	10.6	13.6
<i>Rice (paddy):</i>				
Egypt.....	34.9	38.7	42.2	30.2
Iran.....	19.3 ^e	16.7	16.9	...
Iraq.....	13.5	10.5	12.8	8.6
<i>Rye:</i>				
Turkey.....	9.6	9.3	9.1	11.6
<i>Oats:</i>				
Turkey.....	9.8	9.8	10.5	11.3
<i>Cotton:</i>				
Anglo-Egyptian Sudan.....	3.1	3.7	4.7	2.7
Egypt.....	5.4	5.3	4.6	4.4
Iran.....	2.2	2.0	2.2	1.8
Syria.....	1.8	3.5	4.6	2.3
Turkey.....	2.1	2.6	2.7	2.4

Source: Food and Agriculture Organization of the United Nations.

^a Not weighted average.

^b 1947-50.

^c Three-year average.

^d Four-year average.

^e 1935.

also well above the regional level, though in this case there is a large margin for improvement. In the region as a whole, if short-term changes in output are eliminated by comparing the five-year periods 1934-38 and 1947-51, there has not only been no gain, but there has actually been some deterioration. The average yield per hectare of wheat and barley—the basic food crops of most countries in the region—appears to have diminished. In the case of wheat, there was a reduction of between 5 and 15 per cent in Egypt, Syria and Turkey. The barley yield was less than 10 per cent lower in Egypt and Turkey and 10 to 20 per cent lower in Iran. Similarly, the yield of maize during this period declined slightly in Turkey and by 10 to 20 per cent in Egypt, and the rice yield by 15 to 25 per cent in Iraq. Some crop yields, however—particularly crops with small output until recently—rose in certain countries. In Egypt, the rice yield per hectare increased by 5 to 15 per cent. The linseed yield improved distinctly in Egypt

and still more in Turkey. Similarly, the potato yield per hectare more than doubled in Turkey and greatly increased in Egypt. The yield of sugar-beets improved in Turkey. Some of the reductions may be explained in part by differences in the distribution of crops. Thus, in Syria in 1950/51, part of the wheat was sown on land of inferior quality because of the expanded area under cotton. While the statistics on yield are not altogether reliable, it is clear that, as a whole, the yield of food crops did not improve from 1934-38 to 1947-51, despite the pressing need created by growth in population. Of the commercial crops, the cotton yield improved in Syria and Turkey, but declined in the case of the largest producer, Egypt, as well as in the Anglo-Egyptian Sudan and Iran. The tobacco yield declined in Turkey during this period.

Yields in 1951 improved in some countries of the region and deteriorated in others. The most notable improvement was achieved in Turkey, where yields of the

chief 1951 crops, except cotton, were not only higher than in 1950 but also higher than the average for 1934-38.¹⁵ Yields in Egypt were higher than in 1950 for wheat and barley and lower for rice and maize and, save for relatively minor exceptions like potatoes, were generally lower than yields in the pre-war period. Serious drought conditions in 1950/51 affected the yield in the Fertile Crescent countries. The cotton yield was below the level of 1950 in the Anglo-Egyptian Sudan and Syria; in the latter, the cotton yield per hectare was less than half that of the previous year.

A number of factors caused agricultural yield per hectare to remain stationary in the post-war period, or even to decline, and thus to impede the development of production. In the first place, difficulties resulting from the Second World War occasioned a considerable reduction in output. For example, the yield of wheat per hectare declined 20 to 30 per cent in Egypt and Iraq in 1943; in Syria and Turkey in 1945 it was about half of the pre-war level. This decline was due to a variety of causes: almost total cessation of imports of fertilizers into the region, a lack that particularly affected Egypt, which, before the war, imported over half a million tons yearly; changes in the pattern of rotation arising from reductions in the area planted to cotton and similar crops—again, most marked in Egypt; wearing out of agricultural machinery, such as irrigation pumps, which could not be replaced during the war; shortage of manpower owing to mobilization in certain countries, notably Turkey; and extension of cultivation, which brought into use inferior lands at lower yields, especially in Iraq and Syria. Most of these factors disappeared only gradually after the end of hostilities; the harvests of 1946, 1947 and even 1948 were still affected by them.

More recently, failure to increase crop yields has been caused by inadequate use of water supplies available for irrigation, use of seed of poor quality, inadequacy of measures against parasites and plant diseases, insufficient increase in the use of fertilizers, inefficient methods of cultivation, lack of technical knowledge, obsolete agrarian systems and unfavourable farming conditions.

The lack of improvement in crop yields was not, in general, the result of decreasing yields on marginal land, though this factor was present, as mentioned earlier. It is true that favourable rainfall tends to bring into cultivation additional land whose yield is poor because available equipment is overburdened. The influence of decreasing yields on marginal lands, however, has not been the dominant factor in recent years, since, with respect to many crops, a distinct increase in the area under cultivation was accompanied by a rise in yield. This occurred, for example, in the case of wheat in Turkey in 1950 and 1951 and in Egypt in

1951; in the case of barley in Iran in 1949 and in Turkey in 1950; in the case of maize in Turkey in 1951. However, in cotton, expansion of the area under cultivation was accompanied by improved yields in Syria in 1949 and in the Anglo-Egyptian Sudan in 1950, but by reduced yields in Egypt in 1950 and in Syria in 1951.

If area under cultivation is considered as a whole, rather than by individual crops, a general tendency towards improved yield per hectare appears in the years in which the cultivated area expanded. Thus, in 1948 and 1951 in Turkey, in 1949 in Iran, and in 1950 in Syria, the area under cultivation increased markedly at the same time as yields, except for cotton. The years in which the area under cultivation was reduced were rarely years of high yield, though not always poor in yield.

The tendency towards some correlation between area under cultivation and yield was due to the importance of atmospheric and climatic factors in Middle East agriculture. Rainfall, which favours expansion of crop growing, means increased yield in the area under cultivation as a whole. Such factors were also responsible for wide fluctuations in yield from one year to another, as, for example, a reduction of about two-fifths in the yield from land under wheat in Turkey between 1948 and 1949, and an increase of a third between 1950 and 1951. However, even in recent years when climatic conditions were often favourable, yields in many cases were about the same as the pre-war average, or below.

PRODUCTIVITY PER CAPITA

During the five-year period 1947-51, average per capita production of the eight major food crops of the Middle East was 154.8 kilogrammes of wheat equivalent;¹⁶ it had been 162 in the period 1934-38; and for the world as a whole in 1947-51, it was 251 kilogrammes. In other words, average per capita production was about 4 per cent lower than in the pre-war period and represented only 62 per cent of the corresponding world figure. The 1950 level was below that of 1934-38, which was itself quite low. The 1951 figures for per capita production slightly exceeded the pre-war amounts. Among the major regions of the world, only Africa had lower per capita production. The figures for the Far East were of an order of magnitude close to those for the Middle East; both were far below those for Latin America.

¹⁶ Food and Agriculture Organization of the United Nations, *Monthly Bulletin of Agricultural Statistics*, April 1952. It would have been desirable to estimate per capita production on the basis of the rural, rather than total, population. However, statistics are less reliable for the former, and for present purposes, it has been assumed that the proportion of rural population to the population as a whole has not changed substantially during the period under consideration. The figures for the Middle East include Eritrea, Ethiopia and the Somalilands in addition to the countries generally covered in the present report, but this addition does not alter the conclusions significantly. World figures are exclusive of the Union of Soviet Socialist Republics.

¹⁵ Data on the tobacco yield per hectare are lacking.

Table 7. Per Capita Production of Major Food Crops,^a Compared with Other Regions
(Kilogrammes per person, in wheat equivalent)

Region	1934-38	1947-51	1950	1951
Middle East ^b	162	155	156	167
Africa.....	90	92	94	95
Far East.....	178	157	157	159
Latin America.....	327	280	273	269
Europe.....	374	316	337	339
Oceania.....	647	673	640	563
North America.....	752	954	921	901
World ^c	261	251	253	253

Source: Food and Agriculture Organization of the United Nations, *Monthly Bulletin of Food and Agricultural Statistics*, April 1952.

^a Wheat, barley, maize, rye, oats, rice, sugar, potatoes.

^b Including Eritrea, Ethiopia and the Somalilands.

^c Excluding the Union of Soviet Socialist Republics.

The 1951 figures for the Middle East were larger than in previous years because in Turkey wheat and barley harvests were abundant; they alone represented about half of the total amount harvested in the region. If Turkey is omitted, the results for the rest of the region were lower in 1951 than in the pre-war period. In the case of Egypt, average per capita production of major food crops was approximately 235 kilogrammes (in wheat equivalent) in 1934-38, and was estimated at about 170 in 1951.¹⁷ In the case of Iran, Iraq and Syria the 1951 figures were also lower than those for the pre-war period, although to a lesser extent.

Although the five-year average for the chief food crops was below pre-war levels, the gap between per capita value of food and industrial crops before and after the Second World War is less in many cases because of the rise in prices of several products. In the case of cotton, in particular, the volume of production increased greatly during the post-war period in certain

Middle East countries, and, as prices also increased markedly, the per capita value rose sharply; for example, the per capita value of the cotton harvest, on the basis of the value of cotton exported, rose in Egypt from £E 1.5 in 1939 to £E 7.9 in 1951, which in constant prices¹⁸ represented a gain of about 70 per cent.

In the case of Middle East agriculture, the significance of figures on per capita production is limited. The decrease during the post-war period was not caused in most cases by a decline in productivity of individuals fully engaged in agricultural work but reflected the extension in rural areas of concealed unemployment resulting from increased population. Such unemployment is not taken into account in calculating per capita production owing to the lack of statistics. In other words, the decrease in per capita production to a large extent indicates insufficient utilization of available manpower in rural areas.

Cotton Production and Trade

During the past fifteen years, the area planted to cotton and the total production of cotton in the Middle East have varied considerably from year to year. During the Second World War and the immediate post-war period, the shortage of imports encouraged the development of food crops at the expense of cotton in several countries. The area under cotton in Egypt declined from 746,000 hectares in 1934-38 to 297,000 in 1942; in Syria from 32,000 hectares in 1934-38 to 15,000 hectares in 1942; and in Iran from 158,000 hectares in 1934-38 to 118,000 in 1944. The movement was reversed after the war as more food supplies became available in most areas, and by 1948 cotton output in the Middle East as a whole had regained the pre-war level.

¹⁷ This figure does not include millet.

In recent years there has been some slackening of output in Egypt, the largest producer of the region, and a marked rise in production in the Anglo-Egyptian Sudan, and in Syria, Turkey and Iraq. The increase in the latter countries more than offset the amount of the decline in Egypt; and production of the region in 1949, 1950 and 1951 distinctly exceeded the pre-war level. To the traditional cotton exporters of the region, Egypt and the Anglo-Egyptian Sudan, were added Iran, Iraq, Syria and Turkey. The expansion in output was a result of the rise in cotton prices, following a sharp increase in demand, and the flexibility of cotton production. The shortage of dollars and the 1949 devaluation of sterling placed producing countries, such as Egypt, in a particularly favourable situation with respect to cotton exports,

¹⁸ Based on cost of living indices.

and international demand, which was already high, again increased sharply after the events in Korea in 1950/51. The quantity exported increased from about 460,000 tons in 1949 to 570,000 tons in 1950. At the same time, local demand for cotton was stimulated by growing domestic use, chiefly for expanding textile industries in Middle East cotton producing countries. During the second half of 1951, however, prices began to decline, chiefly because of the abundant cotton harvest in the United States, the existence of large cotton stocks and some slackening in demand as a result of the previous high level of prices. From 1950 to 1951 the volume of cotton exports from the Middle East declined by approximately 120,000 tons, a decline more than accounted for by the drop of 130,000 tons in Egyptian exports.

EGYPT

The cotton harvests of 1950 and 1951 were rather poor in Egypt; the 1951 harvest, in particular, was 9 per cent below the average for 1934-38 despite expansion in acreage. The area under cultivation in 1951 was practically the same as in 1950—about 11 per cent higher than the pre-war average. In 1951, as in 1950, the authorities determined the minimum area to be planted to cereals, thus indirectly limiting the total planted to cotton, but the effectiveness of these measures was somewhat reduced by the appeal of high cotton prices. The poor yield seems to have been due chiefly to the boll weevil, to sun-scorching and, in lower Egypt, to shortage of water.

In order to support cotton prices, the Government of Egypt fixed minimum prices from the beginning of 1951 and later announced that it would buy any amount of cotton tendered at such prices. However, this policy had to be abandoned in 1952 in view of the cessation of exports and the accumulation of large stocks. In March, the Government undertook to free the market, and during the following months bought end-of-season cotton at fixed prices; its purchases of cotton were financed in 1951 by the issuance of Treasury bills and in 1952 by floatation of a government cotton loan of £E 15 million. The export tax on cotton, which had doubled to £E 8 per 100 kilogrammes in January 1952, was abolished in May 1952 for the remainder of the season and reduced to its pre-war level during the following season in order to stimulate exports. Barter agreements involving a total of 26,000 tons of cotton were concluded with the Union of Soviet Socialist Republics and with Germany at the beginning of 1952.

The Egyptian Government in 1952 adopted the policy of limiting the area under cotton for the subsequent three years to one-third of total land cultivated. The quota fixed for cotton was thus lower than that established for wheat, although since 1949 the area planted to cotton has been larger than that under wheat. This

policy, as well as increased guaranteed prices to wheat growers, was aimed at preventing expansion of the cotton area at the expense of cereal production.

Although the quantity of exports in 1950/51 declined by 27 per cent as compared with 1949/50, the value of 1951 Egyptian cotton exports was 10 per cent higher than in the previous year, reaching £E 164 million. The quantity of exports declined 9 per cent in 1951/52 as compared with 1950/51. The value of exports in the first six months of 1952 did not exceed £E 57 million, compared with £E 106 million for the same period during the preceding year. In September 1952, prices for "Ashmouni good" cotton were 56 per cent below the record level of February 1951; the prices of "Karnak" also declined. Local consumption increased slightly in 1951/52, amounting to 67,000 tons compared with 63,000 in 1950/51.¹⁹

SYRIA

Cotton growing is not new in Syria, but output has increased vastly during the past three or four years: from 5,700 tons in 1939 to 50,000 tons in 1951, while the area under cotton increased from 32,000 hectares in 1934-38 to 217,000 in 1951. This expansion was chiefly a result of higher world prices. Cotton yield in Syria was high in 1950. Expansion was encouraged by the authorities, who saw not only an opportunity for expanding the area under cultivation but also a means of providing more employment. Acreage was added chiefly in El Jezira and the Euphrates region. Use of tractors and agricultural machinery made it possible to expand the area under cultivation rapidly; there was a substantial investment of capital.

In 1950 the yield was 460 kilogrammes per hectare—as high as that of Egypt. The 1951 yield was much smaller; for an area nearly three times that of 1950, production was only 50,000 tons, as against 35,000 in 1950. Among the reasons for the decline in yield were plant parasites, lack of experience, poor selection of seed, shortage of water and, in some areas, late rainfall, which delayed preparation of the soil. Other obstacles to be overcome included technical problems in picking, storing, ginning and pressing cotton fibres, financing the harvest, providing sufficient man-power for cotton picking, and regulation of property rights. The area under cultivation was reduced from 217,000 hectares in 1950/51 to about 150,000 hectares in the 1951/52 season, chiefly because of the downward trend of prices; however, a larger harvest was expected. A cotton office was set up by a decree of 23 January 1952, to regulate cotton production by controlling cultivation, ginning, sorting and export. Steps were also taken to limit the area planted to cotton, to improve the quality of the seed and to supply producers with equipment for insect control.

¹⁹ National Bank of Egypt, *Economic Bulletin*, No. 3, 1952.

Total exports for the 1951/52 season were estimated at about 40,000 tons, compared with approximately 24,000 tons in the 1950/51 period. In 1950/51, 7,000 tons were used by mills in Syria, an increase of about 40 per cent in comparison with 1949/50; 8,000 tons were used in spinning in 1951/52. The chief purchasers of Syrian cotton in 1950/51 were France, Lebanon, Italy and the United Kingdom. Lebanon bought 5,000 tons in 1951/52. Cotton was the most important export item of Syria in 1951.

IRAN AND IRAQ

The area planted to cotton in Iran and Iraq has increased substantially in recent years. In Iran it rose from 100,000 hectares in 1949 to 130,000 in 1950 and 150,000 in 1951. However, the area was smaller than the pre-war average of 158,000 hectares. Selection of seeds and standardization of quality appeared inadequate. Aside from petroleum, cotton was the main export of Iran in 1950/51.

In Iraq, the area under cotton increased from 11,000 hectares in 1949 to 32,000 in 1950 and 44,000 in 1951, when it was almost triple the average for 1934-38. Production in 1951, despite the expansion of the area under cultivation, remained below the output of the preceding year. The total was under 7,000 tons, a yield of about

140 kilogrammes to the hectare. Drought and heavy damage by the spiny bollworm were chiefly responsible for the low yield. Most of the harvest was exported, but the local textile industry was beginning to absorb part of it. In Iraq, for the first time, in 1951, cotton surpassed wool exports and became the third major export item.

TURKEY

Cotton production, stimulated by high prices prevailing in foreign markets, made important advances in Turkey in 1950 and 1951. Average export prices increased 67 per cent between 1950 and 1951, reaching about nine times the average price of 1934-38. The area under cultivation rose from 249,000 hectares in 1934-38 to 305,000 hectares in 1949, 448,000 hectares in 1950 and 642,000 in 1951. As compared with the pre-war period, 1951 production tripled and average yield increased. The value of cotton exports reached £T 216 million in 1951; cotton thus became the major Turkish export, supplanting dried fruits and tobacco, whose export had encountered difficulties for several years owing to limited world demand in relation to production and stocks. At the end of 1951 and the beginning of 1952, prices showed a downward trend and price support measures were taken, in particular through the action of cotton co-operative unions.

Aspects of Agricultural Development

The main factors responsible for the present low level of Middle East agricultural output are natural conditions, of which the chief limiting element is the insufficiency and irregular distribution of rainfall; lack of technical progress, of research and demonstration agencies and of credit; and unfavourable systems of land tenure. Attempts to overcome these factors have met with varying degrees of success.²⁰ Some important recent measures with respect to water supply and irrigation, farm equipment and land tenure are described briefly in this section.

WATER SUPPLY AND IRRIGATION

In Afghanistan, work is under way on reservoirs on the Helmand River, a project designed to bring into cultivation almost 100,000 hectares of land and to provide improved irrigation for 50,000 additional hectares. Preliminary studies are being made for another project on the Arghandab River, which will irrigate 60,000 hectares more.

The chief irrigation work in the Anglo-Egyptian Sudan has taken place in the Gezira region, which is already served by the large Sennar dam. In 1951, con-

struction raising the capacity of the dam by 30 million cubic metres was completed;²¹ this was designed to extend the cultivated area by 40,000 hectares. It is planned to raise the dam further, increasing its capacity by an additional 50 million cubic metres. There has also been an appreciable extension of pump irrigation in the northern and central parts of the country, and a scheme to irrigate 12,000 hectares in the Blue Nile province by means of pumps has been launched. Plans for extended control and use of Nile waters, by the construction of dams at Owen Falls and Lake Tana, are expected to further benefit Sudan agriculture.²² A beginning has also been made in developing the clay plains of central Sudan in order to increase food production.

In Cyprus, a ten-year irrigation plan was started in 1946. By 1950, the area receiving perennial irrigation, including both gravity and pump irrigation, had risen from 15,100 hectares to 18,400 hectares, while the area receiving seasonal irrigation increased from 38,000 to 41,700 hectares. During 1951, 1,600 additional hectares were provided with perennial irrigation and 800 hectares with seasonal irrigation.²³

²¹ National Bank of Egypt, *Economic Bulletin*, No. 4, 1951.

²² British Information Services, *The Anglo-Egyptian Sudan* (New York), June 1951.

²³ Information transmitted to the Secretary-General of the United Nations by the Government of the United Kingdom.

²⁰ For technical assistance given by governments and various agencies in this respect, see appendix B.

In Egypt, the principal development project completed recently was the Edfina barrage, controlling the flow of the Rosetta branch of the Nile, which was finished in 1951 at a cost of £E 4 million and is expected to save 600 million cubic metres of Nile water each year.²⁴ The Isna barrage in Upper Egypt had been completed earlier. These and other projects, including the digging of a thousand artesian wells in Upper Egypt, form part of a ten-year plan for irrigation and conversion of 375,000 hectares from basin to perennial irrigation by supplying Nile and underground water. Egypt is also taking part in the construction of a reservoir at Owen Falls, which, in addition to providing electricity for Uganda, is expected to increase the storage capacity of Lake Victoria, and to bring under cultivation about 400,000 hectares in Egypt and an additional large area in the Sudan.²⁵ The Owen Falls dam constituted the first stage of a project for regulating and storing Upper Nile waters. Small reservoirs were also built in the Sinai and eastern deserts for storage of rain water and for irrigation of small areas.

In Iran, the seven-year plan envisaged an increase in the irrigated area, partly by construction of dams and reservoirs, partly by greater use of underground water by means of pumps and artesian wells; several hundred deep wells were drilled. Work was completed in 1952 on the Kuhrang tunnel, which is the first stage of a project to divert some of the headwaters of the Karun River into the Zayandehrud River, thus extending the cultivated area around Isfahan and increasing the water supply of 5,000 hectares. Another scheme at Shaban-Kareh to irrigate 15,000 hectares was completed in 1950. A project on Karkheh River for the irrigation of 80,000 hectares started in 1951. Dams were under construction at Golpayegan, to irrigate 6,000 hectares, and at Zehak and Mian-Kangui in Seistan, and construction was begun in 1951 on a tunnel to divert the Karaj River near Tehran. Some of these projects received aid under the "Point Four" programme of the United States. The implementation of the various schemes which are under way is expected to increase the cultivated area by 185,000 hectares.²⁶

In Iraq, the Habbaniya project for flood control and irrigation is in progress. The diversion of the Euphrates flood waters to Habbaniya Lake is being completed, and tenders have been offered on the building of the Habbaniya dam, which will permit the irrigation of 300,000 hectares. Work has begun on the first stage of the Wadi Tharthar project to divert flood waters into the Wadi Tharthar depression; during the second half of 1952, bids were invited for the construction of a barrage and subsidiary works at Sumarra, on the Tigris River, which is the second stage of the project.

It was also reported that a large-scale project for

artesian wells was undertaken in the northern part of Iraq, in order to provide water for crop irrigation and to encourage nomad tribes to settle permanently on the land. Ninety-nine artesian wells have already been drilled and eleven pumping stations installed.²⁷ Among other schemes may be mentioned the Bekhme dam, a multiple-purpose project, for which an aerial survey was conducted and arrangements made for drilling,²⁸ as well as the Jabal Tariq dam on the Diyala. All these projects are being carried out by the Development Board, established in 1950, to which 70 per cent of the revenues derived from the petroleum industry are allocated.

The main developments in Israel since 1950, in the field of irrigation and reclamation, include reclamation work in the Negeb, where the total cultivated area at the end of 1951 reached 75,000 hectares, compared with 25,000 hectares in 1949, and the number of villages increased from 14 to 38. Of the drainage projects started in 1950, the most important is the Lake Huleh scheme, which is expected to increase the cultivated area by 6,000 hectares; others include construction of artificial lakes in Galilee and the Negeb, wells in western Galilee and water pipelines in various parts of the country. There are also several large-scale projects, the most extensive being the proposed Jordan Valley project, construction of which requires prior agreement between Israel and neighbouring States.

In Jordan, minor irrigation works have been built on some of the streams flowing into the Jordan River. A detailed survey is being conducted for a projected dam on the Yarmuk River, to generate electricity for both Jordan and Syria and to irrigate 60,000 hectares in the Jordan Valley. The costs of the project are put at about \$60 million.

In Lebanon, experimental research with a view to future projects on the Litani River is in process. During the past ten years, several small-scale projects have substantially extended the irrigated area in Lebanon; other projects now on hand or nearing completion are expected to result in a further increase of 37,000 hectares. The chief of these are the Akkar plain project (to add 10,000 hectares), the Lake Yammouneh project (10,000 hectares) and two projects on the Litani River, aggregating 14,000 additional hectares. Some of these are also designed to generate electric power.

Several small-scale irrigation works have been completed, or are being completed, in Saudi Arabia with the help of the Arabian American Oil Company. Great interest attaches in this connexion to five experimental stations—notably the 1,200 hectare farm at Al Kharj—where agricultural research and training are carried on

²⁷ *Middle East Economist and Financial Service*, vol. VI, June 1952.

²⁴ *Al Ahram* (Cairo), 13 August 1951.

²⁵ British Information Services, *Nile Water Projects*, August 1949.

²⁶ Bank Melli, *Annual Report*, 1951 and 1952.

²⁸ Statement by the representative of Iraq to the Second Committee of the General Assembly of the United Nations, 5 November 1952.

with the development of water supplies. The Government is planning to make greater use of underground water by installing pumps.

In Syria, work has begun on various projects for agricultural development. The digging of the main tunnel for the Roudj swamp drainage project started in the summer of 1952. On the Khabur, the principal canals of a project designed to irrigate about 9,000 hectares were completed; it is eventually hoped to extend irrigation to 100,000 hectares. The Sinn irrigation project, which is expected to clear 5,000 hectares for irrigation and also to provide electricity for the town of Baniyas, is under way. Some construction has been carried out on the Kouaik project, designed to irrigate 15,000 hectares near Aleppo. Preliminary engineering surveys of the Ghab scheme have been conducted; this project is expected eventually to reclaim 30,000 hectares of swamp and to irrigate 13,000 additional hectares, as well as provide hydroelectric power.

In Turkey, flood control and generation of electric power, as well as irrigation, are the objectives of several projects. Among the schemes nearest to completion is that for the Seyhan Valley, where existing installations are to be expanded to regulate the flow of the river, to generate electricity and to provide irrigation for about 144,000 hectares in the plain of Adana; it is expected that this project will be completed in 1956. A dam is also under construction at Sariyar, on the Sakarya River; designed to provide electrical energy and flood control, it is scheduled for completion in 1954.²⁹ Work on minor drainage and irrigation projects is proceeding on the Menderes, which flows into the Aegean south of Izmir,³⁰ and on the Gediz, near Izmir, where the project under way is expected to assure the irrigation of 78,000 hectares of land.³¹

AGRICULTURAL EQUIPMENT

The mechanization of agriculture made notable progress in several countries, particularly in Israel and Turkey. In Israel, efforts were made to facilitate the import of mechanical equipment for agriculture. The following figures show the increase in agricultural equipment from 1947/48 to 1950/51.³²

	Tractors	Combines	Drills	Balers
1947/48.....	460	260	237	173
1950/51.....	3,800	940	640	550

In Turkey, it was reported that there were about 25,000 tractors in use in 1952, that is, about six times the 1949 figure; mechanized agricultural equipment to the value of about £T 100 million was imported during

²⁹ Turkish Information Office, *News from Turkey*, 16 October 1952.

³⁰ Bochenski and Diamond, "TVA's in the Middle East", *Middle East Journal*, January 1950.

³¹ Information from Ministry of Public Works, Ankara.

³² Israel Office of Information, *Four Years of Israel's Statehood*, April 1952.

the first six months of 1952, compared with £T 40 million in the first half of 1951, and 165 workshops to service and repair agricultural machinery, in addition to 18 mobile units, were in operation.

In Iraq there were approximately 170 combines and 550 tractors in operation; about half of them were concentrated in the provinces of Mosul and Baghdad. In addition, 75 combines and 81 tractors were owned and rented by the Agricultural Machinery Administration. From 1945 to 1950, inclusive, 632 tractors and 262 combines were imported.³³

In the other countries, mechanization has made less rapid progress. Latest available figures estimate the number of tractors in the Anglo-Egyptian Sudan at 185, in Cyprus at 443, in Egypt at 5,400, in Iran at 1,186, in Jordan at 88 and in Syria at 642.³⁴

The use of fertilizers in the principal countries, after a marked decline during the Second World War, has increased in recent years, especially in Egypt, Israel and Turkey, as shown in table 8. An attempt is being made to meet Egyptian needs for fertilizers from domestic production. Work is progressing on the Aswan dam electric project, which may eventually produce more than 400,000 tons of calcium nitrates, while another nitrate factory with a capacity of 200,000 tons of calcium nitrates (or about 30,000 tons of nitrogen) has started production in Suez. In addition, the present productive capacity of Egypt with respect to superphosphates (equivalent to 7,800 tons of phosphates) is being expanded, and an organic manure plant is also being installed. Smaller fertilizer plants are operating in Israel and Turkey, and the possibility of using waste gases from oilfields for the production of nitrates is being studied.³⁵ Imports of fertilizers show a general increase, and it is estimated that in 1950/51 consumption of all types amounted to 150,000 tons, that is, more than one and a half times the pre-war amount. However, except in Egypt, the use of fertilizers is still very limited in the region, and, in most cases, it is concentrated on a few high-value cash crops.

Some notable results have been obtained in recent years in improving crop varieties, mainly for high-value cash crops. For instance, efforts are being made by the producing countries to improve the quality of cotton, and Egypt, Iraq, Iran and Jordan have started work on cereals in order to develop new varieties more resistant to blight and rust. The distribution of improved seeds to farmers, except in countries like Egypt and Israel, remained inadequate. Government programmes to control animal diseases were expanded in several countries, especially in Egypt and Turkey.

³³ International Bank for Reconstruction and Development, *Economic Development of Iraq*, 1952, page 237.

³⁴ Food and Agriculture Organization of the United Nations, *Yearbook of Food and Agricultural Statistics*, 1950 and 1951.

³⁵ See chapter 3, "Petroleum".

Table 8. Utilization of Fertilizers, 1938, 1947/48 to 1950/51, 1949/50 and 1950/51
(Thousands of metric tons)

Country and item	1938	1947/48 to 1950/51	1949/50	1950/51
<i>Egypt:</i>				
Nitrogen.....	76.0	86.6	93.0	112.5
Phosphoric acid.....	8.7	14.3	14.0	21.9
Potash ^a	0.2	0.1	...	0.3
<i>Israel/Palestine:</i>				
Nitrogen.....	—	4.8 ^b	3.8	7.5
Phosphoric acid.....	—	4.6 ^b	7.4	6.5
Potash ^a	3.1	0.9 ^b	...	0.1
<i>Lebanon:</i>				
Nitrogen.....	—	1.2	1.4	1.5
Phosphoric acid.....	...	0.6	0.6	0.7
Potash ^a.....	...	1.2	1.3	1.4
<i>Syria:</i>				
Nitrogen.....	...	0.5	0.2	0.6
<i>Turkey:</i>				
Nitrogen.....	0.2	4.6 ^b	6.3	...
Phosphoric acid.....	—	1.6	2.2	2.6
Potash ^a	0.2	1.0 ^c	1.0	...

Source: Food and Agriculture Organization of the United Nations.

^a K₂O content.

^b Average of three years.

^c Partly estimated; 1947-50 average.

The threat of locust damage to Egypt, Iraq, Iran and Saudi Arabia in the beginning of 1952 was averted by a well co-ordinated programme involving local governments, the British desert locust control office, the United States Technical Cooperation Administration and the Government of the Union of Soviet Socialist Republics.

LAND TENURE

In most countries of the region the problem of land tenure is a complex subject, involving interrelated questions in the political, social and legal fields, the solution to which requires major decisions of policy affecting the economic, financial and technical aspects of the agrarian structure. Real improvement in the land tenure situation usually requires such direct measures as a more equitable distribution of holdings, a more efficient size of farms, better landowner-tenant relationships and an increase in the cultivable area available to landless peasants or small landowners. But these also call for measures for improving the productivity of agriculture, which in its turn needs to be an integrated part of an over-all development programme of the country. Some of these important interrelations have been taken into account in recent laws on land tenure adopted by several governments of the region. In general, these laws provide, in addition to a redistribution of the land, measures to extend co-operatives, develop agricultural credit and supply advice and technical help to the new farmers. It is too early, in most cases, to measure the effect of these reforms, some of which are still in process of amendment and are to a certain extent tentative in their present form.

In the Anglo-Egyptian Sudan, the concession of two companies in the Gezira scheme was permitted to lapse in 1950. The project, begun in 1913, was a threefold partnership involving the Government, which built the Sennar dam and main canals and rented the land from the original cultivators; two British companies, which built the subsidiary canals, provided buildings and machinery, and managed the cultivation, storage and marketing of the crop; and tenant cultivators who furnished the labour. Food crops were retained by cultivators, while the proceeds from cotton were divided in the proportion of 40 per cent to the Government, 40 per cent to the tenants and 20 per cent to the two companies. The project covers about 350,000 hectares, of which 80,000 are planted to cotton each year. Since 1950, the scheme has been managed by the government-appointed Gezira Board; as before, 40 per cent of the net income from cotton is to accrue to the cultivators and 40 per cent to the Government; the remainder is to be spent on experimentation, development and welfare.

In Egypt, a decree on land reform which was adopted in 1952 contained far-reaching clauses on ownership, co-operatives and rent control. Except for uncultivated land in process of reclamation, the size of agricultural land holdings is limited to a maximum of 200 feddans (about 80 hectares) per owner. The surplus is to be requisitioned by the Government within five years of the date of enforcement of the law, and the portion to be requisitioned each year is to be not less than one-fifth of the total land to be requisitioned. Within certain limits, the proprietor may transfer the ownership of the lands before requisition. The proprietor is to receive

for the requisitioned portion an indemnity equivalent to ten times the rental value of the land, including construction and installed machinery. The rental value is to be fixed at seven times the land tax imposed before the decree. The indemnity is to be paid in 3 per cent government bonds redeemable in thirty years; these bonds may be used for payments of land taxes and of the inheritance tax on land. Regulations governing the disposal of these bonds are to be determined by a further decree. Beginning 1 January 1953, a supplementary tax is to be imposed on land holdings in excess of 200 feddans at the rate of five times the original tax.

The land requisitioned under these provisions is to be distributed among small farmers, that is, farmers owning under five feddans, and each is to be allotted a property of not fewer than two and not more than five feddans. The price of land so distributed is to be estimated at the amount of indemnity paid by the Government plus 15 per cent for expenses; it is to bear 3 per cent interest and to be repaid within thirty years. An agricultural co-operative society for all small farmers is to be established in each village where land has been requisitioned. These societies are to make agricultural loans, supply agricultural equipment to their members, organize cultivation, sell crops on behalf of their members and "render all other agricultural and social services to members". The new decree also regulates the level of rents on agricultural land and the rate of wages, and it gives agricultural workers the right to form unions. Another decree concerning the dissolution of all family waqfs (Ahli) was passed. The land formerly held by the waqfs will be transferred to waqf beneficiaries under the ownership limitations provided in the decree on agricultural reform. It is estimated that 600,000 feddans, or one-tenth of the total cultivated area of Egypt, will be transferred under the terms of the land reform law and that 150,000 farmers will benefit from it.³⁶

In Iran, at the beginning of 1951, the Shah announced the distribution of Crown lands among farmers. The size of the lot is to be determined by the area necessary to provide a fair standard of living to the cultivator and his family. The purchase price is to be paid on a long-term basis during twenty-five years, each annuity being less than the annual payment to the landowner in the past. At the same time, co-operatives are to be established to develop the villages and to provide technical, financial and social help; pilot projects have been started. The cultivated area to be distributed is estimated at 300,000 hectares, which could be raised to 500,000 if sufficient irrigation facilities were available; the area contains 1,677 villages, ranging in population from 50 to 10,000 inhabitants.³⁷

During 1952, several laws, applicable to Iran as a whole, were adopted with a view towards aiding agri-

cultural development and increasing the farmer's share of the crop. Under a law issued on 6 October, 20 per cent of the produce of the land is to be deducted from the landlord's share; half of this is to be given to farmers who have contributed to the care of the crops; the other part is to be given to the development and co-operative fund of the village. Councils are to be set up at the village level, and then at regional levels and at the national level to promote agricultural development. Peasant proprietors are to pay 2 per cent of their total income in cash and kind from unirrigated crops, and 4 per cent on irrigated crops, into the development and co-operative fund. Of the total income accruing to the village fund, 70 per cent is to be spent locally and the remainder allocated to funds serving larger areas.

Another law, adopted on 11 October, ends the levying by the landlord of dues in the form of sheep, goats, fuel, etc., and of poll taxes. The landlord is also forbidden to "force the cultivator to work on his private affairs or to use the peasants' agricultural implements or possessions except with the consent of the peasant or in return for the payment of a just price and wage".³⁸

In Iraq, a start has been made during the past ten years in encouraging small holdings by distributing reclaimed agricultural land. An example of these schemes is the Dujaila project, under which 1,058 farmers were settled from 1946 to 1950 on plots of 100 dunums (25 hectares) allotted from government-owned irrigated land. Most of the farmers are members of co-operatives, and assistance is given to them regarding improved farming methods, seeds and control of pests and plant diseases. After ten years, successful farmers are to obtain full freehold rights over their holdings. Other projects have been started at Shaher Zoor (Sulaimaniya) where 9,000 hectares were distributed to 360 families; at Hawijah (Kirkuk) where 1,000 hectares were distributed to 210 families; and at Kinroin and Bazuiz Al-Latifiya. It was hoped that a total of about 2,500 families would be settled in the course of 1952.

The distribution of holdings on government-owned land (miri sirf) was regulated by a law passed in June 1951. Settlement areas in Iraq, ranging from 2,000 dunums in the mountains to 20,000 dunums in flow-irrigated areas and 80,000 dunums in dry farming zones, are to be established and developed under methods which were tested at the Dujaila project. The size of the units to be distributed is to be limited to 20 dunums (5 hectares) in mountainous land, 100 dunums (25 hectares) in flow-irrigated lands and 400 dunums (100 hectares) in dry farming lands. The planning of the settlement and the methods of cultivation are to be supervised by land settlement committees. The farmers are to become owners of their land without charge after ten years, but are not allowed to alienate it for a further period of ten years. Graduates of

³⁶ National Bank of Egypt, *Economic Bulletin*, No. 3, 1952.

³⁷ *Middle East Economist*, February 1952.

³⁸ Royal Institute of International Affairs, "The New Land Decrees in Persia", *The World Today* (London), December 1952.

agricultural schools are given an opportunity to apply for a settlement plot.

The agrarian structure of Israel differs in many important respects from that of other Middle East countries. There are no privately owned large holdings, and the condition of tenants and agricultural labourers does not present any special problem. The main difficulty has arisen from settling a population with urban traditions upon the land, and it is partly for this reason that much of the settlement has taken the form of co-operative or collective farms. Ninety-three new settlements were established in 1950, and sixty-seven more in 1951.

The new Syrian Constitution and Civil Code provided that measures should be taken to encourage ownership of small and medium-sized plots, to distribute government domains, to limit the maximum area to be owned by an individual and to raise the standard of living of the peasant.

Accordingly, Decree No. 96 of 3 February 1952³⁹ limited the individual use and ownership of government lands — officially estimated at 1.6 million hectares or nearly a quarter of the total cultivable land—to 150 hectares in El Jezira and to 50 hectares in other parts of Syria. The areas in excess of these amounts are to be redistributed to landless peasants or small landowners. The purchase price, while varying with the type of land, is to be low and is to be paid in instalments over a long term. The question of establishing co-operative societies which would assist the farmers in implementing the law was under study. The Agricultural Bank is to provide the new landholders with long-term low-interest loans for the purchase of tractors, seeds and plants. It is reported that the Government has begun distribution of government land in Al Ghab district.

Distribution of land to landless farmers began earlier

³⁹ This decree was subjected to several modifications in the course of 1952.

in Turkey, under the law of 1945, than in other parts of the region, and has been extended during recent years. It is reported that by the latter part of 1951, 200,000 hectares had been distributed to 42,000 families; in 1952, 163,200 hectares were distributed to 37,849 families, and breeding grounds totalling 104,446 hectares were given to stock breeders.⁴⁰ New title and registry laws were passed to accelerate survey and registration procedures; and 300,000 tracts of land were registered in eighteen months, compared with 400,000 tracts in the preceding twenty years. Substantial credits were granted by the Agricultural Bank, for founding new farms and making additions and repairs on existing farms. The bank granted loans to 1,468,000 borrowers, totalling £T 163.2 million in 1951, compared with £T 129.3 million in 1950.⁴¹ Farming co-operatives increased in number, in 1952 reaching 1,150, with 600,000 members in 11,000 villages. The loans by these co-operatives amounted to £T 66 million in 1951/52.

The entry of 250,000 Turkish immigrants from Bulgaria raised special problems of land settlement for the Turkish Government. In order to facilitate the settlement of this group in Turkey and bring about their integration into the Turkish economy, the Directorate-General for Settlement and Re-establishment, a special office responsible to the Minister of State, was established to deal with all economic questions relating to immigrants. The refugees, after reception and initial care, are to be distributed throughout the country. If they are peasants, they are to be provided with land free of charge, and are to receive tools, cattle and seeds. All are to be given loans in order to help them over the initial period of settlement.⁴²

⁴⁰ *Turkish Home Service*, 20 December 1952.

⁴¹ *Turkish Information Office, News from Turkey*, 25 September 1952.

⁴² United Nations High Commissioner's Advisory Committee on Refugees, "Report on the Status and Conditions in Turkey of Refugees from Bulgaria", document A/AC.36/12, 28 July 1952.

Table 9. Production of Principal Cereals, 1934-38, 1947-51, 1950 and 1951

(Thousands of metric tons)

<i>Cereal and country</i>	<i>1934-38</i>	<i>1947-51</i>	<i>1950</i>	<i>1951</i>
<i>Wheat:</i>				
Anglo-Egyptian Sudan.....	7	15	12	15
Cyprus.....	59	50 ^a	56	...
Egypt.....	1,184	1,104	1,018	1,209
Iran.....	1,869	1,904	2,263	1,800
Iraq.....	478	441	520	650
Israel/Palestine.....	87	21 ^b	27	14
Jordan.....	81	89	106	64
Lebanon.....	35	51	54	50
Syria.....	459	682	830	510 ^c
Turkey.....	3,412	4,020	3,872	5,600
TOTAL	7,671	8,376 ^d	8,758	9,970 ^e
<i>Barley:</i>				
Cyprus.....	44	44	44	38
Egypt.....	225	133	91	99
Iran.....	793	759	875	720
Iraq.....	575	714	800	900
Israel/Palestine.....	67	28 ^b	37	28
Jordan.....	37	35	41	30
Lebanon.....	29	23	23	26
Syria.....	290	272	322	155
Turkey.....	1,954	1,935	2,047	2,700
TOTAL	4,014	3,943	4,280	4,696
<i>Maize:</i>				
Anglo-Egyptian Sudan.....	12	14 ^f	15	11
Egypt.....	1,616	1,357	1,306	1,421
Iran.....	...	6 ^a	7	...
Iraq.....	...	20 ^a	22	...
Israel/Palestine.....	8	8 ^b	15	3
Lebanon.....	...	13	13	12
Syria.....	22	31 ^g	36	22
Turkey.....	557	685	628	848
TOTAL	2,240 ^e	2,134	2,042	2,350 ^e
<i>Rice (paddy):</i>				
Egypt.....	609	1,123	1,242	620
Iran.....	423	418	450	360
Iraq.....	205	244	255	180 ^e
Syria.....	3	21 ^a	24	...
Turkey.....	64	96	86	107
TOTAL	1,304	1,902	2,057	1,290 ^e
<i>Other cereals:</i>				
Rye: Turkey.....	336	436	443	600
Oats: Turkey.....	223	284	316	350
Millet: Egypt.....	426	533 ^a	426	...
Millet: Turkey.....	44	75 ^a	89	...
Sorghum: Anglo-Egyptian Sudan.....	342 ^h	633 ^a	867	...

Source: Food and Agriculture Organization of the United Nations.

^a Average 1947-50.

^b Average 1949-51.

^c Unofficial data.

^d The wheat output of Afghanistan, which is not included, was estimated at 1.7 million tons in 1948.

^e Partly estimated.

^f Average 1948-51.

^g Average 1947/48 to 1950/51.

^h Estimate for one year only.

Table 10. Output of Agricultural Products Other Than Cereals,
1934-38, 1947-51, 1950 and 1951

(Thousands of metric tons)

<i>Product and country</i>	<i>1934-38</i>	<i>1947-51</i>	<i>1950</i>	<i>1951</i>
<i>Olive oil:</i>				
Turkey.....	37	46	52	39
Lebanon.....	4	9	...	13
Syria.....	8	11	4	9
Other countries ^a	10	5 ^b	4 ^b	3 ^b
TOTAL	59	71 ^b	63 ^b	64 ^b
<i>Oil-seeds (in oil equivalent):^b</i>				
Egypt.....	128	117	120	126
Turkey.....	32	80	74	102
Other countries ^c	66	98	151	84
TOTAL	226	295	345	312
<i>Sugar (raw):</i>				
Egypt.....	146	199	195	210 ^a
Turkey.....	61	152	153	207
Iran.....	17	51	62	77
TOTAL	224	402	410	494
<i>Citrus fruits:</i>				
Israel/Palestine.....	403	338	348	347
Egypt.....	235	270	318	307
Lebanon.....	61	69	72	87
Other countries ^e	66	148	133	185
TOTAL	765	825	871	926
<i>Cotton (lint):</i>				
Egypt.....	400	364	382	363
Turkey.....	52	99	122	155
Anglo-Egyptian Sudan.....	53	66	100	62
Other countries ^f	42	48	71	82
TOTAL	547	577	675	662
<i>Tobacco:</i>				
Turkey.....	55	87	85	82
Iran.....	15	13	15	12 ^d
Other countries ^g	11	15	19 ^b	20 ^b
TOTAL	81	115	119 ^b	114 ^b

Source: Food and Agriculture Organization of the United Nations.

^a Cyprus, Iran, Israel/Palestine, Jordan.

^b Estimated.

^c Aden, Anglo-Egyptian Sudan, Cyprus, Iran, Iraq, Israel/Palestine, Jordan, Lebanon, Syria.

^d Unofficial data.

^e Cyprus, Iran, Syria, Turkey.

^f Iran, Iraq, Syria.

^g Cyprus, Iraq, Israel/Palestine, Jordan, Lebanon, Syria.

Table 11. Number of Livestock and Draught Animals, Pre-war and Post-war
(Thousands)

Country and year	Cattle	Buffalo	Sheep	Goats	Horses	Donkeys	Mules
<i>Afghanistan:</i>							
1939.....	...	...	...	...	...	...	...
1947/48.....	2,500	...	14,000	6,000	500	1,000	200
<i>Anglo-Egyptian Sudan:</i>							
1939.....	2,700	...	2,500	2,000	23	375	1
1947-51.....	3,780	...	5,575	4,300 ^a	20 ^a	500	...
1949/50.....	4,000	...	5,600	4,300	20	500	...
1950/51.....	4,000	...	5,600	4,300	20	500	...
<i>Cyprus:</i>							
1938.....	40 ^b	...	301 ^b	184 ^b	4	54	11
1947-51.....	35	...	291 ^c	167 ^c	5	53	9
1949/50.....	33	...	304 ^c	167 ^c	5	51	8
1950/51.....	33	...	287 ^c	154 ^c	5	51	8
<i>Egypt:</i>							
1939.....	1,230	966	1,897	1,088	47	1,069	29
1946/47.....	1,321	1,240	1,875	1,474	27	1,026	12
<i>Iran:</i>							
1937.....	2,920	...	14,011	7,119	305	1,180	52
1947-51.....	2,967 ^a	...	14,633 ^a	...	359	1,230 ^a	...
1948/49.....	2,500	10	13,000	6,750 ^d	365	1,200	...
1950/51.....	3,900	12	18,000	7,000 ^e	365	1,200	126
<i>Iraq:</i>							
1938.....	250	59	5,525 ^b	2,224 ^b	150	120	60
1948-51.....	...	...	7,688 ^a	...	187 ^a	...	...
1948/49.....	822	130	7,055 ^f	1,849	188	413	52
<i>Syria:</i>							
1939.....	357	6	3,100	1,275	66	139	27
1947-51.....	380	7	2,948	1,208	111	253	54
1949/50.....	368	7	2,750	1,196	98	267	54
1950/51.....	429	7	2,930	1,230	97	271	58
<i>Turkey:</i>							
1939.....	9,311 ^g	907	25,221	16,518	964	1,387	74
1947-51.....	10,125	934	24,144	17,921	1,126	1,691	103
1949/50.....	10,204	897	23,073	17,403	1,132	1,687	104
1950-51.....	10,216	953	23,083	18,465	1,140	1,633	109
TOTAL:^h							
Pre-war.....	16,808	...	52,555	30,408	1,559	4,324	254
Post-war ⁱ	20,721	...	58,830	34,472	1,842	5,094	365

Source: Food and Agriculture Organization of the United Nations. In this table, the four-year average 1947-51 refers to the agricultural years 1947/48-1948/49.

^a Three-year average.

^b 1939.

^c Over one year old on 1 March of year indicated.

^d 1947/48.

^e 1948/49.

^f 1949/50: 7,490,000; 1950/51: 8,520,000.

^g 1938.

^h Excluding Afghanistan.

ⁱ Most recent available.

Table 12. Net Imports and Exports of Cereals, 1934-38, 1947-51, 1950 and 1951
(Thousands of metric tons)

	<i>Bread grains^a</i>				<i>Coarse grains^b</i>				<i>Rice</i>			
	1934-38	1947-51	1950	1951	1934-38	1947-51	1950	1951	1934-38	1947-51	1950	1951
Aden.....	-9	-13 ^c	...	...	-1	1 ^c	...	...	-2	-2 ^c	...	...
Anglo-Egyptian Sudan.....	-24	-20	-26	-30	67	8	-22	22	-3	-4	-4	-2
Cyprus.....	-22	-51	-30	-77	5	—	9	-7	-2	-2	-2	-2
Egypt.....	-7	-504	-546	-1,082	-24	-151	-164	-41	98	271	178	314
Iran.....	23	-75	-114	-2	13	5	—	3	29	13	14	21
Iraq.....	53	13	66	70	233	316	479	462	1	3	6	9
Israel/Palestine.....	-72	-177 ^a	-173	-207	-19	-74	-79	-99	-16	-4	-3	-5
Jordan.....	23 ^e	-18	4	-96	5 ^e	3	12	-10	-3	-6	-8	-5
Lebanon and Syria.....	-2	-20	146	-152	37	42	129	20	-19	-14	-20	-22 ^f
Saudi Arabia.....	...	...	-72	-30	—	...	-8	-3	...	-22 ^f	-29	-40
Turkey.....	101	-45	-215	-67	135	60	9	127	—	—	—	—
TOTAL ^e	30	-950	-970	-1,690	450	210	350	470	75	235	130	270

Source: Food and Agriculture Organization of the United Nations. Minus sign (-) designates net imports.

^a Wheat and wheat flour and rye.

^b Barley, oats, maize, millet and sorghum.

^c Partly estimated.

^d Average of 1947 and 1949-51.

^e 1936-38.

^f Unofficial data.

Table 13. Net Imports and Exports of Sugar, 1934-38, 1947-51, 1950 and 1951

(Thousands of metric tons)

Country	1934-38	1947-51	1950	1951
Aden.....	-2.5	-5.1 ^a	...	...
Afghanistan.....	-7.4 ^b	-6.7 ^c	-2.3	...
Anglo-Egyptian Sudan.....	-27.0	-49.7	-69.2	-59.7
Cyprus.....	-3.4	-4.7	-5.3	-5.8
Egypt.....	-2.5	-36.1	-138.9	-0.8
Iran.....	-68.5	-120.1	-153.8	-114.3
Iraq.....	-37.2	-65.6	-87.1	-75.9
Israel/Palestine.....	-24.6	-26.0	-32.5	-24.5
Jordan.....	-3.4 ^d	-15.2	-14.6	-14.3
Lebanon and Syria.....	-31.9	-36.5	-42.2	-36.3
Turkey.....	-20.5	-10.4	—	—
TOTAL	-228.9	-375 ^e	-550 ^e	-340 ^e

Source: Food and Agriculture Organization of the United Nations. Minus sign (-) designates net imports.

^a 1947-49 average.

^b 1937-38; imports from India based on Indian statistics.

^c 1947-50 average.

^d 1936-38 average.

^e Partly estimated.

Table 14. Net Imports and Exports of Citrus Fruits, 1934-38, 1947-51, 1950 and 1951

(Thousands of metric tons)

Country	1934-38	1947-51	1950	1951
Aden.....	0.1	-0.3 ^a	...	...
Anglo-Egyptian Sudan.....	...	-0.7	-1.0	-0.4
Cyprus.....	10.9	17.6	20.6	26.1
Egypt.....	6.0	1.2	0.3	6.2
Iran.....	-0.1	0.1	—	—
Israel/Palestine.....	300.1	226.0	167.2	158.5
Syria and Lebanon.....	10.7	5.8	10.0	16.6
Turkey.....	-1.5	0.5	1.6	—
TOTAL	326	250	200	207

Source: Food and Agriculture Organization of the United Nations. Minus sign (-) designates net imports.

^a 1947-49 average.

Chapter 2

INDUSTRY

Industrial development has been uneven in the various countries of the Middle East. Generally speaking, aside from oil extraction and refining, the countries bordering on the Mediterranean, which have been in closer contact with Europe and more readily subject to European influence, have gone further than others in transforming their economic and social structure, thus making possible the growth of modern industry. Industrialization decreases as one proceeds in a southerly or easterly direction. The most industrialized countries of the region are Egypt, Israel and Turkey. In Iran, Lebanon and Syria and, to a lesser extent, in Afghanistan and Iraq, a beginning has been made in several

directions. The other countries of the region have so far remained almost untouched by modern industrialism. Taking the region as a whole, it appears that, while industry has expanded rapidly during recent years, it remains of secondary importance among the economic activities of the region and is hampered by a number of interrelated obstacles, which are only gradually being overcome.

The three sections of this chapter deal with the progress of industry in the Middle East; the structure and place of industry in the economies of different countries; and factors affecting its progress.

Progress of Industry

Industry appears to have made rather rapid progress in the Middle East, when account is taken of the fact that it started relatively late. The need for industrialization began to be realized in the Middle East during the First World War, when imports of manufactured goods declined sharply, and during the nineteen twenties steps were taken in some countries to encourage local industry. But at that time governments were handicapped by restrictions on changes in tariffs imposed by treaties. Thus, until 1930, an 8 per cent duty had to be paid on imports into Egypt; in Iran, the rate was 5 per cent; in Iraq, Lebanon, Palestine and Syria, the terms of the League of Nations mandates prohibiting discrimination against any Member State made it difficult to protect local industry, while the Treaty of Lausanne prohibited the raising of the tariff level in Turkey above that prevailing in 1916.

It was only in the early nineteen thirties that most of these countries recovered their freedom of action in that field: Iran in 1928, Turkey in 1929, Egypt in 1930 and Iraq in 1932. Moreover, about that time the mandatory authorities imposed protective tariffs on manufactured goods, in Lebanon and Syria after 1931, and in Palestine after 1927. These made it possible to establish and maintain local industries, while the sharp fall in agricultural prices during the depression of the nineteen thirties made it urgent for the countries of the Middle East to seek an alternative source of income. Other stimulating factors included the immigration of

Jewish capitalists, skilled workmen and managers to Palestine; the decline of an extensive and profitable entrepôt trade in Lebanon and Syria, following the break-up of the Ottoman Empire in 1919; and the desire throughout the region to achieve some measure of economic self-sufficiency.

Government encouragement of industry took the form, not only of protective duties and total or partial tax exemption of raw materials and machinery but also of alleviation of fiscal burdens and, in some countries, provision of credit facilities. Thus, in Turkey the Sümer Bank was founded in 1933 for the promotion of industry and the Eti Bank in 1935 for the mining industry; in Iran, the Agricultural and Industrial Bank, founded in 1933, extended some facilities to industry; likewise, in Egypt, Bank Misr, founded in 1920, not only financed a large group of private industries, but served as a channel for government assistance to industry. In Iran, Turkey and Afghanistan, government intervention went further, taking the form of the establishment and direct management of several large factories. In 1934, Turkey launched an industrial five-year plan, the first of its kind in the region.

At the outbreak of war in 1939, the only country with heavy industry was Turkey which, as a result of its five-year plan, was in possession of iron and steel works that were just beginning to operate. In Egypt, Iran, Lebanon, Palestine and Syria, as well as Turkey, several light industries had been established and were meeting an

increasing part of the needs of these countries in consumer goods.¹

The immediate impact of the war on industry in the Middle East was disruptive, since imports of certain raw materials and spare parts were cut off or reduced. This factor was, however, more than compensated by other forces which began to be felt after 1940. In the first place, the reduction in imports of manufactured goods increased the demand for local production, thus enabling local industries to expand their output by working at full capacity. Second, and more important, Allied military expenditures in the region began to assume large proportions. In Egypt, for example, in 1942 and 1943, Allied military expenditures represented an addition of some 25 per cent to the national income; in Palestine over 30 per cent; in Lebanon a still higher ratio. Very little of this expenditure went to the purchase of agricultural products and, while a relatively large share was spent on services and the direct employment of workers in military workshops and camps,² a substantial amount was for orders for manufactured goods. In Turkey, competitive buying by the Axis and Allied Powers had a similar inflationary effect. In April 1941, the Middle East Supply Centre was established to co-ordinate economic activities so as to utilize the resources of the region to the fullest possible extent. In addition to stimulating local industry indirectly, by limiting imports, the Middle East Supply Centre gave direct help in the form of technical advice and assistance in procuring spare parts and raw materials. On the whole, the war-time expansion in production was accomplished by utilizing existing plants more intensively, since war-time shortages of production and shipping greatly restricted the importation of new equipment.

The immediate post-war years were a prosperous period for industry in the Middle East. Although some of the smaller industries and new industries, which could flourish only in exceptional war-time circumstances, were wiped out by foreign competition, imports of foreign goods were limited at first, and pent-up demand was sufficiently high to enable most industries to maintain their output. Moreover, in some capacity was expanded, production was increased and several new industries were established.

It is extremely difficult to estimate accurately the increase in industrial output in the Middle East compared with the pre-war level. Over-all indices of industrial

¹ The following figures show the proportion of domestic demand that was met in 1939 by the most developed branches of Egyptian industry (in percentage of local demand): cotton cloth 40, caustic soda 50, vegetable oils 60, beer 65, matches 80, furniture 90, soap 90, cement 90, boots and shoes 90, lamp glass 99, cereal milling 99, common salt 100, cigarettes 100, alcohol 100 and sugar 100 (United Kingdom, Department of Overseas Trade, *Egypt: Review of Commercial Conditions* (London, 1945).

² At the beginning of 1945, the number of civilians employed by United Kingdom forces in Egypt, Iran, Iraq, Lebanon, Palestine and Syria totalled over 300,000, including 90,000 skilled and 20,000 semi-skilled workers.

production have not been officially computed, and available estimates of national income are not comparable nor sufficiently detailed. Production by craftsmen, which in some industries accounts for a considerable proportion of total output, cannot be accurately computed. All available data, however, point towards a marked development of industry as compared with pre-war; it should, however, be remembered that this advance took place from very low levels. The only country for which an official production index exists is Turkey. This index, which covers both mining and manufacturing, reached 152 in 1947, 156 in 1948, 177 in 1949, 179 in 1950 and 185 in 1951 (1938=100).³ While a similar index has not been published for Israel, the index of man-days worked in the various industries reached 166 in 1949 and 187 in both 1950 and 1951 (1939=100).⁴ A partial index of industrial production in Egypt showed a rise to 147 in 1946 and 151 in 1947 (1938=100).⁵

In the region as a whole, all the leading industries registered an appreciable increase in output, as shown in table 15. As regards the smaller industries, many of those existing in 1939 expanded several-fold during the war years; several new ones were created, such as diamond cutting and polishing, the dehydration of vegetables and some chemical and mechanical industries.

Table 15. Indices of Expansion in Leading Industries in Major Producing Countries, 1946, 1948 and 1951

(1938=100)

Industry and country	1946	1948	1951
Crude steel (Egypt, Turkey) ^a . . .	210	270	450
Electricity	200	250	360
Glass (Egypt, Syria, Turkey)	300	...	250
Cement	140	150	240
Paper (Egypt, Turkey)	150	...	220
Matches	150	...	200
Cigarettes	150	160	100
Refined sugar	100	120	178
Coal (Turkey)	150	155	180
Cotton yarn	150	180	170

Source: Estimated by United Nations Department of Economic Affairs. Estimates include all major producers, except as specified.

^a 1940 = 100.

The revival of foreign competition since 1945 has wiped out some of these and reduced the output of others, but their level remains above that of the pre-war period. To a certain extent, this increase in the region's industrial output is reflected in its foreign trade. Thus, imports of textiles have shown a general tendency to de-

³ Ministry of Commerce, *Konjonktur* (Ankara), April-June 1952.

⁴ Statistical Office of the United Nations, *Monthly Bulletin of Statistics*.

⁵ Ismail Rafaat in *Revue économique et financière*, special number (Cairo, 1949).

crease, as compared with pre-war years, while imports of machinery have risen considerably.⁶

During the two years under review, industry has maintained its upward trend. Output in 1951 was greater than during previous years and available figures for 1952 indicate a further rise. Generally speaking, this expansion may be attributed to the increase in purchasing power created by larger crops and higher export prices; in Israel the widening of the market caused by large-scale immigration has strongly stimulated industrial growth. Industrial investment is at a high rate in Israel and Turkey, both of which have benefited from considerable foreign financial assistance, but in other countries it would seem to have declined from the level attained during the immediate post-war years.

On the whole, mining has expanded more rapidly than manufacturing: a considerable rise took place in the output of chromium and copper in Turkey, and manganese and phosphates in Egypt; there was also a small rise in the extraction of iron, lignite and coal in Turkey. The rapid increase in the production of electricity was maintained, and industrial consumption is accounting for a rising proportion of the total. The demand for cement has continued to be keen, owing to the high level of building and construction, and output rose in all producing countries in 1951 and in most

countries continued to increase during 1952 as well.

The two main industries of the region, textiles and food processing, showed a slower rate of progress. Output of cotton yarn in 1951 was slightly below the amount produced in 1950 and 1949, but output of cotton fabrics was higher. Production of other textiles expanded more rapidly, especially that of rayon fabrics; rayon yarn and staple are now being produced on a large scale in Egypt. As regards food processing, conditions varied from branch to branch. Output of refined sugar has increased but industries producing certain other food products, particularly beverages, which expanded very rapidly during the war years, are still struggling to readjust themselves to the decline in demand. The tobacco industry has continued to grow steadily.

The metallurgical industry is developing relatively rapidly; at present, both Egypt and Israel, as well as Turkey, produce small quantities of steel. The chemical industry is also advancing, especially in Egypt and Israel; new products, such as nitrate fertilizers, are now being manufactured, while the output of some established industries has appreciably increased. In engineering, the most noteworthy developments have been the establishment of motor-car assembly plants in Israel and Egypt.

Structure and Place of Industry in the Economies of Different Countries

In spite of the expansion registered during the past fifteen years, industry occupies a minor place in the economy of even the most advanced countries of the region, except for some of the Persian Gulf countries in which petroleum is an important factor. In Egypt and Turkey, for example, which are the region's leading industrial producers, fewer than 10 per cent of the working population are in industry and only 10 to 15 per cent of the national income is contributed by industry. These figures include craftsmen working at home and self-employed, who account for an appreciable part of the total. Only in Israel does industry play a more important part in the national economy.

Many industries have remained close to the handicraft stage and have continued to use methods which are obsolete in more developed countries. The traditional crafts still account for a sizable part of total output; they completely dominate certain fields, such as rug-making, and play an important part in pottery-making, weaving, shoe-making, leather work and some other in-

dustries. In certain cases a partial adaptation of the craft to modern conditions has taken place through use of power-driven machinery to supplement hand work. In consequence, industry in the Middle East presents a wide variety of methods, ranging from archaic crafts to the use of modern equipment. But, with few exceptions, even the more modern enterprises are not capitalized to an extent at all comparable with similar industries in western countries, and with the Middle East oil industry.

The advance in industrial output has not been equal in the different parts of the region. In general, it has been proportionate to the amount of equipment already in the country at the outbreak of the war. Moreover, there are wide gaps in the industrial structure of even the most advanced countries; in all of these light consumer goods account for the bulk of industrial production. Wide differences exist, therefore, among the various countries of the region as regards the structure and place of industry in the economy. The following paragraphs outline the place and structure of industry in the three leading countries, Turkey, Egypt and Israel, and three less industrialized countries, Iran, Lebanon and Syria. Mention is also made of the principal industries in Afghanistan, Iraq and Jordan.

⁶ For detailed information on the various industries, see appendix A, "Survey of Major Industries", which deals with mining and quarrying, electric power, textiles, processing of food, beverages and tobacco, chemical, metallurgical and other industries; for figures on imports of various commodities see table 48 on quantity and relative value of major imports of certain countries.

TURKEY

Turkey has the most diversified industry of any country in the Middle East, and is the only one with fairly important heavy industry. Industrialization has proceeded as part of a national policy designed to make the country less dependent on foreign capital and more self-sufficient with respect to manufactured goods; the policy involves government direction, by means of government-owned organizations, within the framework of successive development plans. The first of these was carried out between 1934 and 1939; the second, drawn up in 1938, was delayed by war-time conditions. A third plan was drawn up in 1945, and a development plan for the period 1948 to 1955 was put into effect in 1948; both were greatly modified in the course of execution.

The carrying out of these plans was entrusted to the Sümer Bank and the Eti Bank; these banks are responsible for the promotion of manufacturing and of mining, respectively. The required capital has been provided from budget revenues, external loans, advances from

government institutions, and from reinvested profits.

At the beginning of its operation, Sümer Bank took over factories valued at £T 10.7 million. Between 1933 and 1949, inclusive, it retained £T 45.6 million out of its earnings to finance expansion and received £T 46.9 million from the budget. Moreover, the proceeds of a loan from the Union of Soviet Socialist Republics, amounting to £T 6.3 million, were turned over to it. At the end of 1949, the paid-in capital of the bank was £T 109.5 million, reserves £T 139.2 million, depreciation accounts amounted to £T 84.2 million, bills discounted by the bank at the Central Bank £T 107.1 million and government deposits and other liabilities £T 52.8 million, giving a total of £T 492.8 million of liabilities.⁷

As shown in table 16, during the war and immediate post-war years, Sümer Bank pursued a policy of financing development in relatively unprofitable industries, such as cement, cellulose, and iron and steel, from the profits made by other industries, notably textiles, and by the stores selling domestic products.

Table 16. Turkey: Investments and Profits of Sümer Bank Enterprises, 1940, 1943 and 1945

(Thousands of Turkish pounds)

Year and item	Spinning and textile mills	Iron and steel plants	Cellulose mills	Leather and footwear factories	Sales establishments*	Cement factories	Total
1940:							
Capital invested.....	37,248	35,424	4,492	3,500	300	...	80,964
Profit.....	3,404	9	401	594	400	...	4,808
Profit rate (per cent).....	9.1	—	8.9	17.0	133.3	...	5.9
1943:							
Capital invested.....	37,000	36,000	6,500	3,500	3,000	7,000	93,000
Profit.....	10,172	2,030	1,004	400	9,936	...	23,542
Profit rate (per cent).....	27.5	5.6	15.5	11.4	331.2	...	25.3
1945:							
Capital invested.....	37,000	42,000	20,000	5,000	5,000	8,000	117,000
Profit.....	17,378	1,375	495	334	20,853	143	40,578
Profit rate (per cent).....	47.0	3.3	2.5	6.7	417.1	1.8	34.7

Source: United States Department of State, *Handbook of Economic Statistics*, No. 4357, 12 February 1948, page 63.

* Handling domestic products.

Between 1935, when the Eti Bank was founded, and the end of 1949, it took over mines, formerly privately owned, valued at £T 9.1 million. Financially less successful than the Sümer Bank, it was able to retain during this period only £T 13.8 million out of its earnings and hence received proportionately more aid from the budget, a total of £T 45.8 million. At the end of 1949, its paid-in capital amounted to £T 68.7 million, reserves £T 41.4 million, depreciation accounts £T 55.7 million, discounts at the Central Bank £T 69.6 million and deposits and other current liabilities £T 76.2 million, a total of £T 311.6 million of liabilities. In recent

⁷ International Bank for Reconstruction and Development, *Economy of Turkey, an Analysis and Recommendations for a Development Program* (Washington, D.C., 1951), page 154.

years, much of the foreign aid received under the European Recovery Program and other measures has been used for expansion of the Eti Bank.⁸

During the past three or four years, foreign private capital has not participated directly in any new enterprises except to a limited extent, and most of the foreign holdings in mining have been bought up. Turkish private capital has shown little interest in local industry, and the relative importance of the government-owned sector of industry has rapidly increased. In 1946 the percentage of total production in different Turkish industries then under government control was: cotton textiles 60, woollen textiles 40, leather 30, lignite 70,

⁸ *Ibid.*, page 155.

Table 17. Turkey: Employment and Output in Industry and Agriculture, 1950

Item	Industry ^a	Agriculture
Persons employed (thousands).....	674	5,724
As percentage of employed population ^b	8	64
As percentage of income-earning population.....	9	76
Net output (millions of Turkish pounds)	1,131	4,520
As percentage of national income....	14	55
Average annual income per capita (Turkish pounds).....	1,678	863

Source: Occupational tables in 1945 Turkish census of population; Central Statistical Office, *National Income of Turkey* (Ankara), March 1952.

^a Including mining and construction.

^b Including students and a few others not earning income.

chromium 35, cement 25, caustic soda 100, sugar 100, cigarettes 100, paper 100, rayon 100, copper 100, coal 100, iron and steel 100, and superphosphates 100.⁹ Following the 1950 elections, however, the Government announced its intention of encouraging private industry and has taken steps to turn over certain enterprises to private ownership.

Table 17 shows the place which industry, including manufacturing, mining and construction, occupies in the Turkish economy, compared with agriculture. It may be noted that industry accounts for 8 per cent of the working population, against 64 per cent in agri-

culture, and contributes 14 per cent of the national income, against 55 per cent. Income per capita in industry is about twice as high as in agriculture.

The 1950 industrial census provided data on the structure of industry. Of the 98,828 establishments listed (table 18), 2,202 had an installed capacity of over 10 horsepower; of the latter, 696 were in food industries, 364 in textiles, 198 in chemicals and 194 in lumber and wood products. Of the 354,000 paid employees covered by the census, 57,600 were in state-owned plants, 71,000 in large privately owned establishments¹⁰ and 125,800 in small establishments; owners of small establishments, together with members of their families, numbered a further 99,600. State-owned enterprises accounted for 28 per cent of the value added by all industry, large factories for 44 per cent and small factories for 28 per cent. The proportions contributed by the three groups varied considerably as between different branches. Thus, state enterprises accounted for 82 per cent of primary metal products, 53 per cent of beverages, 51 per cent of machinery and appliances and 50 per cent of textiles. Large private firms accounted for 86 per cent of rubber products, 83 per cent of furniture, 74 per cent of stone, glass and clay products, 70 per cent

⁹ France, Ministry of Economic Affairs, *L'Industrialisation des pays du Moyen-Orient* (Paris); Turkey: Central Statistical Office, *Istatistik Yilligi* (Ankara); Ministry of Commerce, *Konjonktur* (Ankara); United Kingdom Board of Trade, *Overseas Economic Surveys: Turkey* (London, September 1947).

¹⁰ Defined as those with a capacity of over 10 horsepower.

Table 18. Turkey: Employment, Value of Equipment and Production in Major Industries,^a 1950

Product or industry	Number of establishments	Persons employed	Equipment value (millions of Turkish pounds)	Gross production value ^b (millions of Turkish pounds)	Total annual payroll	Value added
Textile mill products.....	3,364	58,706	249.3	539.1	67.6	188.1
Chemical products.....	1,028	17,574	127.0	144.5	26.6	51.7
Primary metal products.....	638	6,818	91.8	57.1	12.6	25.0
Food products.....	10,756	48,063	78.7	766.8	38.2	188.6
Pulp and paper products.....	25	1,321	68.1	28.0	6.0	9.8
Stone, clay, glass products.....	1,635	11,586	40.6	53.7	10.9	34.0
Tobacco products.....	88	25,894	32.7	246.2	19.5	146.9
Fabricated metal products.....	12,385	29,174	34.7	76.7	16.1	35.7
Machinery and appliances.....	2,634	6,936	24.7	25.4	2.9	18.3
Apparel.....	32,056	59,549	22.0	124.8	13.0	66.5
Printing and allied products.....	703	3,564	17.0	20.5	4.3	12.2
Beverages.....	457	3,036	16.9	19.4	3.3	4.6
Lumber and wood products.....	5,824	14,160	13.0	52.7	5.7	28.3
Rubber products.....	267	4,851	8.8	31.1	5.3	16.5
Leather products.....	4,215	7,766	7.5	33.8	2.4	8.2
Furniture.....	1,108	3,823	6.3	20.1	2.5	12.5
Transport equipment.....	2,492	6,435	6.5	13.9	1.7	10.6
Miscellaneous.....	1,387	2,888	5.4	10.4	1.1	5.8
TOTAL	81,062	312,144	851.0	2,264.2	239.7	863.3
Industries in localities with population of 501 to 2000 ^c	17,766	41,850	59.3	54.4	9.1	35.8
GRAND TOTAL	98,828	353,994	910.3	2,318.6	248.8	899.1

Source: Central Statistical Office, *1950 Census of Business and Manufacturing* (Ankara, March 1952).

^a Excluding gas and electricity; mining; construction; repair activities of local administrations; cottage industries; installations of Ministry of Defence; also industries in localities with

population totalling 500 persons or less.

^b Including indirect taxes, except on sales of products of state monopolies.

^c Obtained by sampling.

of tobacco products, 57 per cent of printing, 52 per cent of chemicals and 51 per cent of food products, while small firms accounted for 98 per cent of transport equipment, 91 per cent of apparel, 89 per cent of leather products and 80 per cent of lumber and wood products.

The population census of 1945 gave the number of persons employed in construction and building as 62,000; in mining and quarrying, 34,000; in supplying electricity, gas and water, 4,000. None of these groups was covered by the 1950 industrial census. The difference between the total number of industrial workers listed in the 1945 census and the 1950 one, 674,000 and 354,000 respectively, in so far as it is not due to the above-mentioned omissions, is to be accounted for by the large number of craftsmen and cottage workers, neither of which groups was covered by the 1950 census. Thus, the 1945 census put the number employed in the textile industry as 104,000; in clothing, 52,000; in shoe manufacturing and repair, 70,000; in hides, leather and fur, 19,000; and in wood, rush and cane products, 69,000. In each of these branches the above-mentioned groups probably accounted for one-half, or more, of the total number employed.

The relative importance of different branches of industry is shown in table 18, in which industries are listed according to the value of the capital invested in each. In terms of employment, the making of apparel heads the list, followed by textiles and food products while, if the value of the net product is taken as a criterion, food processing, the textile industry and the tobacco industry are seen to be the leading industries, accounting for nearly 60 per cent of the total. In recent years, mining has developed more rapidly than manufacturing; in manufacturing, expansion has been greatest in textiles, paper and cellulose products, and iron and steel.

EGYPT

During the past thirty years, Egypt has sought to promote its industry in order to absorb part of the increase in population, which provides man-power in excess of the requirements for agriculture, and in order to provide a supplementary source of national income.

The older industries, such as petroleum extraction, sugar refining, cotton spinning and weaving, have expanded considerably, and a wide range of new industries has been established, principally in the fields of textiles, chemicals and food processing. The development of these has been carried out by private enterprise, with some government aid; the only noteworthy government-owned establishments are the railway workshops and an oil refinery. A leading part in this process of expansion was played by the group of industries established by Bank Misr, founded in 1920, which has set up cotton textile industries, woollen textile, rayon, shipping, aviation, printing and other industries.

The place which industry—including manufacturing, mining and building—occupies in Egypt is shown in table 19, which compares industry with agriculture, the main sector of the country's economy. In 1951 industry absorbed 6 per cent of the employed population, as against 53 per cent in agriculture, and accounted for 10 per cent of the national income, against 42 per cent in agriculture. Average per capita income in industry was twice as high as in agriculture.

Table 19. Egypt: Employment and Output in Industry and Agriculture, 1951

Item	Industry ^a	Agriculture
Persons employed (thousands) ^b	835	7,555
As percentage of employed population ^c	6	53
Net output (millions of Egyptian pounds)	82	349
As percentage of national income	10	42
Average annual income per capita (Egyptian pounds)	98	46

Source: *Census of Population* (Cairo, 1947); Statistical Office of the United Nations.

^a Including mining and construction.

^b Figures refer to 1947.

^c Including students and a few others not earning income.

Because of the difference in the coverage of the Egyptian industrial censuses taken in 1937, 1945 and 1948, it is difficult to determine the exact extent of the growth of industry. The 1937 census listed 92,000 establishments with 274,000 employees; in the 1945 census, the figures were 129,000 and 458,000, respectively, and in

Table 20. Egypt: Distribution of Industrial Establishments by Average Number of Employees, 1944 and 1947

Average number of employees	Number of establishments		Total number employed	
	1944	1947	1944	1947
Under 10	18,874	23,362	79,000	...
10 to 49	2,778	2,798	58,000	...
50 to 499	523	519	77,000	...
500 and over	45	63	102,000	...
TOTAL	22,220	26,742	316,000	367,000

Source: National Bank of Egypt, *Economic Bulletin* (Cairo), October 1948; Gamal el Din Said, *Iqtisadiat Misr* (Cairo, 1951).

the 1948 census 134,000 and 578,000, respectively. The capital of industrial companies rose from £E16.3 million in 1938 to £E28.5 million in 1945 and £E56.8 million in 1950.¹¹ An unofficial index of industrial production¹² showed an increase of 26.7 per cent between 1944 and 1947, and there has been a substantial further rise since that date.

The 1945 census did not include 107,000 shops engaged in maintenance and repair work, and the 1948 census similarly excluded 106,000. The approximate structure of employment in the establishments engaged in production is shown in table 20. The predominance of very large and very small units, and the relative lack of medium-size enterprises, is noticeable.

Table 21 shows the relative importance of the main branches of Egyptian industry, listed according to the value of capital invested in them in 1947. The very low position of mining is partly due to the fact that the capital of foreign companies which extract petroleum has not been included in the total. In terms of employment, textiles and food processing industries were by far the most important branches, accounting for over 60 per cent of the total. The same two industries also accounted for over half the total net output of Egyptian industry. In recent years, progress has been greatest in the textile, electrical, metal, engineering and chemical industries.

Table 21. Egypt: Employment, Capital Invested and Production in Major Industries, 1947

Product or industry	Number of establishments	Persons employed	Capital invested (thousands of Egyptian pounds)	Output	
				Gross	Net
Food and beverages.....	6,260	88,157	14,846	66,682	14,342
Textiles.....	12,399	124,584	12,644	36,088	17,936
Cotton ginning and pressing.....	84	21,358	7,800	16,289	2,988
Chemical products.....	310	16,646	7,059	11,068	2,549
Metal products.....	1,512	17,895	5,698	4,865	2,148
Tobacco products.....	61	9,822	4,826	29,717	5,622
Water, electricity, gas.....	41	5,318	4,405	5,484	4,090
Other mineral products.....	963	15,636	3,364	4,137	1,830
Paper and printing.....	543	11,321	2,106	4,077	1,912
Petroleum products.....	2	3,611	1,763	3,830	1,045
Clothing and shoes.....	1,998	8,746	1,405	3,162	1,143
Leather and rubber products.....	415	4,673	1,083	2,938	803
Mining and quarrying.....	31	6,362	918*	4,656	4,418
Machinery and transport equipment....	55	2,541	713	418	273
Wood and cork products.....	1,713	8,638	693	2,035	973
Miscellaneous.....	355	2,087	585	2,054	396
TOTAL	26,742	347,397	69,908*	197,500	62,478

Source: *Annuaire statistique de poche, 1949-50* (Cairo, 1951); Gamal el Din Said, *Iqtisadiat Misr*.

* Excluding petroleum extraction.

ISRAEL

Israel is the most industrialized country in the region, the only one in which the contribution of industry to the national income is greater than that of agriculture. In 1950 industry accounted for 23 per cent of the employed population, against 21 per cent in agriculture and 6 per cent in construction, and contributed 24 per cent of the national income, against 10 per cent and 12 per cent respectively. Per capita income in industry was more than double that in agriculture (table 22) but only a little over half as high as in construction.

The country is not rich in natural resources, but the Dead Sea contains very large deposits of potash, bromides and magnesium chloride, while small quantities

¹¹National Bank of Egypt, *Economic Bulletin* (Cairo), No. 1, October 1948, and No. 4, 1951.

¹² Computed by S. Toulan in an unpublished thesis.

Table 22. Israel: Employment and Income in Manufacturing, Construction and Agriculture, 1950

Item	Industry	Building and construction	Agriculture
Number employed.....	107,000	27,000	97,000
As percentage of employed population...	23	6	21
Net income (millions of Israeli pounds).....	82	40	32
As percentage of national income.....	24	12	10
Average annual income per capita (Israeli pounds) .	768	1,482	330

Source: A. L. Gaathon, *The Israeli Economy in 1950*, Special Study No. 1 (Central Statistical Office, Jerusalem) (in Hebrew).

of other minerals have been recently discovered in the Negeb. In the nineteen twenties and thirties, the main

impetus to industrial growth came from the influx of skilled immigrants, many of whom brought capital with them. More recently, the large increase in population has provided a rapidly expanding domestic market, while investment in industry from both public and private sources has risen considerably, amounting to £1 57.7 million between 1949 and 1951 inclusive. During that period, the number of industrial enterprises rose from 5,400 to 8,200, employment from 80,000 to 119,000, gross output from £1133 million to £1274 million and net output from £156 million to £1124 million. Over nine-tenths of industrial enterprises, employing 80 per cent of all workers in industry, are privately owned,¹³ the balance being operated by producers' co-operatives affiliated with the General Federation of Labour.

Table 23 shows the relative importance, in terms of

net output, of the main branches of industry in Israel. Metals and machinery head the list, followed by food processing and building materials. Between them, these three industries account for 45 per cent of the total. The relatively minor part played by the textile industry presents a contrast to its position in other Middle Eastern countries. Since the establishment of the State, expansion has been greatest in metals and machinery, building materials and food processing. The diamond industry, formerly one of the leading branches, has decreased in relative importance, as has also the chemical industry, owing to the stopping of potash extraction from the Dead Sea. However, further progress is taking place in most branches of industry and new enterprises have been started, such as the assembling of motor cars and radios, and the manufacture of electric bulbs and refrigerators.

Table 23. Israel: Gross and Net Output and Installed Power in Major Industries, 1950 and 1951

Product or industry	Installed electric motors, 1950/51 (horsepower)	Gross output		Net output	
		1950	1951 (millions of Israeli pounds)	1950 (pounds)	1951
Metals, machinery and electrical equipment.....	34,948	31.3	46.0	16.2	25.4
Food processing.....	36,771	54.0	63.8	11.9	15.9
Building materials.....	23,684	13.5	30.4	8.5	15.6
Clothing.....	4,213	18.0	23.0	7.9	11.5
Leather products and shoes.....		5.2	15.0	2.0	6.6
Wood working.....	17,946	17.6	23.0	9.2	11.5
Textiles.....	11,987	20.0	19.9	7.6	9.0
Paper and printing.....	4,276	6.4	12.9	3.9	8.2
Chemicals.....	34,065	8.4	14.6	3.0	5.3
Production of electricity.....	...	5.7	7.4	3.3	4.4
Diamond cutting and polishing.....	1,098	4.0	5.0	0.8	1.4
Glass.....	2,870	1.2	2.2	1.3	1.5
Miscellaneous.....		8.0	11.0	6.3	8.1
TOTAL	171,858 ^a	193.3	274.2	81.9	124.4

Source: Estimates of gross and net output obtained from Dr. A. L. Gaathon, Office of the Prime Minister, Government of Israel, Tel Aviv.

^a Excludes electric stations.

IRAN

Iranian industry may be divided into three sectors: the petroleum industry, other government-owned industries and private industries.

Until 1951, when nationalized, oil extraction and refining, by far the most important industry in Iran, was carried on entirely by a concessionary company, the Anglo-Iranian Oil Company. Other government enterprises accounted for about one-third of the employment and installed power in the remaining sectors, excluding handicrafts; these enterprises produced all the country's output of sugar, tobacco and cement, and a considerable part of its minerals, textiles and chemicals.

¹³ Jewish Agency for Palestine, *Israel Economic Horizons* (New York), November 1951.

Most of the factories were set up in the nineteen thirties, as part of government policy in industrializing the country's economy. Private enterprise played a leading part in textiles, milling, chemicals, and public utilities, and some branches, such as rug-weaving, are still in the handicraft stage.

If oil extraction is excluded, industry still occupies a minor place in the economy of Iran. The total number of persons employed in modern enterprises in 1950 was about 120,000; this figure included 52,000 directly engaged in oil extraction and refining, and over 15,000 employed by contractors engaged in construction activities on behalf of the oil company; about 20,000 in government factories; about 30,000 in private industry; and 5,000 in mining. In addition, 130,000 persons were employed in carpet making and 20,000 in hand

Table 24. Iran: Number of Factories, Employment, Capital Invested and Installed Power in Industries, 1950

Product or industry	Number of factories or branches	Number of employees	Capital (millions of rials)	Installed power (horsepower)
<i>State-owned enterprises:</i>				
Textiles.....	5	7,928	718	9,470
Sugar refining.....	9	4,912	609	7,194
Tobacco products.....	1	1,342	509	3,460
Chemicals.....	9	1,700	163	3,135
Cement.....	1	1,180	110	3,460
Sawmills.....	1	241	60	82
Canning.....	1	159	32	280
Tea packing.....	9	83	19	235
Total, state-owned ^a	36	17,545	2,220	27,316
<i>Privately owned enterprises:</i>				
Cotton textiles.....	24	12,755	442	10,094
Woollen textiles.....	8	5,523	246	9,685
Soap and vegetable oils.....	9	427	103	595
Cotton ginning.....	30	728	92	2,404
Alcoholic beverages.....	25	600	75	134
Rice polishing.....	18	287	72	980
Leather products.....	7	480	62	526
Electricity.....	...	620	60	18,500
Hosiery.....	23	644	35	400
Flour milling.....	18	178	28	1,513
Glass.....	5	288	23	574
Matches.....	26	4,474	21	125
Wool carding.....	5	76	4	152
Miscellaneous.....	5	184	6	900
Total, privately owned....	203 ^b	27,264	1,269	46,582
Total, state and private....	239 ^{a b}	44,809	3,489	73,898
Total, including corrections for omissions ^c.....	...	53,770	4,360	88,675
Anglo-Iranian Oil Company.....	...	51,702	...	155,000
Caspian fisheries.....	1	2,484	...	1,155
Mines.....	...	4,500 ^d	...	...
GRAND TOTAL.....	...	112,456	...	244,831

Source: Ministry of Labour, *Statistics of Production of Major Industries*, 1328 (1949/50) (Tehran).

^a Excludes ammunition factories.

^b Excludes electric generating stations.

^c Corrections amounted to 20 per cent of the number of employees, 25 per cent of the capital invested, and 20 per cent of the installed power.

^d Approximate.

loom weaving.¹⁴ Since that date, employment has sharply declined in the oil industry but has risen slightly in other sectors of industry.

Table 24 lists, according to the amount of capital invested, the main branches of government industry and privately owned industries. Data on the latter are not complete and some of the figures on particular industries seem to be only partial. Textiles are by far the most important branch, accounting for over 30 per cent of total capital, followed by sugar and tobacco, which between them account for a further 25 per cent.

¹⁴ John Murray, "Iran Today" (Tehran, October 1950), page 145.

¹⁵ The total number of industrial workmen and craftsmen in 1951 was estimated as 45,000 by Joseph Donato in "Lebanon and its Labour Legislation", *International Labour Review*, January 1952.

¹⁶ Albert Y. Badre, "National Income of Lebanon", Monograph No. 1, Beirut, 1951.

LEBANON

Relative to its size, Lebanon is one of the most industrialized countries in the area; it is probable that nearly 50,000 persons are employed in that sector of the economy, excluding construction, more than one-tenth of the total number of income earners. Of these 50,000, well over half are factory workers.¹⁵

The net income arising from agriculture was estimated at £L 168.5 million in 1948 and £L 158.8 million in 1949.¹⁶ Assuming the number of persons employed in agriculture to be about 250,000,¹⁷ per capita income

¹⁷ Donato, *op. cit.*, puts the number of landowners at 99,000 and that of agricultural labourers at 160,000; Badre, *op. cit.*, quotes "the estimates of the Ministry of Agriculture that about fifty per cent of the population depend on land"; C. Issawi and C. Dabezies in "Population Movements and Population Pressure in Jordan, Lebanon and Syria", *Milbank Memorial Fund Quarterly* (New York), October 1951, estimate the farming population at 600,000 or 120,000 families.

in agriculture would be about £L 650. Net income arising from industry has been estimated at £L 60 million to £L 70 million,¹⁸ giving a per capita income of £L 1,300 to £L 1,400.

The structure of Lebanese industry is indicated by the industrial census of 1950,¹⁹ which covered only manufacturing, omitting mining and quarrying, fuel and power (including petroleum refining), and construction, as well as handicrafts. A total of 1,144 enterprises were listed, with a combined capital of £L 147 million and a total of 21,854 employees, of whom 5,046 were women and 1,945 children. Of the firms listed,

25 had a capital of £L 1,000,000 or over, 29 of £L 500,000 to 1,000,000, and 45 of £L 250,000 to 500,000, while at the other end of the scale 381 had a capital of £L 10,000 to 25,000 and 249 of £L 5,000 to 10,000.

Table 25 shows the relative importance of the different branches in 1950, listed according to the amount of capital invested in each. Three main groups, building materials, textiles, and food and beverages, accounted for over 60 per cent of the total capital invested and for almost 60 per cent of employment. In recent years, progress has been most rapid in the electricity, cement and textile industries.

Table 25. Lebanon: Employment and Capital Invested in Major Industries, 1950

Product or industry	Number of establishments	Number of employees	Average number of employees per firm	Capital invested (millions of Lebanese pounds)	Capital investment per employee (thousands of Lebanese pounds)
Mineral products ^a	97	2,697	27.8	35.4	13.1
Textiles.....	60	5,040	84.0	32.6	6.5
Food processing ^b	401	5,334	13.3	24.8	4.6
Beverages ^c	122	1,290	10.6	10.7	8.3
Printing.....	100	855	8.6	8.6	10.1
Chemical ^d	55	1,089	19.8	5.9	5.4
Furniture making.....	95	1,211	12.7	4.6	3.8
Leather and leather products.....	60	731	12.2	4.5	6.2
Clothing and shoe-making.....	29	1,068	36.8	3.4	3.1
Machinery ^e	26	588	22.6	3.2	5.5
Metallurgical.....	30	639	21.3	2.6	4.1
Electrical instruments ^f	4	214	53.6	1.6	7.3
Wood and cork products.....	23	196	8.5	1.3	6.7
Rubber products.....	5	445	89.0	1.0	2.2
Paper products.....	8	90	11.3	0.5	5.2
Other.....	29	367	12.7	6.5	17.6
TOTAL 1,114		21,854	19.1	147.0	6.7

Source: Republic of Lebanon, *Bulletin Statistique Trimestriel* (Beirut), October 1951.

^a Including cement, cement products, bricks, glass, pottery; excluding metal products.

^b Including vegetable oils, confectionery, macaroni.

^c Beer, wine, araq.

^d Soap, matches, plastics, perfumes, etc.

^e Foundries and spare parts, excluding electrical machinery.

^f Bulbs, radio sets, batteries.

SYRIA

Handicrafts still play an important part in Syrian industry, but during the past two decades a beginning has been made in establishing modern factories. It is estimated that, in the years 1945 to 1950 inclusive, over £S 60 million was invested in industrial enterprises. In 1950 textile industries were first in capitalization and in number of workers, and provided an export surplus of certain kinds of cotton and silk cloth. Food-processing industries, next in importance, covered a wide range, including sugar refining, fruit and vegetable canning, and the preparation of olive oil and other vegetable oils, glucose, starch and confectionery. A glass factory and cardboard factories are among the recently established industries; cement plants and a

tannery among the older ones. The relative importance of the different branches is indicated by table 26, which covers only joint stock companies and omits some fairly large enterprises as well as the traditional handicrafts. The figures refer to 1950; since then there has been very little investment in industry. Total investment in industry has been estimated at between £S 200 million and £S 250 million.²⁰

Information on the industrial labour force is scanty. An estimate by trade union leaders put the number of workers in 1949 at a little over 50,000, but this figure "excluded smaller business establishments, areas untouched by organized labour and workers below 'advanced levels' of skill (apprentices, helpers, etc.)".²¹

²⁰ Statement by the president of the Chamber of Industry of Damascus in *Le Commerce du Levant* (Beirut), 1 March 1952.

²¹ United States Department of Labor, *Labor Abroad* (Washington, D.C.), March 1950.

¹⁸ Donato, *op. cit.*

¹⁹ *Bulletin Statistique Trimestriel* (Beirut), October 1951.

Table 26. Syria: Number of Joint Stock Industrial Companies and Capital Invested, 1950

Industry	Number of firms	Capital invested (thousands of Syrian pounds)
Textiles.....	5	30,000
Sugar refining.....	1	12,000
Cement.....	2	11,760
Glass.....	1	7,000
Food preserving.....	2	5,950
Tanning.....	1	5,000
Electric power.....	15	3,250
TOTAL	27	74,960

Source: *Le Commerce du Levant* (Beirut), 26 May 1952.

It also excluded some 15,000 construction workers. The number of craftsmen was estimated at 120,000 in 1937,²² and has probably declined since that date.

AFGHANISTAN

The largest part of Afghanistan's industrial production is still contributed by craftsmen and home workers engaged in such activities as making rugs, carving stone, carpentry, weaving and spinning wool, silk and cotton, making bricks and tiles and working in leather. The more mechanized enterprises include cotton gins, wool and cotton textile factories, a beet-sugar refinery and a vegetable oil refinery, while an army workshop makes small arms and other light equipment. Smaller factories are engaged in the production of matches and of boots and other leather goods. There are also some small coal mines.

²² Report of the Mandatory Government to the League of Nations for 1937.

IRAQ

Apart from the petroleum industry, only a few industries in Iraq have advanced beyond the handicraft stage. Among these are cotton ginning, spinning and weaving; rayon weaving; leather tanning and boot and shoe manufacturing; beer brewing and the distilling of alcohol; production of cigarettes; manufacture of cement and building materials; and the making of vegetable oils and soap.

No comprehensive figures on investment or employment are available. A mission sent by the International Bank for Reconstruction and Development reported that "excluding the petroleum industry, modern industrial plants employ only 2,000 people and account for a total capital investment of only about ID 4 million and an annual gross income of roughly ID 3 million. The very modern and important oil industry, on the other hand, provides employment for about 12,000 people".²³ These figures do not cover workshops and some of the smaller factories. The same source estimates total employment in all branches of industry at 46,000, of whom 11,000 were in textiles, 6,000 in building materials, 4,500 in food and beverages, 3,500 in tobacco and 2,700 in machinery and machinery repair.²⁴

JORDAN

As table 27 shows, the few industries in Jordan are still in the handicraft stage. Projects for new industries include a cement plant, a petroleum refinery, a textile plant, a tannery, an olive oil refinery and a soap factory. The development of Jordan's phosphate deposits is under way, and it is intended to resume extraction of potash from the northern end of the Dead Sea.

²³ International Bank for Reconstruction and Development, *The Economic Development of Iraq* (Baltimore, 1952), page 277.

²⁴ *Ibid.*, page 149.

Table 27. Jordan: Employment, Average Number of Working Days, Motive Power, Capital Invested, Value of Raw Materials and Output of Principal Industries, 1950

Product or industry	Establishments	Number of employees	Average number of working days	Motive power installed (horsepower)	Capital invested (thousands of dinars)	Value of raw materials used (thousands of dinars)	Value of gross output (thousands of dinars)
Milling.....	113	300	300	3,524	319	1,560	2,080
Food processing.....	3	36	254	350	70	33	42
Beverages.....	6	25	190	16	6	6	13
Cigarettes.....	2	333	300	—	110	110	520
Building materials.....	25	255	258	699	31	43	83
Cardboard boxes.....	1	91	300	4	4	...	4
Electricity.....	3	131	305	3,324	197	22	72
TOTAL	153	1,171	1,907	7,917	737	1,774	2,814

Source: Jordan: Ministry of Finance and Economics, *Al Nashra al Ihsaia al Urduniyya* (Jerusalem, 1950).

Factors Affecting the Progress of Industry

During the war and post-war years, some obstacles which delayed the progress of industry in the Middle East in the past have been overcome. But several factors retarding industry are still operative, and most industries of the Middle East are not yet sufficiently advanced to survive against foreign competition unaided.

NARROWNESS OF MARKETS

Among the most important limiting factors is the narrowness of the domestic market. In most of the region, this is due to the low purchasing power of the great majority of the inhabitants, which reduces their demand for manufactured goods to a few basic articles. In addition, several of the countries have a very small population, a factor which affects such States as Israel and Lebanon. Royalties from petroleum, though substantial, make too slight an addition to the national income to increase the demand for industrial goods significantly.

A closely related factor has been the preference of the wealthier groups of the community for foreign goods even where local substitutes were available. With the marked improvement in quality of products that has taken place over all the region, this factor is losing much of its importance; a considerable part of local purchasing power, however, is still lost on this account to the industry of the Middle East.

RAW MATERIALS

Industry suffers from a further handicap in the limited range of raw materials available in the region; this, however, may be partly due to insufficient prospecting and surveying. The absence of coal and iron deposits continues to prevent the development of heavy industry in most countries. Efforts to overcome this lack by utilizing imported coal and scrap iron, as Egypt and Israel do at present, or by using locally produced iron ore and electricity, as projected in Egypt, can have only a limited measure of success. Even in Turkey, where the two basic materials are available, the considerable distance separating them imposes a heavy strain on the iron and steel industry.

As regards other mineral resources, the position is somewhat better. Cyprus, Egypt, Israel, Saudi Arabia and Turkey export several important minerals, such as asbestos, chromium, copper, gold, manganese, phosphates, potash, salt and silver. Since a fairly wide range of other minerals is extracted for domestic use, there seems little doubt that the number of minerals exploited could be increased and that costs of production could be reduced. However, most of the Middle East is still

unsurveyed; even in those countries which have carried out surveys only a small fraction of the total area has been covered. Among the difficulties faced by the mining industry have been the nature of the official formalities, the intricacy of administrative regulations, and the shortness of the period for which exploration and exploitation permits are granted.²⁵ Another difficulty has been the high transport cost. Thus, in Turkey, "transportation of ores is expensive, both from the mine face to shipping points and from the mining areas to ports or markets".²⁶ In Egypt, costs of extracting chromium in 1947 were £E 2 per ton, but transport by road to the nearest centre, Suez, added a further £E 8, whereas imported chromium cost only £E 4, c.i.f. Suez; similarly high transport charges raised the delivery price of sand to a glass factory well above that of imported sand of comparable or higher quality.²⁷ It has been estimated that the cost of transporting one ton of phosphate from the mine in Jordan to Beirut is £L 2.10.0; this compares with an f.o.b. price of £L 4.10.0 obtainable for phosphate in Beirut. Still another difficulty has been the shortage of water in many areas, which has prevented the working of any deposits discovered.

A wider range of basic agricultural raw materials is available, although certain ones, such as rubber and jute, and in some areas wood, are not found. Much of the expansion achieved during the past two decades has been due to increased use of locally produced materials. Such local produce is not, however, always satisfactory. For one thing, it is generally difficult to obtain a large supply of uniform quality; this has handicapped industries processing local fruit and vegetables. Similarly, except in Egypt and the Anglo-Egyptian Sudan, cotton lacks uniformity of quality and of staple length because of impure seed and inadequate grading and packing.²⁸

Then, too, local produce is often of too low a quality; most of the wool and some of the grains provide examples of this. Again, because of slaughtering methods, a large proportion of hides are spoiled. Lastly, local produce is often more expensive than imported varieties, because of the high costs of agricultural production, including land rents, as well as high transport and marketing costs. Examples can be drawn from all Middle Eastern countries. In every one the Government has sought to protect some branches of agriculture by prohibiting the import of foreign produce. Thus, in the sugar industry of Iran, Israel and Turkey, locally grown beets are processed, and in Egypt, sugar-cane, resulting in sugar prices far above the c.i.f. cost of imported raw sugar. An interesting, and paradoxical, case in point is that of Egyptian cotton. Owing to prohibition

²⁵ See, for instance, the comments of the Egyptian Chamber of Mines and Quarries in the Egyptian Industrial Federation's *Annuaire, 1950-51*, pages 75 and 76; also, International Bank for Reconstruction and Development, *Economy of Turkey*, page 111, and Overseas Consultants, Inc., *Report on Seven Year Development Plan of Iran* (New York, 1949), vol. IV.

²⁶ International Bank for Reconstruction and Development, *op. cit.*, page 110.

²⁷ Report of Egyptian Government's Committee on Industry (Cairo, 1948) (in Arabic).

²⁸ Paul Craig-Martin, "Cotton and the Middle East", *Middle East Journal* (Washington, D.C., summer 1952).

of importation of foreign cotton, the Egyptian textile industry—which produces mainly cheap cloth for mass consumption—is forced to use Egyptian cotton, which is far superior in strength and quality but is also much more expensive than its foreign rivals.

The handicaps met by food-processing industries using local agricultural raw materials are exemplified in the case of the Egyptian dairy industry: output of milk is insufficient to meet all its needs; the milk is not pure; and facilities for refrigerating and transporting milk to the factories are inadequate.²⁹ In other Middle East countries the dairy industry faces the same problems, in an even more acute form.

A still greater handicap is imposed upon any industry using as one of its raw materials the product of another local industry. In 1947, for example, the Egyptian chocolate industry paid for sugar 250 per cent of average prices abroad and for milk 270 per cent.³⁰ A similar burden is laid on most industries which use the products of the chemical or metallurgical industries in Egypt, Israel and Turkey. In most cases, too, locally produced glass bottles and containers used by Middle Eastern industrialists are more expensive than imported ones.

Where industries process imported materials, they often have to pay more than foreign competitors, because of high costs of transport or customs duties. In recent years, there has been a marked tendency in certain countries, notably Egypt, to lower or abolish duties on imported raw materials, machinery and spare parts, but in many other cases these duties remain high. Moreover, purchases of foreign raw materials by Middle Eastern industrialists are necessarily on a small scale and scarcely benefit from economies arising out of bulk buying.

Hence, though these deficiencies are not insuperable, and although the possibilities of utilizing local produce are far from exhausted,³¹ the Middle East, compared with other regions, is not specially favoured as regards raw materials, except petroleum. This is reflected in the high proportion of raw material costs to total cost of production. In Egypt, for example, raw materials accounted for 79.8 per cent of total costs in 1944, and 75.9 per cent in 1947; the share of salaries and wages was only 12.6 and 13.0 per cent respectively.³² In Turkey, the 1950 census showed that wages and salaries constituted only 10.6 per cent of the gross value of production. In the Iranian sugar industry in 1947/48, labour and supervision accounted for 13.7 per cent of costs, while the cost of beets amounted to 63.8 per cent of the total.

²⁹ *Report of Egyptian Government Committee, 1948* (in Arabic).

³⁰ *Ibid.*

³¹ Thus, to take one example, the possibility of using straw for paper and other manufactures has not received sufficient attention.

FUEL AND ENERGY

Another handicap is the relatively high cost of fuel. Coal, whether produced locally, as in Iran and Turkey, or imported, is expensive. So is electricity in most countries, as table 28 shows. On the other hand, petroleum is relatively less expensive. In producing countries, prices charged by the companies are usually low, but in some cases high transport costs, or excise duties, or both, greatly raise the price to the consumer. In non-producing countries, prices charged by the companies approximate those paid by importing countries in other areas, such as western Europe, but here again internal transport costs and excises raise the retail price.³³ Nevertheless, in all countries petroleum prices are lower than those of coal, for comparable uses, and, except in Turkey, a marked shift from coal to oil has taken place in Middle Eastern industry, as well as transport. While in 1937 Egypt consumed 1,311,000 tons of coal, by 1950 the figure had dropped to 191,000; comparable figures for Lebanon and Syria were 143,000 tons in 1937 and 14,000 in 1949. On the other hand, consumption of oil in Egypt rose from 490,000 tons in

³² Censuses of production of 1944 and 1947 (Gamal el Din Said, *Iqtisadiat Misr* (Cairo, 1951), pages 235 to 236).

³³ Comparable prices for fuel oil are difficult to obtain, but in recent years the price of bunker oil at the wharf in both Aden and Port Said has been lower than in western European ports such as Antwerp, London or Rotterdam (*Petroleum Press Service* (London)).

Table 28. Cost of Coal and Electricity in Selected Countries, 1950^a

Country	Coal (United States dollars per metric ton)	Electricity for industrial use (United States cents per kilowatt-hour) ^a
Egypt	12.52 ^b	1.0 to 1.9 ^c
Iran	16.40 ^d	.. .
Israel	12.24 ^e	2.8 ^f
Lebanon	14.93 ^g	{ 2.3 to 5.9 ^h 4.1 to 6.9 ⁱ
Syria		
Turkey	13.42 ^j	3.1 ^k
United States	5.69 ^l	1.0 ^m

^a All prices converted at official rates of exchange. Figures for electricity rates should be regarded as only indicative of the general level prevailing in the Middle East; they naturally do not take into account differences in quality of service, availability of supply and other important elements.

^b "Coal and anthracite", import price.

^c Cairo, minimum and maximum.

^d "Coal in lumps", wholesale price in Tehran, converted at rate of 50 rials per dollar.

^e "Anthracite", import price.

^f Excluding "fuel charge".

^g "Coal", import price, 1949, converted into dollars at rate of £L 3.50 to the dollar.

^h Beirut, minimum and maximum.

ⁱ Damascus, minimum and maximum.

^j "Sea coal, washed", wholesale price in Istanbul.

^k Average, Istanbul.

^l Wholesale price per short ton.

^m Average price to large light and power consumers.

1937 to 2.8 million in 1950; in Lebanon and Syria from 100,000 tons to 410,000.³⁴

Industrial consumption of electricity, the bulk of which is generated from petroleum, has increased several-fold in the past few years. In Egypt, the amount consumed by factories in Cairo and Alexandria which do not generate their own electricity rose from 69.1 million kilowatt-hours in 1940 to 198.8 million in 1949.³⁵ In Iraq use of electricity in manufacturing rose from 25.6 million kilowatt-hours in 1944 to 35.0 million in 1949.³⁶ In Israel, sales of electricity for industrial purposes increased from 36.3 million kilowatt-hours in 1940 and 96.9 million in 1949, to 157.8 million in 1951. In Lebanon, sales of electricity to industry rose from 30.3 million kilowatt-hours in 1946 to 39.8 million in 1950, and in Syria from 18 million kilowatt-hours in 1948 to 28 million in 1951; in both countries, the increase in output by generating plants belonging to private factories has been proportionately greater than purchases of electricity from public utilities. In Turkey, industrial consumption of electricity rose from 293.9 million kilowatt-hours in 1942 to 519.2 million in 1949.³⁷

The completion of important hydroelectric and thermic plants may be expected to reduce electricity rates in the near future. Perhaps more important is the anticipated reduction in cost of petroleum in several countries, due to the projected construction of refineries and agreements made with oil companies for the purchase of specified quantities of crude oil at lower prices. It may therefore be anticipated that fuel costs will decline appreciably within the next few years in most Middle Eastern countries.

EFFICIENCY OF MANAGEMENT AND LABOUR

The material difficulties mentioned above are by no means the only ones faced by Middle Eastern industry. In spite of great progress achieved during the past twenty or thirty years, standards of management and workmanship are still far below those of more developed regions.

A common characteristic in Middle Eastern industries is high administrative costs. Comparison of certain leading Egyptian industries in 1947 with British industries in 1935 showed that in the former administrators, technicians and clerks formed a higher proportion of total personnel than in the latter. Extreme examples were 19.9 per cent against 6.3 per cent for textiles, 22.2 per

³⁴ Statistical Office of the United Nations, Statistical Papers, Series J, No. 1, *World Energy Supplies*. For further details see chapter 3, Petroleum.

³⁵ *L'Egypte industrielle* (Cairo), April 1951.

³⁶ Iraq, Ministry of Economics, *Statistical Abstract* (Baghdad).

³⁷ Turkey, Central Statistical Office, *Istatistik Yilligi* (Ankara).

³⁸ Gamal el Din Said, *op. cit.*, page 265.

³⁹ Overseas Consultants, Inc., *Report on Seven Year Development Plan* (New York, 1949), vol. IV, page 132.

cent against 11.7 per cent for sugar and 22.4 per cent against 17.8 per cent for paper manufacture.³⁸ In Iranian state enterprises "the number of employees at Tehran and on the supervisory and labour staffs at most factories is not only much greater than would be needed with modern equipment, but is grossly in excess of that actually needed at the plants as presently equipped. This not only results in high costs for salaries and wages, but adversely affects the productivity and morale of workers and makes efficient operation impossible".³⁹ Similarly, in Turkish state enterprises "heavy administrative charges add to costs of production and unnecessarily raise the price of finished goods."⁴⁰ Among the factors inflating administrative costs may be mentioned the excessive number of directorships; the over-staffing of administrative and clerical posts; obsolete methods of cost accounting used by the vast majority of industrial enterprises; and the inadequacy of plant management.

The shortage of trained managers and technicians has, in all Middle Eastern countries, retarded development; the former, although less acute than some years ago, still constitutes a major obstacle. The lack of technicians has been alleviated, to a considerable extent, by employing foreigners, who train nationals to succeed them, or by sending nationals abroad for training; moreover, as already mentioned, war-time employment with the Allied armies gave many Middle Eastern technicians an opportunity to improve their skills. Nevertheless, the shortage of technicians still causes considerable inconvenience. It is sometimes necessary, for example, to bring in foreign engineers for major repairs. A similar difficulty arises from lack of repair facilities and of adequate mechanical workshops, which often compels industries to order spare parts from abroad and fly them in by air.⁴¹

As stated previously, training opportunities were afforded to many thousands of industrial employees in army workshops of the Allies during the Second World War. This training, together with the industrial expansion of the past twenty years and the extension of educational facilities throughout the region, has undoubtedly helped to raise the technical level of workmen. In turn, this raising of the level, plus improvement in industrial equipment, have raised productivity. Although productivity per person employed is now considerably greater in industry than in agriculture,⁴² it still remains low, except in a few plants equipped with up-to-date machinery. Thus, a comparison of production figures in the Egyptian industrial censuses of 1945 and 1948

⁴⁰ International Bank for Reconstruction and Development, *Economy of Turkey*, page 156.

⁴¹ Alternatively, some firms are compelled to install a complete mechanical workshop capable of making all spare parts required by them; an example of this is the new rayon factory in Egypt (*L'Economiste égyptien* (Alexandria), 10 September 1950).

⁴² The figures given in the preceding section indicate that per capita income in industry is over twice as high as in agriculture.

Table 29. Value of Net Output Per Person Employed in Egypt, United Kingdom and United States

(Pounds sterling)

Branch of industry	Egypt		United Kingdom 1935	United States 1937
	1944 (in 1937 prices)	1947		
Chemicals.....	69	58	617	1,145
Textiles.....	39	77	159	318
Clothing.....	61	121	168	356
Leather.....	45	57	237	417
Quarrying.....	28	84	238	588
Paper and paper products.....	68	44	332	867
Food processing.....	82	62	487	760
All industry	56	74	264	595

Source: Gamal el Din Said, *Iqtisadiat Misr* (Cairo, 1951), page 275; figures for Egypt are taken from the industrial census; those for the United Kingdom and the United States from L. Rostas, "Industrial Produc-

tion, Productivity and Distribution in Britain, Germany and the United States", *Economic Journal* (London, April 1943).

with those of the United States and the United Kingdom (table 29) shows that net output per person employed in the United States was about eight times as high as in Egypt and in the United Kingdom three and a half times as high. Egyptian industry, furthermore, is among the most efficient in the region.⁴³

Lower productivity is the result of many causes, including the poor health of the workers, and their inadequate nutrition and housing. Illiteracy and lack of technical training on the part of the majority of workmen also reduce efficiency; in a few enterprises there is provision for training in service, but not in most firms. As a result, the percentage of waste and rejected goods is much higher than in similar industries in more developed countries. Another important factor is the high turnover of labour, due to the fact that, in many cases, workers retain their connexions with their village and enter industrial employment only in order to earn a certain amount of money, or to have off-season work, after which they return home. It has been stated that only 5 per cent of Turkish coal miners can be regarded as industrial workers, the rest being peasants or transients;⁴⁴ the average period spent at work in the Ereğli coal mines was 17 days per year in 1935 and 14 days in 1936. In the Karabuk iron and steel works, the percentage of newcomers in one year was 68, in the Bursa wool factory 67, and in the Beykoz shoe factory 31; in

the chromium mines of Guleman and Ergani the percentages were 165 and 247, respectively.⁴⁵ In Egypt, where absenteeism is on a smaller scale, labour turnover in some industries runs as high as 20 per cent.⁴⁶

Some enterprises have succeeded in drastically reducing absenteeism by offering their workmen better housing, with schools, canteens and similar improvements. Among these are several government enterprises in Turkey, the larger textile firms in Egypt and the petroleum companies in most of the region. As a result of such measures, absenteeism in some Egyptian textile firms has been reduced to 5 per cent or less.

More important as a cause of low productivity has been the state of industrial equipment. Although most Middle Eastern enterprises were established relatively recently, many of them installed second-hand or obsolete machinery, while during the war years even new equipment deteriorated rapidly owing to intensive use, inadequate maintenance and difficulties of repair.⁴⁷ The increase in productivity registered in Egypt between 1944 and 1947 (table 29) is to be explained largely by the installation of new machinery.

Finally, even with the existing equipment, there seems little doubt that better results could be obtained.⁴⁸ In particular there is evidence of overstaffing. In Egypt, according to a statement by the cotton textile industry,

⁴³ Average net output per employee in Egyptian industry in 1947 was £E 215, or \$888 at the rate of exchange then prevailing, while in Turkey, average net output per employee in 1950 (when prices were somewhat higher) was £T 2,539 or \$906.

⁴⁴ *Turkiye iktisat Mecmuasi* (Istanbul), June 1949.

⁴⁵ Ozeken Ali, "Turkiye sanayiinde iscilik mevzuunun iktisadi problemleri" in *Iktisat Fakultesi nesriyatından* (Istanbul, 1948).

⁴⁶ Gamal el Din Said, *op. cit.*, page 284.

⁴⁷ For example, in the annual report of the Egyptian Sugar Company for 1947/48, it is stated that "most of the machines are very old and consequently in bad condition; in addition, they are overworked and require continuous upkeep, which involves much expense". In the Iranian textile industry "present plant and equipment is generally in very poor condition and urgently needs rehabilitation" (Overseas Consultants, Inc., *op. cit.*, page

134); in the cement industry "equipment in the Tehran mill is in bad condition due to continuous hard service during and since the war when suitable repair parts were not available, and to inadequate maintenance" (*ibid.*, page 150). In the Israeli cotton industry, "one-third of the spindles are obsolete" (*Israel Economic Bulletin*, March 1952). In Turkey, a mission sent by the International Bank for Reconstruction and Development reported that "machinery is generally not well maintained in Turkish industry". The same mission reported that state factories often take better care of their equipment than private plants, but even there "opportunity exists for general improvement in maintenance practices" (*Economy of Turkey*, page 115).

⁴⁸ United Nations, *Labour Productivity of the Cotton Textile Industry in Five Latin-American Countries* (New York, 1951). Many of the remarks made in that survey apply to Middle East industry.

three times as many workers are required to tend the machines as abroad,⁴⁹ while in the woollen industry, owing to lack of experience on the part of workmen and technicians, labour requirements are twice as high as normal.⁵⁰ In Iran "all mines visited were overstaffed and overmanned. Production per worker is extremely low"⁵¹ while in the textile industry "the amount of labour currently employed in both government and privately owned textile plants is between 20 and 50 per cent more than necessary for efficient operation"⁵² and in the cement industry there are "grossly excessive labour and administrative staffs".⁵³

In the Israeli cotton spinning industry, "even in the most modern mills efficient production methods are not used, so that six, seven or even more workers are employed per 1,000 spindles" while in the weaving branch "if all workers, technicians and overhead staffs are taken into account, even the automatics seldom do better than three looms per worker".⁵⁴ Automatic looms constituted under 15 per cent of the total. One of the reasons given for this overstaffing was that the average number of looms per factory was only eight, "which is much too few for rational production".⁵⁵

Similar examples could be adduced from several industries in Lebanon, Syria and Turkey.

In some cases, the depressed level of wages reduces costs of production sufficiently to offset the low productivity of labour. Labour is abundant throughout the region and except in Israel, where it is organized in strong trade unions, wages are very low compared with those prevailing in economically developed countries. The figures in table 30 are illustrative. In many cases, however, the low level of wages does not offset low productivity. Although no over-all comparisons are possible, the following examples are typical.

Egyptian cotton textile industry

Table 31 compares weekly wages and wage costs in Egypt and the United Kingdom, according to the cards, slivers, spindles or looms tended by one employee. It appears, however, that the wages chosen for comparison with those of the United Kingdom are well above the level prevalent in the country. According to a comment on this table, "while the wages in Egypt are on the average about 60 per cent, and in some cases barely one-third, of the wages in the United Kingdom, the cost of labour per unit of machinery is two to three times higher in Egypt than in the United Kingdom. Only in spinning, where wages in Egypt are extremely low, is the cost per spindle slightly lower than in the United Kingdom. It must be remembered that the quality of work is not considered at all, and the quantity produced

⁴⁹ Gamal el Din Said, *op. cit.*, page 283.

⁵⁰ *Journal du commerce et de la marine* (Alexandria), 13 June 1949.

⁵¹ Overseas Consultants, Inc., *op. cit.*, vol. IV, page 174.

⁵² *Ibid.*, page 135.

⁵³ *Ibid.*, page 150.

Table 30. Daily Wages of Male Industrial Employees in Selected Countries

Country, year and industry	Daily wage in local currency	Approximate equivalent in United States dollars ^a
<i>Egypt, 1949:</i>		
Average, manufacturing...	25 piastres	1.00
<i>Iran, 1949:</i>		
Cotton textiles.....	30 to 100 rials	0.90 to 3.00
Leather.....	35 to 80 rials	1.00 to 2.50
Caspian fisheries.....	35 to 133 rials	1.00 to 4.00
<i>Israel, end of 1950:</i>		
Bricklayer.....	2,870 to 4,710 prutoth	8.00 to 13.00
Unskilled worker in building industry.....	2,370 prutoth	6.60
<i>Lebanon, 1951:</i>		
Average, manufacturing...	£L 5	2.30
<i>Turkey, 1948:</i>		
Average wages in Sümer		
Bank establishments:		
Unskilled workman.....	£T 3.77	1.40
Skilled workman.....	£T 4.23	1.50
Foreman.....	£T 10.25	3.60

Source: Egypt, Ministry of Finance, *Annuaire statistique de poche, 1949-50*; Iran, Ministry of Labour, *Statistics of Production of Major Industries of Country, 1949/50* (Tehran); Israel, Central Bureau of Statistics, *Statistical Bulletin of Israel* (Jerusalem), April-September 1951; Lebanon, *Bulletin Statistique Trimestriel* (Beirut), fourth quarter, 1951; Turkey, *Çalışma* (Ankara), January-March 1949.

^a Converted at official rates of exchange.

per unit of machinery is also not taken into consideration. Both must be lower in Egypt."⁵⁶

Turkish coal mines

Average production per person employed during an eight-hour shift in 1946 was only 0.51 ton. The average in Pennsylvania mines of similar depth and thickness was 5 tons.⁵⁷ The difference was due, in the main, to the nature of the mines and to the fact that United States mines are equipped with modern machinery. Nevertheless, low productivity in Turkish mines more than offsets the cheapness of labour.

Israeli industry

A comparison made by the Israeli Labour Federation showed that, in 1949, money wages in Israel were about twice as high as those in the United Kingdom, and 65 per cent of those in the United States; real wages were about equal to those in the United Kingdom; but pro-

⁵⁴ *Israel Economic Bulletin* (Jerusalem), March 1952.

⁵⁵ *Ibid.*

⁵⁶ National Bank of Egypt, *Economic Bulletin*, 1949, No. 4, page 188.

⁵⁷ M. W. Thornburg, G. Spry and G. Soule, *Turkey: An Economic Appraisal* (New York, 1949).

Table 31. Weekly Wages and Wage Costs per Machine Unit in Egypt and the United Kingdom, 1949

(Piastrs)

Occupation	Wages per employee		Wage costs per machine unit	
	Egypt	United Kingdom	Egypt	United Kingdom
Carding.....	316	588	39.5	13.3
Tending draw frames.....	253	412	109.7	34.3
Tending speed frames.....	315	419	5.2	1.7
Spinning.....	140	400	1.1	1.2
Weaving.....	492	658	123.0	65.8

Source: National Bank of Egypt, *Economic Bulletin* (Cairo, 1949), vol. II, No. 4, page 188.

ductivity per worker was about one-half that in the United Kingdom and one-fifth of that in the United States.

MONOPOLIES

Another factor making for inefficiency is the monopolistic character of many Middle Eastern industries. Owing to the narrowness of the market, which does not leave room for more than one large-scale enterprise or a few, and owing to the tendency to combine for common action, many Middle Eastern industries are dominated by either one or two large enterprises or by a closely knit group. The monopolistic position thus enjoyed has enabled several industries to dispense with much-needed reorganization. The same factor applies to government monopolies.

It should not, however, be concluded that all, or most, Middle Eastern industries are inefficient. In each country some industries compare favourably with those abroad, while in the majority of industries a number of firms are well above the average. Among these may be mentioned the cotton yarn industry in Cyprus, the Egyptian cotton textile, beer, superphosphate and cement industries; the sugar and tobacco industries in Iran; diamond, cement and pharmaceutical industries in Israel; the Lebanese cement and confectionery industries; the silk and rayon weaving industry in Syria; and Turkish sugar and tobacco industries. Most of these either export some of their output or produce at costs which compare favourably with those of imported articles.

CAPITAL

Lack of capital has constituted a major obstacle in the path of industry. In all Middle Eastern countries capital is scarce, while the high rates of interest prevailing in other fields have diverted available capital away from industry. Except in the special case of Israel, foreign capital has tended to be restricted to the oil industry. In Egypt, however, several large enterprises, including cotton textile and rayon plants, have been established with the help of United Kingdom and United States

capital; similar developments have occurred in the Turkish pharmaceutical industry and in production of electric bulbs. In Israel, foreign capital has co-operated in the production of shoes, motor cars, refrigerators, precision tools and other items.

Measures recently taken by some governments in the Middle East to encourage foreign investment may possibly result in a greater flow of capital to the region. Moreover, several other sources of foreign capital have become available in recent years or have increased their flow of capital. Chief among these are oil royalties and sterling balances accumulated during the war. In Iran and Iraq, oil royalties have been used in part to finance industrial development, while in Egypt and Israel a small portion of the amount released from blocked sterling balances has been allocated to imports of industrial machinery. In the same way, loans made by the Export-Import Bank of Washington to Afghanistan, Egypt, Israel and Turkey have been invested in part in industry; likewise, a portion of the loans to Turkey from the International Bank for Reconstruction and Development.

Local capital has also shown more interest in industry. In Egypt, the capitalization of industrial companies rose by £E 28.3 million between 1946 and 1950, inclusive; this represented 59 per cent of the increase in capitalization of all Egyptian joint stock companies during that period. The capitalization of industrial concerns, which had risen by 75 per cent between 1938 and 1945, doubled during the period 1945 to 1950, it is estimated. Of the total increase, some 40 per cent went into the textile industry, while the electrical, metal and engineering, and chemical industries followed in that order.⁵⁸

In Afghanistan, Iran and Turkey, the bulk of industrial investment continued to be provided by the State. Investment in government enterprises in Turkey aggregated £T 206 million in 1949 to 1951, inclusive; private industrial investment was estimated at between £T 25

⁵⁸ National Bank of Egypt, *Economic Bulletin* (Cairo), No. 4, 1951.

million and £T 40 million per annum.⁵⁹ The Sümer Bank's post-war investment plan provided for a total expenditure of £T 173.5 million. Of this, £T 104.8 million was allocated to the textile industry, £T 25 million to the paper and cellulose industry and £T 19.1 million to the iron and steel industry. By the end of 1949, expenditures under the plan had amounted to £T 54 million; a further £T 53.4 million had been allocated for 1950.⁶⁰ The post-war mining investment programme of the Eti Bank provided for a total of £T 368.9 million; of this £T 110.6 million had been spent by the end of 1949, and a further £T 60.8 million allocated for 1950.⁶¹

In Iran, during the period from August 1949 to November 1950, investments aggregating 362 million rials and loans aggregating 613 million rials were made to industries and mines as part of the seven-year plan which provided for a total investment in industry and mining (excluding petroleum) of 3,000 million rials.⁶²

Israel's industrial investment has been at a high level. In 1949, a total of £I 11.5 million was invested and in 1950 £I 17.1 million; the total for 1951 was higher than that for 1950. These figures included investment from all sources, public and private, national and foreign. Analysis of the projects approved by the Government Investment Centre, up to the end of August 1951, showed that local capital accounted for a little over half the total. The main industries for which new investment has been approved are textiles, £I 7.6 million; cement, quarrying and building materials, £I 7.6 million; metals, £I 6.3 million; chemicals and pharmaceuticals, £I 5.2 million; and glass and ceramics, £I 3.7 million.⁶³

In Syria, investment in industrial enterprises in the years 1945 to 1950, inclusive, was over £S 60 million. No figures were available for Lebanon, but an appreciable expansion of the electricity, cement and textile industries is known to have taken place in the post-war period.

Another handicap to the industrialization of the Middle East—one which is gradually being overcome—is the absence of a well organized system of industrial credit. Among noteworthy steps taken to remedy this lack were the establishment in 1945 of the Industrial Bank of Iraq with a capital of 500,000 dinars (US \$2 million), raised in 1952 to 2 million dinars; the Industrial Bank of Egypt in 1947 with a capital of £E 1.5 million (\$6 million); and the Industrial Development Bank of Turkey, set up in 1950 with a capital of \$4.5 million, to which was added \$9 million advanced by the

International Bank for Reconstruction and Development, and \$4.5 million advanced by the Turkish Government. The Industrial Bank of Egypt, which started operations in 1949, had by the end of 1951 made advances totalling £E 978,000 and taken shares aggregating £E 50,000 in enterprises.⁶⁴ The Industrial Development Bank of Turkey, which started operations early in 1951, had by mid-1952 advanced £T 22 million; it has also undertaken to lend to Turkish private industries £T 54.5 million from the counterpart funds of the European Recovery Program.⁶⁵

During the war and the years immediately following, the world-wide shortage of capital goods severely limited the importation of industrial machinery and prevented the carrying out of some projected developments. More recently, however, the position has improved, and imports of machinery, exclusive of petroleum equipment, are at present about twice as large as in the pre-war period.

In spite of the improvements that have been effected during the past thirty years, the lack of transport facilities continues to retard industrial development. It is only in countries such as Cyprus, Egypt, Israel and Lebanon, where transport is aided by the size or compactness of the settled area, that the transport system may be described as adequate. Even in these countries, little is done to encourage industry by means of preferential transport rates. However, industry will undoubtedly benefit from the transport development programmes which are being carried out in most of the Middle Eastern countries.⁶⁶

GOVERNMENT POLICIES

In some countries, the government continues to own a substantial part of industry and, in several, government policy is becoming increasingly favourable to industry and inclined to furnish aid by means of tariffs, import restrictions, foreign exchange licences, and even small subsidies.⁶⁷ It was largely owing to such forms of government help that industry in the Middle East withstood the intensified foreign competition of the past few years.

Nevertheless, there remain several further possibilities of aid to industry. Of these, the most important is reduction in customs duties on imported raw materials and machinery, duties which are still high in some cases, and reduction in the heavy excise duties on fuels and certain products essential to important industries, such as sugar. Similarly, in many countries, the burden of direct taxation on industry is proportionately greater

⁵⁹ International Bank for Reconstruction and Development, *Economy of Turkey*, page 102.

⁶⁰ *Ibid.*, page 104.

⁶¹ *Ibid.*, page 112.

⁶² Bank Melli, *Bulletin*, No. 113 (Tehran).

⁶³ Israel Office of Information, *Private Foreign Investment in Israel* (New York), July 1952.

⁶⁴ National Bank of Egypt, *Economic Bulletin*, No. 2, 1952.

⁶⁵ International Bank for Reconstruction and Development, *Annual Report* (Washington, D.C., 1952).

⁶⁶ For details on means of transport in some Middle Eastern countries, see "Transport and Communications in Iraq, Iran and Afghanistan", United Nations, *Transport and Communications Review*, October-December 1950, and "Transport and Communications in Turkey", *ibid.*, January-March 1953.

⁶⁷ For measures taken to encourage foreign investment, see chapter 7, Foreign Capital in the Region; for fiscal relief given to exporters, see chapter 5, Public Finance.

than on some other branches of the economy. In Egypt, for example, the amount of taxes collected from industry in 1945, exclusive of customs duties, was £E 20 million compared with £E 5 million from agriculture, although the value of the agricultural net product was four times as high as the industrial.⁶⁸ The limited resources of the governments of the Middle East make it unlikely, however, that much relief will be given to industry in this respect. However, assistance could be given through government-sponsored research, prospecting and technical training and by changes in government regulations, as well as by the improvement of

⁶⁸ Hafiz Afifi Pasha, "Industrial Progress in Egypt and its Effect on Labour and Social Conditions", Address before United Nations Social Welfare Seminar (Beirut, 26 August 1949).

transport facilities and the provision of cheap power.

From the foregoing, it appears that industry in the Middle East has reached a state of temporary and precarious equilibrium. On the whole, the advances made during the war and immediately thereafter have been maintained. Some minor industries established in the exceptional circumstances of the war period have disappeared, but the expansion of larger industries has more than offset this loss. Pent-up demand and worldwide shortages of goods maintained the domestic market. But in 1951 and 1952 there were signs of increasing pressure, owing to intensified foreign competition, and export prospects, except for a few items, were distinctly unfavourable.

Chapter 3

PETROLEUM

With over half of the world's proved reserves, the Middle East region accounted in 1951 for 16.4 per cent of the total world production of crude petroleum and for about 17 per cent in 1952. Middle East output of crude petroleum rose from 88.4 million metric tons in 1950 to 97.2 million in 1951 and to over 105 million in 1952; increased production in Iraq, Kuwait and Saudi Arabia much more than offset the drastic reduction in Iranian production which followed nationalization and stoppage of exports. The 1951 output of refined products in the Middle East comprised 6.7 per cent of the world's total (excluding that of the Soviet Union and of eastern European countries) and the percentage was still lower in 1952. The benefits derived by oil producing countries, other than Iran, from their petroleum industries increased sharply mainly as a result of new profit-

sharing agreements, as well as expanded production and increased expenditures by producing companies. Other Middle East countries benefited from increased payments by oil companies to governments under pipeline agreements and from expenditures by the companies and their employees in their territories. A growing interest was taken during this period in proposals to utilize natural gas obtained in the process of oil production, the bulk of which is at present wasted.

In this chapter, the different sections deal with Middle East oil in the world economy; the role of petroleum in the economy of the Middle East; and the disposal and utilization of natural gas and refinery gases. In chapter 7, "Foreign Capital in the Region", some indications are given concerning the amount of capital invested in the petroleum industry of the region.

Middle East Oil in the World Economy

RESERVES

The proved Middle East reserves of crude petroleum continued to increase from 1949 to 1952, owing to explorations which resulted in the discovery of several new fields and the extension of certain existing fields. The total proved reserves in the Middle East were estimated at 7,000 million tons at the beginning of 1952 compared with 4,400 million tons in January 1949,

representing a rise of about 60 per cent. In the same period, the share of the Middle East in the world's proved oil reserves increased from 42 per cent to 51 per cent (table 32). These reserves are concentrated in a few countries: Iran, Iraq, Kuwait and Saudi Arabia account for about 97 per cent, and the remainder is located in Bahrein, Egypt, Qatar and Turkey. A large part of the potential oil bearing area remains untapped.

Table 32. Estimated Proven Reserves and Cumulative Total Production of Crude Petroleum, by Countries, 1951^a

Country	Estimated proven crude reserves		Crude oil production, cumulative total		
	Thousands of metric tons	Per cent of world total	Year begun	Thousands of metric tons	Per cent of world total
Bahrein.....	40,900	0.3	1933	18,100	0.2
Egypt.....	23,400	0.2	1911	24,200	0.3
Iran.....	1,722,300	12.6	1913	332,950	3.5
Iraq.....	1,403,700	10.3	1927	72,650	0.8
Kuwait.....	2,172,700	15.9	1946	67,400	0.7
Qatar.....	135,100	1.0	1949	4,100	—
Saudi Arabia.....	1,482,900	10.8	1936	134,700	1.4
Turkey.....	3,400	—	1948	50	—
Total, Middle East	6,984,400	51.1	1911	654,150	6.9
WORLD TOTAL	13,670,400	100.0	1857	9,499,550	100.0

Source: United Nations, *Statistical Yearbook, 1951 and Monthly Bulletin of Statistics*; Gulf Publishing Company, *World Oil* (Houston, Texas), 15 July 1952;

American Geographical Society, *World Geography of Petroleum* (Princeton University Press, 1950).

^a End of year.

EXPLORATION

Exploration activities from 1950 to 1952 resulted in important discoveries, especially in Saudi Arabia and Kuwait. During April 1951, the Uthmaniya field was discovered in Saudi Arabia, 65 kilometres south of the Ain Dar field, and in the following month the Safaniya field was found, located in the Persian Gulf approximately 3,500 metres off the mainland at a point where the sea is 6.5 metres deep; this was the first offshore discovery in the region. As a result of these discoveries and further exploration, the acreage of proven oilfields in Saudi Arabia increased from about 53,000 hectares at the end of 1949 to nearly 125,000 hectares at the end of 1951.¹ During 1952, exploration activities were extended to additional areas in Saudi Arabia.

A discovery at Magwa, about 11 kilometres north of the Burghan field, substantially increased the proven reserves of Kuwait, which thus kept their relative position as the second largest in the world. In Iran, the exploration activities of the Anglo-Iranian Oil Company in the first half of 1951 added over 7,000 hectares to the proven acreage; in addition, during 1951/52 the activities of the Iranian Oil Company, directed by the Seven Year Plan Organization, resulted in the discovery of an oilfield in the Qum area, south of Tehran. In Turkey, exploration by the Mining Research Institute (Maden Tetkik ve Arama Enstitüsü), a government-owned organization, led during 1950/51 to the discovery of Garzan field, north of Ramandag.² On the other hand, exploration from 1950 to 1952 in the Kuwait-Saudi Arabian neutral zone was unsuccessful. This was also true of explorations in the Adana region, near the Gulf of Iskenderun in Turkey. In Egypt, oil companies discontinued their exploration activities early in 1952 because of failure to discover further economic locations in their current lease areas.³

DRILLING

Drilling activities in the Middle East continued at a low level as compared with activities in the main producing areas of the world. Wells completed during 1951 numbered 105, totalling 195,000 metres drilled; of these seventeen were failures, eight of them in Egypt. The figures for 1951 may be compared with those for 1950 and 1949: 94 completed wells totalling 164,000 metres, and 106 wells totalling 166,000 metres, respectively. Over three-fourths of all Middle East drilling activities in the period 1949 to 1951 were undertaken in Egypt, Iraq, Kuwait and Saudi Arabia.⁴

Development of oilfields as well as expansion of oil handling facilities continued in the region. Between 1949 and 1952, new fields placed in production in-

cluded Dukhan late in 1949 in Qatar, Zubair late in 1950 and Ain Zalah late in 1952 in Iraq, and Ain Dar early in 1951 in Saudi Arabia. During this period the producing capacity of many oilfields was stepped up by drilling new wells and by expanding facilities for handling oil. Several oilfields were discovered which had not been placed in production by the end of 1952 owing to lack of pipeline outlets; these included Abu Hadriya, Fadhili, Haradh, Safaniya and Uthmaniya in Saudi Arabia; Qaiyarah in Iraq; Qum in Iran; and Magwa in Kuwait.

PIPELINES AND OTHER FACILITIES

The most striking development in the region with respect to expansion of oil handling facilities was the construction of two large-diameter pipelines from Saudi Arabia and Iraq to the Mediterranean. The pipeline from Saudi Arabia, completed late in 1950, stretches from the oilfields of Saudi Arabia, through Jordan and Syria, to Sidon in Lebanon. This thirty- to thirty-one-inch pipeline, with a length of 1,720 kilometres and a present throughput capacity of 15.5 million tons a year, required an investment of \$230 million. The Iraqi pipeline, with diameters of twenty-six, thirty and thirty-two inches, and a length of 895 kilometres, has a normal throughput capacity of 13.5 million tons a year. The line was completed in 1952 from Kirkuk field in Iraq to Baniyas in Syria; it required a total investment of about \$115 million.

In addition to these lines, the pipeline systems of several oil producing countries were expanded during the past three years. In Iraq, a pipeline of twelve to sixteen inches, with a length of 120 kilometres, was laid between the Zubair field and Fao on the Persian Gulf; it has a crude charging capacity of 2.6 million tons annually. This line was finished late in 1951; in 1952 plans were laid to construct a parallel line with a diameter of twenty-four inches. There was another plan, also, to construct a pipeline of twelve and three-quarter inches, with a length of about 220 kilometres, capable of carrying 1.3 million tons of crude a year from Ain Zalah to the main Iraqi pipelines near Shuraimiya. The construction of a sixteen-inch pipeline from Kirkuk to Haifa, which was interrupted in 1948, was not completed. Another parallel twelve-inch pipeline from Kirkuk to Haifa, which was shut down in 1948, remains closed. In Saudi Arabia, the pipeline system was expanded in 1951 by 76 kilometres of new pipelines with a capacity of nearly 14 million tons of crude petroleum a year. During the past three years additional pipelines were laid in Iran, Kuwait and Qatar. Expansion of oil handling facilities also included construction of storage and harbour facilities in the new oil ports of Sidon,

¹ Gulf Publishing Company, *World Oil* (Houston, Texas), 15 July 1951 and 15 July 1952.

² *Ibid.*, 15 July 1952.

³ United States Department of Commerce, *Foreign Commerce Weekly* (Washington, D.C.), 16 June 1952.

⁴ Gulf Publishing Company, *World Oil*, 15 July 1951 and 15 July 1952. Wells drilled in 1951 in the United States numbered 43,300 and totalled 51 million metres; over 17,000 were dry holes. Wells drilled in Venezuela in the same period totalled over 1,200, of which 140 were dry holes.

Baniyas and Fao, as well as expansion of existing facilities in Iran, Kuwait, Qatar and Saudi Arabia.

PRODUCTION OF CRUDE PETROLEUM

The sharp increase in total crude petroleum production experienced in the post-war period continued in the Middle East in 1951 and 1952, in spite of the cessation of Iranian exports. The increase in output of crude in 1951 was 10 per cent and in 1952 about 8 per cent. The rise in production accompanied the expansion of oil handling facilities and the increasing world demand for crude petroleum. Despite this increase, the volume of output remained relatively low compared with the great potentialities of the region as represented by its large proven reserves. By the end of 1951, the cumulative total output of Middle East oilfields since the beginning of large-scale commercial production — which

started relatively late — had reached about 654 million tons, of which over one-half had come from Iranian oilfields (see table 32). This output represented only some 7 per cent of the total cumulative crude oil production of the entire world. Total production of crude oil in the Middle East increased almost six and a half times in the period between 1938 and 1952; the figure for the latter year was about 105 million tons compared with 97.2 million tons in 1951 and 35.6 million in 1946 (table 33). But in 1951 the Middle East, with over half of the world's proved oil reserves, contributed only 16.4 per cent of the crude oil supply of the world, as compared with 16.8 per cent in 1950 and 5.7 per cent in 1938. The decline between 1950 and 1951 in the relative position of the Middle East was due to the sharp decrease in production in Iran, following nationalization, as well as a rise in crude petroleum output elsewhere in the world.

Table 33. Crude Petroleum Production by Countries, 1938, 1946, 1948 and 1950 to 1952
(Thousands of metric tons)

Country	1938	1946	1948	1950	1951	1952 ^a
Bahrein.....	1,138	1,099	1,496	1,511	1,508	1,510
Egypt.....	226	1,282	1,886	2,434	2,332	2,320
Iran.....	10,359	19,497	25,270	32,259	16,844	1,350
Iraq.....	4,298	4,680	3,427	6,479	8,351	18,000
Kuwait.....	—	800	6,400	17,291	28,327	37,900
Qatar.....	—	—	—	1,636	2,370	3,300
Saudi Arabia.....	67	8,200	19,260	26,904	37,476	40,700
Turkey.....	—	—	2	17	19	20
Total Middle East....	16,088	35,558	57,741	88,440	97,227	105,100
WORLD TOTAL	282,000	378,000	470,000	525,000	592,000	622,000
Middle East output as percentage of world total	5.7	9.4	12.3	16.8	16.4	16.9

Source: United Nations, *Statistical Yearbook and Monthly Bulletin of Statistics; Economic Survey of Europe, 1951* (Geneva, 1952).

^a Preliminary figures.

While production in Iran declined sharply, from 32.3 million tons in 1950 to about 1.3 million tons in 1952, there were spectacular increases in Iraq, Saudi Arabia and Kuwait. The output of Saudi Arabia rose from 26.9 million tons to 40.7 million tons, and that of Iraq from 6.5 million to approximately 18 million tons in the corresponding period. These expansions in output were facilitated by the construction of large-diameter pipelines, as already mentioned, from the Iraqi and Saudi Arabian fields to the eastern Mediterranean coast. In Kuwait, also, production of crude petroleum increased by about 120 per cent in 1952 over the 1950 output of 17.3 million tons; Qatar's output of crude rose from 1.6 million tons to nearly 3.3 million in the corresponding period. There were no important changes in production in Bahrein, Egypt or Turkey.

Middle Eastern crude petroleum came from 597 wells in 1951, of which 145 were located in Egypt. The output per well is in some cases as high as 20,000 barrels a

day. Daily average production per well at the end of 1951 was about 4,600 barrels in the Middle East (excluding Egypt), as compared with only 12.7 barrels per well in the United States, and 225 barrels in Venezuela.⁵

REFINING

The refinery capacity of the Middle East petroleum industry has increased in recent years at a much slower rate than that of crude oil production, from a total yearly capacity of about 47 million tons in 1948 to about 52.5 million tons in 1951—a rise of 12 per cent as compared with the 68 per cent increase in output of crude. This slow rate of development was largely a

⁵ The high productivity of oil wells in the Middle East is due partly to geological conditions and partly to the fact that in almost every country oilfields are operated by a single company, which can drill and operate the most promising wells to drain the oil reservoirs.

reflection of increasing world demand for crude petroleum rather than refined products. In the post-war period, the countries of western Europe, with the assistance of the Organisation for European Economic Co-operation, launched a programme for expanding refinery facilities, as a result of which the crude throughput capacity of refineries in western Europe reached approximately 65.7 million metric tons a year at the beginning of 1952, as compared with throughput capacity of 23 million tons in 1948.^a By the end of 1952, several plans had been made for construction of

^a Petroleum Press Bureau, *Petroleum Press Service* (London), February 1952.

new refineries in the Middle East. The Anglo-Iranian Oil Company planned to erect a new refinery in Aden Colony, with an annual capacity of 5 million tons. Caltex announced the construction of a refinery at Sidon, Lebanon, with a capacity of 650,000 tons a year, mainly to supply bunker fuel for ships. The Government of Iraq had also undertaken the construction of a refinery at Dourah, near Baghdad, with a capacity of one million tons a year, while the Government of Turkey planned one at Batman with a yearly capacity of 150,000 tons. In addition, there were plans for expansion of refining capacity in Bahrein, Egypt and Saudi Arabia.

Table 34. Output of Major Refinery Products, 1949 to 1951
(Thousands of metric tons)

Country and year	Motor fuel	Kerosene	Heavy oils	Total, major products
<i>Bahrein:</i>				
1949.....	1,573	619	4,597	6,789
1950.....	1,754	705	4,382	6,841
1951.....	2,005	828	5,207	8,040
<i>Egypt:</i>				
1949.....	213	119	1,625	1,957
1950.....	195	151	1,761	2,107
1951.....	208	210	1,715	2,133
<i>Iran:</i>				
1949.....	4,378	2,222	16,141	22,741
1950.....	4,571	2,300	17,794	24,665
1951 ^a	2,525	1,290	8,992	12,807
<i>Iraq:</i>				
1949.....	63	51	235	349
1950.....	67	77	252	396
1951 ^b	94	73	346	513
<i>Israel:</i>				
1949 ^b	19	6	47	72
1950.....	31	27	129	187
1951.....	110	98	499	707
<i>Kuwait:</i>				
1949 ^b	14	3	98	115
1950.....	15	5	1,095	1,115
1951.....	17	7	1,195	1,219
<i>Lebanon:</i>				
1949.....	62	34	180	275
1950.....	98	61	235	394
1951.....	117	62	241	420
<i>Saudi Arabia:</i>				
1949.....	1,245	316	4,314	5,875
1950.....	956	371	3,498	4,825
1951.....	1,383	588	5,424	7,395
<i>Turkey:</i>				
1949.....	1	—	3	4
1950.....	1	—	4	5
1951.....	1	—	5	6
TOTAL:				
1949.....	7,568	3,370	27,240	38,178
1950.....	7,688	3,697	29,150	40,535
1951.....	6,460	3,156	23,624	33,240

Source: United Nations, *Statistical Yearbook, 1952*; United States Department of the Interior, Bureau of Mines, *World Petroleum Statistics* (Washington, D.C.), 1949, 1950 and 1951.

^a Partly estimated. ^b Estimated.

In contrast to the increase in capacity, the total refinery output of the region showed a marked decline in 1951 and 1952. In 1950, crude petroleum runs to stills totalled 43 million tons compared with 36 million tons in 1951 and an estimated 1952 crude throughput slightly over 25 million tons. This drastic decrease in refining activity was due to the shut-down of about 95 per cent of the Abadan refinery. This refinery represented over one-half of the refining capacity of the Middle East; since late in 1951 the refinery has operated only to meet the domestic consumption needs of Iran. Exclusive of Iranian refineries, crude throughput of Middle East refineries increased from 17.3 million tons in 1950 to 22 million tons in 1951, a rise of 27 per cent. However, this increase met only a small part of the loss caused by the shut-down of the Abadan refinery, a loss more than made up by refineries in the United States and western Europe. In 1951, the countries of western Europe had a crude throughput of 54 million tons as against 34 million tons the previous year; the corresponding figures for the United States were 316 million tons and 279 million, respectively. In 1951, the refineries of Bahrein, Iran and Saudi Arabia produced nearly 85 per cent of all products refined in the Middle East, compared with about 90 per cent in 1950. The output of major refinery products in the Middle East from 1949 to 1951 is shown in table 34.

About one-half of the total refinery output consisted of residual fuel oil, and over one-fifth was accounted for by motor fuel; distillate fuel oil, kerosene and other products comprised the rest. The refineries of the Middle East did not produce lubricating oil; the plant for lubricating oil at Abadan, construction of which was completed in 1951, required certain adjustments for operation. Thus, the whole region depended upon imports of lubricants. Aviation gasoline, which had formerly been available chiefly from the Abadan refinery—at an annual rate of about 700,000 tons before the shut-down—also had to be imported.

EXPORTS

Exports accounted for the greatest part of Middle East petroleum products.⁷ In terms of crude equivalent, exports of crude and refined products, excluding transfers within the region, were approximately 80 million tons in 1951 as compared with 72.5 million tons in 1950, 26 million in 1946 and 12 million tons in 1938.⁸ Iran's petroleum exports, which amounted to 31.2 million tons in the year ending 20 March 1951, ceased almost completely following nationalization.⁹ Crude petroleum represented a large and an increasing part of the oil exports of the Middle East: about 60 per cent in 1950; 75 per cent in 1951 and nearly 90 per cent in

⁷ Consumption of petroleum products within the region is dealt with in a later section of this chapter.

⁸ Of the oil exports of the Middle East, nearly 43 million tons passed through the Suez Canal in 1951, 10 per cent less than in 1950, but 6 million tons more than in 1949.

1952. The increased percentage was almost entirely the result of the cessation of exports of refinery products from Abadan and the increasing demand in western Europe and the United States for crude petroleum. Table 35 shows exports of crude petroleum from Middle East countries during the years 1949 to 1951, as well as imports of crude for refining.

Table 35. Exports and Imports of Crude Petroleum, 1949 to 1951

(Thousands of metric tons)

Country and item	1949	1950	1951
<i>Exports from:</i>			
Iran.....	3,208 ^a	6,552	3,538
Iraq.....	3,730	6,177	7,916 ^a
Kuwait.....	12,200 ^a	15,987	26,898
Qatar.....	15	1,533 ^a	2,347
Saudi Arabia.....	17,027	20,660	29,989
TOTAL EXPORTS	36,180	50,909	70,688
<i>Imports by:</i>			
Bahrein ^b	6,120	6,249	7,385
Egypt.....	—	—	99
Israel.....	79	224	755
Lebanon ^c	305	493	550
TOTAL IMPORTS	6,504	6,966	8,789
Net exports..	29,676	43,943	61,899

Source: United States Department of the Interior, Bureau of Mines, *World Petroleum Statistics* (Washington, D.C.), 1949 to 1951; *Financial Times* (London), 3 July 1950.

^a Estimated.

^b Imported from Saudi Arabia for refining and export.

^c Imported from Iraq for refining.

Since 1950 the Middle East has emerged as the leading supplier of oil in international trade. This occurred at the same time as important structural changes in the international oil market. Traditionally the oil producers of the Western Hemisphere—the United States and the Caribbean area—supplied the petroleum deficit of the Eastern Hemisphere, where the Middle East met only a small portion of demand.

In the post-war period, the rapid rate of development of the petroleum industry in the Middle East, as well as in the Caribbean area, together with a sharp rise in demand for petroleum in many areas, especially Europe and the United States, and the fact that output in the United States has not kept pace with United States consumption, have drastically changed the pattern of international trade in oil. The net movement of petroleum from the Western Hemisphere to the Eastern Hemisphere declined from 34 million tons in 1938 to about 15 million tons in 1950. The United States, the chief exporter of petroleum in pre-war years, became the chief importer. Hence, the Middle East and Caribbean areas have become the two major exporters of petro-

⁹ For exports of crude oil and petroleum products from Iran, see Ministère des finances, *Statistique annuelle du commerce extérieur de l'Iran en 1329 (1950/51)* (Tehran).

leum products; broadly speaking, the Middle East has supplied an increasing part of the rising demand in Europe, most of Asia, Oceania and East Africa, and the Caribbean area has supplied that of the Americas and West Africa, and a decreasing part of western Euro-

pean needs. It should be added that this development has not prevented movement of oil products of different type in an opposite direction, especially during the period of adjustment. Table 36 gives the pattern of international trade in petroleum during 1950.

Table 36. International Trade in Petroleum, 1950
(Thousands of metric tons)

Destination	Source			
	Middle East ^a	Caribbean	United States	Borneo and Indonesia
Africa ^a	8,250	2,500	750	—
Australia and New Zealand.....	2,500	250	—	—
Europe.....	44,750	17,000	3,000	250
Far East.....	6,250	—	1,250	2,000
North America.....	8,400	36,500	—	—
South America.....	1,500	—	2,500	250
TOTAL	71,650	56,250	7,500	2,500

Source: Arabian American Oil Company, *Middle East Oil Development* (New York, 1952).
^a Egypt is included in Africa.

The Role of Petroleum in the Economy of the Middle East

Recent developments in oil operations in the Middle East, namely, new profit-sharing agreements between the companies and the governments, increased production of petroleum and additional employment, have, to a varying extent, favourably affected economic conditions in the oil producing countries of the Middle East—with the major exception of Iran.¹⁰ Countries such as Lebanon and Syria, which have provided transit rights for petroleum through pipelines, have also received increasing, though relatively small, benefits.

The countries in the Middle East which obtained nearly all the benefits accruing from oil operations in 1952—Saudi Arabia, Kuwait, Iraq, Qatar and Bahrein—had a population of only about 11 million, or a little over 10 per cent of that of the entire Middle East. The direct contribution of oil activities, including royalties, taxes, wages and other payments, to the national incomes of the above-mentioned countries, increased almost fourfold between 1948 and 1952. It is estimated that the total of such payments in 1952 represented over two-fifths of the combined national income of these countries, though the proportion differed widely among them; it was lowest in Iraq and highest in Kuwait.

In Iraq, direct payments to the Government and local expenditures by the oil companies, which together represented less than one-tenth of the national income in

1949, increased to about one-quarter in 1952. In Saudi Arabia, the proportion increased from one-third in 1949 to over one-half in 1952. In Bahrein, Qatar and Kuwait, between three-fourths and nine-tenths of the national income in 1952 resulted from petroleum activities. In Iran, however, the proportion of oil revenues declined from about one-tenth of the national income in 1949 to under 2 per cent in 1952 as a result of the suspension of exports.

DIRECT PAYMENTS BY OIL COMPANIES TO GOVERNMENTS¹¹

The most important contribution of petroleum activities to the national income of the countries of the Middle East consists of direct payments by oil companies to the governments; these payments take the form of royalties, taxes, dead rent and other items.¹² Between 1940 and 1952, total direct payments to governments in the Middle East rose nearly sixteenfold; production in-

¹⁰ The effects of the cessation of oil exports from Iran after mid-1951 are dealt with in the chapters on prices, foreign trade and balance of payments, and public finance.

¹¹ Indications of profits of the oil companies are given in chapter 7, on foreign capital in the region.

¹² Direct payments by the oil companies are made in return for concessions to operate in certain areas—sometimes the entire territory, or a large part of the territory, of the State—for a period usually ranging from fifty to seventy-five years. The concession, among other provisions, includes the right of exploration and extraction, transportation, refining and export of oil as well as the right to construct related facilities. In general, there is no over-all petroleum law in most of the oil producing countries of the Middle East. The terms of the payments were usually determined by bargaining between individual oil companies and the concession-granting State, and were also influenced by practices in other countries. The companies generally received exemption from local income taxes, from duties on imports of capital goods and exports of petroleum products and from other fees and taxes. For a list of major petroleum concessions in the Middle East, see *Review of Economic Conditions in the Middle East (1949-50)*, United Nations publication: 1951.II.C.3.

creased about 7.6 times and terms of payments under new profit-sharing agreements also changed. During this period, the margin between the cost of production and refining (excluding royalties), on the one hand, and the price of crude oil and petroleum products, on the other, widened. Most of the increase in direct payments took place after 1950, that is, after the effective date of the

new agreements. Total direct payments to oil producing countries, which amounted to close to \$28 million in 1940, reached over \$190 million in 1950 and rose to about \$260 million in 1951 and \$440 million in 1952 (table 37). These figures include both published data and estimates calculated on the basis of production and the rate of royalty, tax and other payments.

Table 37. Direct Payments by Oil Companies to the Governments of Oil Producing Countries
(Millions of United States dollars)

Year	Bahrein	Egypt ^b	Iran	Iraq	Kuwait	Qatar	Saudi Arabia	Total
1940.....	1.0 ^b	...	16.0	8.1	—	—	1.5	26.6 ^b
1946.....	1.2 ^b	2.8 ^b	28.7	8.9	0.8 ^b	—	13.2 ^b	55.6 ^b
1948.....	1.4 ^b	4.3	36.7 ^d	10.3	13.7 ^{b e}	—	31.5 ^b	97.9 ^b
1949 ^f	1.5 ^b	5.0	50.1 ^d	7.9	11.8 ^b	—	66.0 ^{b g}	142.3 ^b
1950.....	3.3 ^b	4.9	44.9 ^d	14.8 ^b	12.4 ^b	1.0 ^b	112.0 ^b	193.3 ^b
1951.....	3.8 ^b	5.8 ^b	23.3 ^d	38.5 ^b	30.0 ^b	3.8 ^b	155.0 ^b	260.2 ^b
1952.....	6.3 ^b	...	—	110.0 ^{b h}	139.0 ^b	9.0 ^b	170.0 ^b	440.1 ^{b i}

Source: Egypt: *The Egyptian Gazette* (Cairo), 21 May 1951; Iran: Overseas Consultants, Inc., *Report on Seven Year Development Plan*, vol. V (New York, 1949); Anglo-Iranian Oil Company, Ltd., *Annual Report and Accounts*, 1949, 1950, 1951 (London); Iraq: Ministry of Economics, *Statistical Abstract* (Baghdad); International Monetary Fund, *Balance of Payments Yearbook* (Washington, D.C.); Saudi Arabia: United States Senate, Eightieth Congress: *Hearings before a Special Committee Investigating the National Defense Program* (Washington, 1948), page 25381.

^a Royalties only.

^b Estimate calculated on the basis of crude oil production and the rate of royalty, tax and other payments.

^c Excluding Egypt.

^d Excluding increased payments under an unratified 1949 supplemental agreement.

^e Including \$7.5 million bonus received from American Independent Oil Company.

^f Sterling and rupee payments are adjusted to take devaluation into account in proportion of nine months for the old rate and three months for the new rate.

^g Including \$9.5 million bonus received from Pacific Western Oil Company; royalties are computed on the basis of \$2.40 a ton.

^h Including \$14 million fund for settlement of previous claims, and excluding the Turkish share of 10 per cent under the Lausanne treaty.

ⁱ Including 1951 figure for Egypt.

Iraq, Kuwait and Saudi Arabia together received over 95 per cent of the direct revenues paid to governments of oil producing countries in 1952. The revenues of Saudi Arabia increased to about \$170 million in 1952, compared with about \$112 million in 1950 and \$31.5 million in 1948. The receipts of Iraq rose from \$10.3 million in 1948 to nearly \$15 million in 1950, and to approximately \$110 million (including \$14 million in settlement of previous claims) in 1952; revenues were expected to increase to about \$165 million a year by 1956. In Kuwait also, petroleum revenues rose from \$12.4 million in 1950 to approximately \$140 million in 1952; in Qatar the increase was from about \$1 million to about \$9 million in this period. The share of Bahrein in the increase was comparatively small because of stable production of crude petroleum; its revenues rose from \$1.4 million in 1948 to about \$3.8 million in 1951 and \$6.3 million in 1952. In Egypt, royalties increased from \$4.3 million in 1948 to nearly \$6 million in 1951. On the other hand, Iran's revenues from this source, which, under the 1933 agreement, amounted to \$44.9 million in 1950, stopped completely in 1952.

¹³ Association of Lebanese Industrialists, *Le Commerce du Levant* (Beirut), 30 May 1951.

¹⁴ Statement by the Director of Communications in Lebanon, quoted in *Le Commerce du Levant*, 24 May 1952. Over two-thirds

The countries providing transit for the movement of crude petroleum through the Trans-Arabian pipeline—Jordan, Lebanon and Syria—reportedly received a total amount of about \$870,000 in 1951 as direct payments for security charges, transit fees and other items.¹³ As a result of negotiations between the Lebanese Government and the oil companies, a tentative agreement was reached in May 1952 which provided for an increase in payments by the Iraq Petroleum Company, from £L 980,000 to £L 3,749,000; it also provided for an increase in payments of the Trans-Arabian Pipeline Company, from £L 1,558,000 to £L 4,491,000.¹⁴ By the end of 1952, this agreement had not received the approval of the Lebanese Parliament. A similar agreement was being negotiated between the Syrian Government and the oil companies late in 1952.

The direct revenues of Bahrein, Iraq, Kuwait, Qatar and Saudi Arabia from petroleum, in the form of royalties, taxes and other items, formed by far the largest source of income available for development; in some cases such revenues exceeded the estimated costs of practicable development projects. In Iraq, the proportion of oil revenues assigned to development projects

of the anticipated increase represented profits from resale to the companies of crude oil which Lebanon had an option to purchase for local consumption under the original agreement of February 1947.

was reduced from 100 per cent in 1950 to 70 per cent in 1952 as a result of higher revenues from oil operations; at the same time certain internal taxes and customs duties were either lowered or abolished. The development plan adopted in 1952¹⁵ by the Government of Iraq anticipated the expenditure of ID 155.4 million for the period 1952 to 1956.¹⁶ For financing the projects under this plan, 70 per cent of the oil revenue was expected to provide ID 164.6 million—ID 9.2 million more than the anticipated cost of the plan. In other countries, a large part of the oil revenue went to the head of the State, some as savings which did not affect the national economy; another part was used to finance government operating expenses; the rest was utilized for capital expenditures. The cessation of direct payments to Iran affected projects under the seven-year plan which were to have been financed from such revenues.

Direct payments to governments by the oil companies, augmented by local expenditures in foreign currencies, also provided ample supplies of foreign exchange in several countries and constituted the chief item of receipts in their balance of payments. These receipts facilitated a marked expansion in imports, which, in turn, materially increased government revenues from customs duties. A part of the increase in imports consisted of foodstuffs and of manufactured goods, including luxury items, and only a small part consisted of capital goods and machinery for general development.¹⁷ As a result, the economies of major oil producing countries became increasingly dependent upon petroleum—a vulnerable and, in the long run, an exhaustible source of income. This trend was expected to continue unless further steps were taken to utilize oil revenues efficiently, and to an increasing degree for the development of other sources of income.

TERMS OF DIRECT PAYMENTS

Prior to 1949, financial obligations of the petroleum companies to local governments in the Middle East varied widely from country to country. Payments on account of royalties, taxes and other items ranged from \$1 to \$2.50 a ton; average payments were between \$1.50 and \$1.75 a ton.¹⁸ Following the Iranian oil controversy, which led to negotiations for higher revenues from oil operations in several other areas in the Middle East, new agreements contained provisions for the equal sharing of profits—a formula similar to that in the Venezuelan oil industry.¹⁹ Although there are variations

¹⁵ Following the recommendations of the mission of the International Bank for Reconstruction and Development which visited Iraq in the spring of 1951.

¹⁶ Of the total, ID 72.2 million was allocated to irrigation, drainage and agriculture; ID 31 million to industry; ID 30.9 million to transport and communications, and ID 18 million to buildings, hospitals and schools.

¹⁷ The sizable imports of machinery and equipment required by the oil companies in recent years were largely financed abroad by foreign exchange obtained from the proceeds of oil exports.

¹⁸ Payments averaged about \$6 a ton in the case of twelve major oil companies in Venezuela in 1948.

from country to country in the application of this formula with regard to the determination of costs, prices and profits, the net result has been to increase the rate of payments to a present range of \$3.70 to \$5.20 a ton. The following passages give the terms of payment concluded with companies engaged in production at present.

The first country to conclude an agreement for equal sharing of profits in the Middle East was Saudi Arabia, where the principal financial obligation of the Arabian American Oil Company, according to the 1933 agreement, was the payment of four gold shillings, or its equivalent, per ton of oil produced. In case of payments in dollars, there were to be adjustments for changes in the rate of dollars in terms of the gold sovereign. As a result of this provision, the exchange rate for the sovereign was changed in 1948, by agreement between the company and the Government, from the official rate of \$8.24 to \$12 for one gold sovereign, that is, payments increased from the equivalent of \$1.65 a ton to \$2.40. In December 1950, a new agreement was signed, retroactive to January 1950, under which the Government of Saudi Arabia was entitled to continue collecting the royalty of four shillings per ton on all oil produced, at the rate established by the International Monetary Fund—one gold sovereign equals \$8.24—plus a corporate income tax which, together with the royalty, would turn into the treasury of Saudi Arabia 50 per cent of the net operating revenue of the company. The amount of net operating revenue was to be determined after deducting from the gross receipts of the company all operating expenditures, depreciation, exploration and development expenses, and foreign government taxes, including the United States corporate income tax.²⁰ This agreement increased payments to Saudi Arabia from the equivalent of about \$2.40 a ton to about \$4.20, depending on the valuation of products and the calculation of net operating revenue in 1950/51. The basis of this valuation has not been disclosed. Early in 1952, the Government of Saudi Arabia raised the question of the applicability of foreign government taxes to the Saudi Arabian share of profits and also the question of the sale of the crude oil of the company to its parent companies below market prices.²¹ The results of negotiations on these and other points had not been announced at the end of 1952.

In Iraq, the concession agreement of the Iraq Petroleum Company provided for a royalty payment of four

¹⁹ The most striking difference between the profit-sharing formulas is that in the case of Venezuela, provision is made to prevent the share of the Government from falling below 50 per cent of the profits (see chapter X of the Venezuelan income tax law of 12 November 1948); in general in the Middle East the share of the government may not be above that percentage unless receipts fall under certain specified minima.

²⁰ Petroleum Publishing Company, *Oil and Gas Journal* (Tulsa, Oklahoma), 11 January 1951.

²¹ The parent companies of the Arabian American Oil Company bought crude oil of 36° API at \$1.43 a barrel from the latter, as compared with the posted market price of \$1.75 in the Persian Gulf for the same quality of crude oil.

gold shillings per ton of oil exported, to be paid in sterling on the basis of the price of gold in London on the day of payment, plus a payment in lieu of taxes amounting to £60,000 gold for the first 4 million tons and £20,000 gold for each subsequent million tons of oil exported. The concession agreements of the Mosul Petroleum Company and the Basrah Petroleum Company each provided, in addition to royalty and tax payments, for a dead rent of £200,000 gold annually until regular exports reached a rate of one million tons a year, plus the right of Iraq to take up to 20 per cent of the production of these companies for local consumption free of charge.

Following negotiations between the Iraqi Government and the Iraq Petroleum Company, an agreement was concluded in August 1950 to increase the royalty rate from 4 gold shillings to 6 gold shillings per ton, retroactive to January 1950, but no agreement was reached regarding the exchange rate of the gold sovereign to the pound sterling. As a result of the new agreement, payments to Iraq under the previous exchange rate increased from the equivalent of about \$1.65 to about \$2.45 a ton. In August 1951, after the conclusion of the new profit-sharing agreement in Saudi Arabia and subsequent negotiations in Iraq, a new agreement was announced, retroactive to January 1951, between the Government of Iraq and the Iraq Petroleum Company, Basrah Petroleum Company and Mosul Petroleum Company. This was ratified in February 1952. The agreement provided for another formula for equal sharing of profits, with profits to be determined before deduction of foreign taxes, on the basis of fixed values and costs of petroleum. According to article 9 of the agreement, the share of Iraq in profits from crude oil of Kirkuk quality on the Iraqi-Syrian border would amount to 35 shillings sixpence per long ton in 1951, 38 shillings threepence in 1952, and 40 shillings sixpence per long ton in 1953 and thereafter; the corresponding figures on the Persian Gulf at Fao would be 29 shillings 4½ pence, 32 shillings 1½ pence and 34 shillings 4½ pence per long ton, respectively, during this period. The fixed value and cost of oil are to be adjusted in case of price changes, and in case of a difference of over 10 per cent between the actual and the fixed costs of oil production.

In Kuwait, until December 1951 the payments of the Kuwait Oil Company to the Sheikh consisted of three rupees per ton of oil, plus four annas per ton in lieu of taxes; the rate of payment declined from the equivalent of about \$0.97 a ton to \$0.66 after the devaluation of the rupee in September 1949. The agreement was revised by another, concluded on 3 December 1951, which, in addition to the payment of royalties at the

previous rate, imposed a new corporate income tax on the earnings of the company before deduction of foreign taxes, so as to bring about an equal division of profits. On the basis of 1951 costs and prices, payments to the Sheikh reportedly amounted to the equivalent of about \$3.70 a ton.²²

In Qatar, the 1935 concession of Petroleum Development (Qatar) Ltd. provided for a royalty payment of three rupees per ton of oil; this amount was apparently increased to ten rupees per ton in May 1951. Further negotiations resulted in an agreement providing for profit-sharing on an equal basis; the agreement was signed and became effective on 2 September 1952.

In Bahrein, the Sheikh received 3½ rupees per ton of oil from the Bahrein Petroleum Company under the original concession agreement; this amounted to the equivalent of about \$1.05 a ton before the devaluation of the rupee in September 1949. In 1950 the company increased its royalty payments to ten rupees (about \$2.10) effective from January 1950, and subsequently, in 1951, another supplemental agreement reportedly increased payments by an annual lump sum. A new profit-sharing arrangement was agreed to in 1952 providing for payment by the Bahrein Petroleum Company of 50 per cent of its net income from the production and sale of crude oil produced in Bahrein, effective from January 1952.²³ This new arrangement replaced the previous terms of payment.

In Egypt the Government is entitled to a royalty in kind on the production of crude oil. The rate of royalty varies according to the date of the original concession. It is reported that this rate is 4 per cent for contracts signed between 1912 and 1923 with Anglo-Egyptian Oilfields; 12½ per cent for the 1923 contract with Egyptian Oil Syndicate; 14 per cent for the 1948 contract with Anglo-Egyptian Oilfields; and 14½ per cent for all contracts with Anglo-Egyptian Oilfields signed since 1948—in which Socony Vacuum shares half—on the basis of 14 per cent from Anglo-Egyptian Oilfields' share, and 15 per cent from Socony Vacuum's share.²⁴

OTHER LOCAL EXPENDITURES BY OIL COMPANIES

In addition to direct payments to governments under the terms of concession agreements, oil operations in the Middle East have resulted in substantial increases in the demand for local materials and services. For instance, the local and foreign employees of the oil industry in the region numbered over 130,000 in 1951; in 1948/49, there were approximately 120,000, of whom about 85 per cent were local employees. Since mid-1951 a large number of former workers in the Iranian oil industry have been idle. There is little available information on wage and salary payments or on expenditures for the purchase of materials by the oil

²² *Journal of Commerce* (New York), 4 December 1951.

²³ Petroleum Press Bureau, *Petroleum Press Service* (London), October 1952. This payment is to be made under an income tax decree issued by the Sheikh of Bahrein on 6 December 1952 (*Petroleum Press Service*, January 1953).

²⁴ *Egyptian Gazette*, weekly airmail edition (Cairo), 21 May 1951.

Table 38. Gross Inland Consumption^a of Fuel and Power, by Countries, 1929, 1937, 1950 and 1951
(Thousands of metric tons; coal equivalents)

Country	1929				1937				1950				1951 ^b			
	Coal and lignite	Liquid fuels	Hydro-electricity	Total	Coal and lignite	Liquid fuels	Hydro-electricity	Total	Coal and lignite	Liquid fuels	Hydro-electricity	Total	Coal and lignite	Liquid fuels	Hydro-electricity	Total
Afghanistan.....	...	...	...	...	—	5	3 ^c	8	5 ^d	29 ^d	23 ^{c, d}	57 ^{c, d}	...	...	...	...
Anglo-Egyptian Sudan.....	112	26	—	138	87	27	—	114	54	180	—	234	61	246	—	307
Bahrein.....	...	...	...	...	—	144	—	144	—	624 ^c	—	624 ^c	—	750	—	750
Cyprus.....	9	15	—	24	5	39	—	44	2	127	—	129	1	135	—	136
Egypt.....	1,245	903	—	2,148	1,311	736	1	2,048	178	4,244	...	4,422	242	4,622	...	4,864
Iran.....	1	793 ^c	—	794 ^c	—	1,545 ^c	—	1,545 ^c	175 ^c	4,339 ^c	—	4,514 ^c	175	3,450	—	3,625
Iraq.....	7	70	—	77	3	132	—	135	—	929 ^c	—	929 ^c	—	956	—	956
Israel ^e.....	...	...	...	...	...	...	...	...	34	982	—	1,016	20	1,224	—	1,244
Jordan ^e.....	...	...	...	...	...	...	...	...	—	79	—	79	—	81	—	81
Kuwait.....	—	—	—	—	—	—	—	—	—	248 ^c	—	248 ^c	—	279	—	279
Lebanon ^f.....	...	...	...	...	...	...	...	...	—	396	38	434	...	...	...	...
Palestine ^g	33	72	—	105	97	267	21	385	—	—	—	—	—	—	—	—
Saudi Arabia.....	...	...	—	...	1	3 ^c	—	4 ^c	—	725 ^c	—	725 ^c	—	1,080	—	1,080
Syria ^h	47	100	—	147	143	131	20	294	4 ^c	347 ^c	—	351 ^c	...	735	40	...
Turkey.....	1,075	138	—	1,213	2,026	153	1	2,180	4,761	620	18	5,399	4,954	827	27	5,808
TOTAL	2,529	2,117	—	4,646	3,673	3,182	46	6,901	5,213	13,869	79	19,161	5,458 ⁱ	14,414 ⁱ	90 ⁱ	19,962 ⁱ

Source: United Nations, *World Energy Supplies in Selected Years, 1929-1950*, Statistical Papers, series J, No. 1; Statistical Office of the United Nations.

^a Including refinery consumption and excluding bunker fuels.

^b Preliminary figures.

^c Estimated.

^d 1949 figures.

^e Included with Palestine in 1929 and 1937.

^f Included with Syria in 1929, 1937 and 1951.

^g Including Israel and Jordan in 1929 and 1937.

^h Including Lebanon in 1929, 1937 and 1951.

ⁱ Including 1949 figures for Afghanistan.

companies; in general, such expenses appeared to be financed from proceeds from the sale of oil for local consumption, from local currencies acquired through foreign exchange disbursements and from the sale of imported goods to workers.

In Iraq, local expenditures by oil companies for wages, supplies, services and other expenses amounted to ID 5.8 million in 1951 as against ID 6.4 million in 1949.²⁵ Such expenditures in 1949 were roughly estimated at the equivalent of \$20 million in Saudi Arabia, \$15 million in Kuwait and \$4 million in Bahrein. In Egypt, wages and salaries of workers engaged in petroleum production and refining were estimated in 1950 at about £E 1 million a year, and those of workers engaged in the distribution of petroleum products at over £E 2 million annually.²⁶ In Syria, estimated receipts of foreign exchange from the oil companies, as a result of local expenditures and direct payments to the Government, were approximately £S 55 million in 1951—about 20 per cent over 1950. On the other hand, in Iran the disbursement of foreign exchange by the oil company for its local expenditures, which amounted to the equivalent of 2,240 million rials in 1949/50, 1,795 million rials in 1950/51 and 689 million rials in the following four months, ended in mid-1951.²⁷

CONSUMPTION OF PETROLEUM WITHIN THE REGION

The development of the oil industry in the Middle East has resulted in a great expansion of petroleum consumption both in quantitative terms and in comparison with other sources of energy. Between 1937 and 1951, consumption of petroleum in the region—including utilization in refineries and excluding bunker fuels—increased four and a half times, as compared with an increase of about 50 per cent for coal and lignite combined. As a result, the share of petroleum—in terms of coal equivalent—in gross inland consumption of coal, lignite, liquid fuels and hydroelectricity rose from 46 per cent in 1937 to 72 per cent in 1951, while that of coal and lignite declined from 53 per cent

to 27 per cent in the corresponding period (see table 38).

Despite the rise in the consumption of petroleum, per capita consumption of oil in the region remained comparatively low. In 1950, the Middle East consumed about 80 kilogrammes per capita (including refinery consumption and excluding bunker fuels) as compared with a world average of about 160 kilogrammes.

The rapid increase in the consumption of petroleum products in the region was due to greater demand, which resulted from the development of industry, operations of refineries, the mechanization of agriculture and increasing motor traffic, as well as from the replacement of other fuels by oil in factories, railways and homes. This trend was encouraged by the abundance of petroleum supplies and was aided by the extension of distribution facilities, and also by lower prices of oil products compared with other sources of energy.²⁸

In 1951, about 17 million tons of petroleum products were disposed of in the region for local consumption (including utilization in refineries) and bunkering. In terms of crude petroleum, this represented slightly under one-fifth of the region's output. Total inland consumption of petroleum products in the Middle East in 1951 amounted to about 9.6 million tons, compared with 9.2 million tons in 1950 and 2.1 million tons in 1937.²⁹ Local consumption, excluding utilization in refineries, was 7.4 million tons in 1951—nearly 20 per cent higher than in 1950 and six times as high as in 1937. Refinery consumption in the region as a whole declined in 1951 and 1952, because of the shut-down of the greater part of the Abadan refinery in the second half of 1951. Total consumption, which was about 3 million tons in 1950, declined to about 2.2 million tons in 1951. Increasing sea traffic was responsible for a sharp rise in the demand for bunker fuel in many Middle East ports. Between 1937 and 1951, bunker loadings increased fourfold, to nearly 8 million tons, exclusive of marine supplies for the Governments of the United Kingdom and the United States.

Natural Gas and Refinery Gases

Production of natural gas in the Middle East is associated with the production of crude petroleum, usually as a by-product in the form of "dissolved gas".³⁰

²⁵ International Monetary Fund, *International Financial Statistics* (Washington, D.C.).

²⁶ J. Oman, "Petroleum and our National Economy", *Egypt News Bulletin* (Cairo), November 1950.

²⁷ Bank Melli, *Bulletin*, Nos. 104 and 111, 122/123 (Persian text, Tehran).

²⁸ In most of the Middle East, prices of petroleum products are based on United States prices in the Gulf of Mexico area plus transportation from Middle East sources of supply; discounts are granted in certain cases. In most countries heavy excise duties and local transportation costs tend to raise prices substantially and thus affect the expansion of consumption. This factor,

Smaller quantities of hydrocarbon gases are also produced as by-products in refining. Very little is known about the actual volume of production, but published

however, has been offset in part by changes in the price relationship between petroleum products and other commodities from the pre-war to the post-war period, owing to a smaller increase in the price of the former as compared with that of the latter in the Middle East as a whole.

²⁹ Data to show consumption by different sections of the economy are not available.

³⁰ Natural gas is generally combined with petroleum as a gas in solution, "dissolved gas", and as a gas cap on oil reservoirs, "associated gas". It is also found in gas reservoirs without appreciable quantities of crude oil, as "non-associated gas".

data on the gas-oil ratio³¹ of several oilfields of the region, together with production figures for these oilfields, make it possible to establish the probable order of magnitude.

The gas-oil ratios for major fields range from about 30 cubic metres per ton of crude oil in Kirkuk, Iraq (where the oil produced is unsaturated in natural gas) and 105 cubic metres in Burghan, Kuwait, to 200 cubic metres in Agha Jari in Iran and Abqaiq in Saudi Arabia (table 39). There is also a gas field in Iran, at Pazanun, but the field is shut in. In addition, smaller quantities of hydrocarbon gases are produced by Middle East refineries; the output of such gases has ranged between 8 per cent and 15 per cent of total natural gas production in recent years.

Table 39. Gas-Oil Ratio in Certain Oilfields

Country and oilfield	Gas-oil ratio ^a	Volume of gas per ton of crude oil produced (cubic metres)
<i>Iran:</i> ^b		
Agha Jari.....	165	198
Gach Saran.....	110	133
Haft Kel.....	80	96
Masjid-i-Sulaiman.....	40	48
Naft Safid.....	165	198
Naft-i-Shah.....	180	214
<i>Iraq:</i>		
Kirkuk.....	27	31
<i>Kuwait:</i>		
Burghan.....	90	105
<i>Saudi Arabia:</i>		
Abqaiq.....	165	195
Damman.....	53	63
Qatif.....	80	94

Source: *Iran Today, an Economic and Descriptive Survey*, prepared from official sources for International Islamic Economic Conference (Tehran, October 1950), page 116; Kirkuk, Damman and Qatif: Food and Agriculture Organization of the United Nations, *Near East Resources for Production of Synthetic Nitrogen Fertilizers* (Washington, D.C.), 28 June 1949; Burghan: L. G. May, *A Discussion of Petroleum Engineering Problems in the Burghan Field, Kuwait (Third World Petroleum Congress, section II, The Hague, 1951)*, page 700; Abqaiq: Petroleum Publishing Company, *Oil and Gas Journal* (Tulsa, Oklahoma), 20 December 1951, page 197.

^a Volume of gas associated with one unit of volume of petroleum produced.

^b A gas field in Iran, at Pazanun, has a gas-oil ratio of 3,500/1, or a volume of 4,170 cubic metres of gas per ton of crude oil produced.

On the basis of the gas-oil ratios in table 39 and the output of petroleum from the oilfields listed, the order of magnitude of gas production in the Middle East may

³¹ Gas-oil ratio refers to the volume of gas associated with a unit of volume of crude petroleum in production or refining.

³² Production in Iran took place chiefly during the first half of the year.

³³ One thousand million cubic metres of natural gas have been estimated to have a value equal to nearly one million tons of crude oil, and could yield about 2,300 million kilowatt-hours at prevailing efficiency.

be estimated at about 14,000 million cubic metres in 1951, as against about 9,300 million in 1948. In 1951, about one-half of this gas was produced in Saudi Arabia, one-fifth in Kuwait and one-fifth in Iran.³² The estimates given in table 39 are, for the principal fields, comparable with those in other oil producing regions, such as Venezuela; even allowing for a large margin of error in the figures, the estimates of possible gas production indicate substantial output.³³

There are indications that the Middle East has great natural gas reserves in the petroleum fields, as well as gas reservoirs which are probably comparable to those in the United States.³⁴ The production of natural gas in the Middle East will increase with the expansion of crude oil output. Technical developments may result in still greater changes; in this connexion it has been stated that:

“The greater depth at which new reservoirs will be found will bring with it the problem of the disposal of the natural gas which accompanies the crude. At present the amount of gas produced in the Middle East is relatively small, but a stage may soon be reached when 15 per cent by weight of the fluid extracted from the earth may be gas. On this basis, a natural gas production of some 5,000 million cubic feet per day [about 51,000 million cubic metres a year] is well within the bounds of possibility.”³⁵

PRESENT DISPOSAL OF GASES

Natural gas and refinery gases produced in the Middle East are largely wasted at the present time by “flaring off”. In Saudi Arabia, for example, the amount of natural gas produced, saved and sold was about 1.4 million cubic metres in 1950, compared with less than 0.5 million in 1948,³⁶ but the 1950 figure probably represented less than 0.03 per cent of Saudi Arabian gas output in this period. In Abadan, Bahrein and Kuwait small quantities of hydrocarbon gases are utilized in refineries, but these form only an insignificant part of the total output.

Natural gas and refinery gases have many possible uses, including utilization in the operation of refineries and oilfield machinery; as fuel in power plants, industries and homes; as a source of hydrogen in the manufacture of fertilizers and as a source of carbon black and other chemicals. If they are not utilized for these purposes they can be conserved by repressuring.

³⁴ It was reported that the estimated proven recoverable reserves of natural gas in the United States were 5,500,000 million cubic metres on 31 December 1951; of this, 3,300,000 million cubic metres were in the form of non-associated gas, 800,000 million in associated gas, and 900,000 million in dissolved gas (see American Gas Association, *Gas Facts*, New York, 1952).

³⁵ H. S. Gibson, president of the Institute of Petroleum, *Petroleum Press Service* (London), August 1952. Explanation in brackets added.

³⁶ Arabian American Oil Company, *Report of Operations to the Saudi Arabian Government* (New York), 1948 and 1950.

In the Middle East, flaring off is the usual means of disposing of gases which necessarily accompany the extraction and refining of petroleum. No facilities have been established to permit large-scale utilization or conservation of hydrocarbon gases. Since most of the oilfields of the Middle East are remote from the chief urban and industrial centres, heavy investment would be required to construct power plants, gas pipelines and related facilities for utilizing natural gas as fuel or energy in houses and factories. Moreover, the present effective demand for gas is limited. It is technically possible to expand gas consumption in the oilfields and refineries and by operations requiring large investments to utilize natural gas in the production of chemicals and fertilizers but such operations would yield only moderate returns, not comparable with those from usual petroleum activities in the Middle East. In such circumstances, the last means of disposing of gases, short of burning, would be to pump them back into the oil reservoirs and thereby accomplish the dual purpose of improving the ultimate recovery of oil and of safeguarding the gas for future consumption.³⁷

The laws and concession agreements of the oil producing countries of the Middle East do not contain provisions for preventing wastage or encouraging conservation of this valuable source of energy. In the agreements signed by certain Middle Eastern governments and the Iraq Petroleum Company and its subsidiaries, natural gas has been excluded from the list of hydrocarbon products to which are applied the royalty and tax payments provided for in the concession. In the agreements concluded between the Saudi Arabian Government and the Arabian American Oil Company and the Pacific Western Oil Corporation, it is stipulated that the oil companies will pay one-eighth of the proceeds from natural gas "produced, saved and sold". In Iran, according to the 1933 agreement with the Anglo-Iranian Oil Company, royalty and taxes were paid only on "petroleum sold for consumption in Iran or exported from Iran"; the term "petroleum" was defined to include natural gas. Thus, all these agreements excluded any payment of royalty and taxes on natural gas which was flared off.

PROPOSALS FOR UTILIZATION OF NATURAL GAS AND REFINERY GASES

The problem of how to use the region's natural gas has received increasing attention recently and plans are being considered for its utilization and conservation on a large scale. One project being studied by the Arabian American Oil Company provides for a large-scale repressuring programme. The project would cost

³⁷ In the United States, the total amount of natural gas produced between 1900 and 1950 was estimated at about 3,255,000 million cubic metres, of which about 510,000 million were used for repressuring and will therefore be available for recovery for later use (Ayres and Scarlett, *Energy Sources—The Wealth of the World*, New York, 1952).

approximately \$20 million, and involves the return of more than 1,600 million cubic metres yearly to Abqaiq reservoir in Saudi Arabia.³⁸ In Kuwait a plant is being built to distil fresh water from the sea, utilizing natural gas from the oilfield as the source of heat and power.³⁹

A number of proposals have been made for the utilization of natural gas. One of these is a project for building a gas pipeline from Iraqi oil and gas fields to Paris. The pipeline would be 2,500 miles long and would have an initial capacity of 14 million cubic metres a day—about 5,100 million cubic metres a year. It has been estimated that it would require an investment of \$425 million. By this means natural gas could be delivered to most of the consuming centres of Europe through the construction of branch lines. An additional investment of \$350 million for building a parallel line would double its throughput capacity.⁴⁰

In 1949 a study by the Food and Agriculture Organization of the United Nations⁴¹ concluded that:

"The most important raw material for the fixation of nitrogen in the region is an abundance of by-product natural gas obtained from the production of crude oil. This gas is now being burned owing to lack of markets for it. Were this gas utilized for the fixation of nitrogen, there is sufficient quantity now being wasted to about double the present world production of nitrogen fertilizer."

To make the region self-sufficient in respect of nitrogen fertilizer, FAO experts recommended the establishment of plants in Egypt, Saudi Arabia and Lebanon in order to supply, at the initial stage, approximately 200,000 tons of nitrogen fertilizer annually. One such plant, completed in 1950 at Suez, Egypt, has an annual productive capacity of 200,000 tons of calcium nitrate (32,000 tons of fixed nitrogen) and uses refinery gas as raw material.

A mission of the International Bank for Reconstruc-

³⁸ Petroleum Publishing Company, *Oil and Gas Journal* (Tulsa, Oklahoma), 27 December 1951. The gas injection method is widely used in Venezuela, where the cost of injection amounts to between \$1 and \$1.75 per thousand cubic metres of gas pumped in. See also Venezuela Ministry of Mines and Hydrocarbons, *National Petroleum Convention* (Caracas, 1950).

³⁹ Lord Kinross, *The Listener* (London), 11 September 1952.

⁴⁰ Bechtel International Corporation, *Natural Gas Supply for Europe* (San Francisco, March 1951). It was estimated that the delivered cost of gas would be about 32 cents per thousand cubic feet, of which 3 cents would represent purchase price, 22 cents transmission costs by the major line and 7 cents branch-line transmission costs (on the basis of a daily delivery of 500 million cubic feet of gas and amortization over a period of twenty years). Such costs would be substantially below the prevailing rate for equivalent manufactured gas in European countries.

⁴¹ *Near East Resources for Production of Synthetic Nitrogen Fertilizers* (Washington, D.C.), 28 June 1949. When this report was published, world production of fixed nitrogen, excluding that of the Union of Soviet Socialist Republics, was 3.3 million tons (1948/49), which increased to 4 million tons in 1950/51. In the corresponding period, hydrocarbon gas production in the Middle East probably increased by about two-thirds.

tion and Development which went to Iraq in 1951 recommended utilization of natural gas from the Kirkuk fields. Its report⁴² stated that in Iraq:

“The largest and perhaps the most promising industrial possibility lies in the utilization of the natural gas produced in conjunction with oil and now

⁴² International Bank for Reconstruction and Development, *Economic Development of Iraq* (Johns Hopkins Press, Baltimore, 1952).

almost totally wasted. The mission recommends therefore that early consideration be given to the erection, near Kirkuk, of a plant which, using natural gas and gypsum as raw materials, would be capable of producing annually 500,000 tons of ammonium sulphate fertilizer, 100,000 tons of elemental sulphur, 10,000 tons of carbon black and 300,000 tons of cement.”

The cost of this plant was estimated at about 25 million Iraqi dinars.

Chapter 4

PRICES

General Aspects

During 1951 and the first months of 1952, cost of living indices showed a moderate upward trend in all Middle East countries for which statistics are available, except in Israel where they rose sharply and in Lebanon where they were stable (table 40). From the first six months of 1951 to the corresponding period of 1952, the cost of living increased by less than 10 per cent in Egypt, Turkey and Iran, a little less than 15 per cent in Iraq and Syria and 44 per cent in Israel. Although prices in the Middle East increased during 1951, their

level at the beginning of 1952 was generally not much higher, and in some cases was lower, than in 1948 and in 1949 since, in spite of repercussions from hostilities in Korea, prices had decreased in many countries of the region during 1950. The main exceptions were countries which had devalued their currencies following the devaluation of the British pound in 1949. In Iran, Iraq, Lebanon and Syria, the cost of living in 1951 was below its 1948 level. In most countries prices tended to level off or decline in the latter part of 1952.

Table 40. Indices of Cost of Living and Wholesale Prices, 1949 to 1952
(1948=100)

Country and item	1949	1950	1951					1952		
			Full year	First quarter	Second quarter	Third quarter	Fourth quarter	First quarter	Second quarter	Third quarter
<i>Anglo-Egyptian Sudan:</i>										
Cost of living.....	106	107	128	117	125	130	141	148	149	153
Wholesale prices.....	104	114	134	128	132	136	139	152	146	150
<i>Cyprus:</i>										
Cost of living ^a.....	...	103	116	110	113	120	121	120	122	120
<i>Egypt:</i>										
Cost of living.....	99	104	114	112	113	114	116	117	115	113
Wholesale prices.....	94	104	116	117	116	116	116	121	114	111
<i>Iran:</i>										
Cost of living.....	109	89	93	91	94	93	96	98	103	100
Wholesale prices.....	93	79	89	90	87	85	91	93	91	92
<i>Iraq:</i>										
Cost of living.....	80	73	78	76	75	77	83	85	85	83
Wholesale prices.....	83	85	93	94	92	90	97	102	99	95
<i>Israel:</i>										
Cost of living ^b	97	90	98	93	96	98	105	122	150	165
Wholesale prices.....	97	83	91	84	87	91	101	127	153	168
<i>Lebanon:</i>										
Cost of living.....	94	87	94	95	94	92	95	97	95	92
Wholesale prices.....	82	76	95	99	97	92	95	92	87	84
<i>Syria:^c</i>										
Retail prices.....	100	85	99	95	93	99	109	110	106	101
Wholesale prices of food.....	100	83	103	97	94	104	116	121	121	111
<i>Turkey:</i>										
Cost of living.....	110	104	103	103	101	102	104	107	109	109
Wholesale prices.....	108	97	103	108	104	98	104	105	105	102

Source: United Nations, *Monthly Bulletin of Statistics*; for Syria: Ministry of National Economy, *Nashrat-el-ihsaat-el-shahriya* (monthly bulletin; Damascus).

^a January 1950 = 100.

^b September 1951 = 100.

^c 1949 = 100.

Thus prices in Middle East countries have fluctuated during the past two or three years, but these fluctuations were within a relatively narrow range, so that the overall picture of cost of living movements in recent years remains one of relative stability for the region as a whole, the main exception being Israel and, to a somewhat lesser extent, the Anglo-Egyptian Sudan. Price movements between 1948 and the first months of 1952 tended, to a certain extent, to compensate for earlier discrepancies in the rate of price increases that had appeared during the war and the immediate post-war period among the various countries of the region, as the dislocations caused by the war were practically overcome. While it is not possible to give a quantitative measure of this trend, since the results would differ according to the year chosen as the pre-war basis, it would appear that the relationship of prices among the countries of the region was nearer to the pre-war situation in 1952 than in 1948.¹

One of the main factors tending to raise prices in the region during 1951 and the beginning of 1952 was the increase in prices of imported products; this was greater than increases in internal prices in countries for which information is available. For example, in

Egypt, prices of imported products (not controlled) increased by 34 per cent between June 1950 and December 1951, while prices of locally produced and consumed items (not controlled) increased by only 5 per cent. This trend was accentuated by the depreciation of the currency in Israel at the beginning of 1952; in Iran indices of prices of imported products averaged 89 in 1950 and 106 in 1951, reaching 119 during the second quarter of 1952 (1948=100). Increased investment in Syria, where capital was used to extend the cultivation of cotton, and in oil producing countries, such as Iraq and Kuwait, where more funds became available from the rise in payments by oil companies, may also have exerted pressure on prices.

Another factor which stemmed from international trends and which contributed to the rise, was the increase in prices of raw materials up to the end of 1951; this increase expanded the revenues accruing from exports in most countries of the region. The influence of this factor was, however, rather limited except in countries like Egypt and the Anglo-Egyptian Sudan. Wholesale prices of raw materials increased much more than general wholesale prices and the cost of living in these countries for which data are available (table 41).

Table 41. Indices of Wholesale Prices of Raw Materials in Selected Countries, 1949 to 1952
(1948=100)

Country and item	1949	1950	1951	1952	
				First half	Second half
<i>Anglo-Egyptian Sudan:</i>					
Wholesale prices of raw materials	95	114	161	176	...
Wholesale prices (general)	104	114	134	149	...
<i>Lebanon:^a</i>					
Wholesale prices of raw materials	87	100	144	114	106 ^b
Wholesale prices (general)	109	100	126	118	111 ^b
<i>Syria:^c</i>					
Wholesale prices of raw materials	100	112	136	123	117 ^d
<i>Turkey:</i>					
Wholesale prices of raw materials	104	94	114	110	107 ^d
Wholesale prices (general)	108	97	103	105	102 ^d

Source: United Nations, *Monthly Bulletin of Statistics*; for Syria: Ministry of National Economy, *Nashrat-el-ihsaat-el-shahriya* (Damascus).

^a 1950 = 100.

^b Five months only.

^c 1949 = 100.

^d Four months only.

Budgetary deficits occurred in most countries of the region. While their order of magnitude was, in a number of cases, similar to that of the previous year, they

¹ On the basis of 1939 = 100, cost of living indices for 1948 and the first six months of 1952 were:

Country	1948	1952
Egypt	281	326
Iran	639	642
Iraq	673	572
Israel	338	487
Lebanon	492	470
Turkey	341	369

The countries (Egypt, Israel and Turkey) in which prices had

were higher in other countries, such as Israel and Iran, where they contributed to the upward trend of prices.

These various pressures on prices were offset to a varying degree by the supply situation which was, generally speaking, relatively satisfactory. The output of 1951 crops was exceptionally good in Turkey. In other countries, such as Israel, Jordan and Syria, the risen least by 1948 showed a further rise between 1948 and 1952; conversely, two of the countries which had registered the highest rise by 1948 (Iraq and Lebanon) showed a decline between 1948 and 1952. The dispersion of prices thus decreased.

agricultural situation was less good, but exports of foodstuffs were reduced and large import surpluses were maintained or increased during the second half of 1951 and the beginning of 1952. Industrial activity, which showed an over-all increase in most of these

countries, does not appear to have been of sufficient importance to have had a definite effect on the general level of prices. The paragraphs which follow deal with those aspects of the situation which had a particular bearing on prices in each country.

Price Trends in Individual Countries

AFGHANISTAN

During the period following the outbreak of hostilities in Korea, prices of wheat, sugar, clothing and other consumer goods in Afghanistan rose rapidly, and it was reported that prices were at a level about eight to nine times as high as in pre-war years. This increase in prices, as well as the need to attract foreign investment and facilitate exports, led to devaluation of the Afghanistan currency, which was announced at the beginning of 1952 by the National Bank of Afghanistan.²

ANGLO-EGYPTIAN SUDAN

In the Anglo-Egyptian Sudan, prices increased considerably in 1951, and the cost of living index in the first quarter of 1952 was 26 per cent above its level in the first quarter of 1951. This increase was principally due, as was the case in Egypt, to high prices of cotton, resulting in large export surpluses. The export surplus amounted to £E 22 million in 1951 as against £E 6 million in 1950, that is, three and a half times the surplus of the previous year.

EGYPT

Prices rose continuously in Egypt in 1951 and also at the beginning of 1952, but at an increasingly slower rate. The cost of living average in the first six months of 1952 was 3 per cent above the corresponding period in 1951, while the average for all of 1951 had been about 9 per cent above that of 1950. Prices tended to decrease from the second quarter of 1952.

In 1951 the main factor tending to an increase in prices was the pressure of high cotton prices, stimulated for several years both by increased demand and by the fact that Egyptian cotton was sold in a currency other than a hard currency. The rise in prices for Egyptian cotton was thus distinctly sharper than for cotton sold in dollars. Another important factor was the increase in prices of imported products, which largely exceeded that of locally produced and consumed commodities, at least as regards products whose prices were not controlled.³ Indices of such articles are shown in the following table (August 1949=100):

Item	June 1950	December 1951
Imported articles (not controlled)	100	134
Locally produced and consumed articles (not controlled)	112	118

The slowing down of price increases at the end of 1951 and beginning of 1952 was due chiefly to the fall in both value and volume of cotton exports. For the first five months of 1951 the Egyptian balance of trade showed an export surplus of £E 17 million compared with a deficit of £E 30 million in the same period in 1952. Moreover, the data indicate that the rate of investment no longer increased, and may have decreased. Preliminary figures for 1952 showed decreases in the number of building permits, in amount of timber imported and in cement production, reflecting a decline in building activity. A slowing down of investment took place likewise in the case of investments financed through the budget: the amount spent for new projects was £E 30.3 million less than was allocated in the fiscal years 1946/47 to 1948/49, £E 20.7 million less⁴ in each of the next two fiscal years, and in 1950/51 actual expenditure on new work was only 17 per cent of total budget expenditure as against 20 per cent the previous year. Pressure on prices was also counteracted by government price subsidies, which reached £E 19 million in 1951, and by the government price-fixing policy. The deficit in the budget of 1950/51, however, did not exceed £E 5 million, which was of the same order of magnitude as the preceding year's.

Industrial production did not seem to exert a great influence on prices except in certain fields such as textiles, where stocks increased and enterprises had to reduce prices by about 10 per cent during the second quarter of 1952. The insufficient food supply from domestic production was compensated by large imports.

IRAN

Iranian prices, which had declined since 1949, began to increase at the end of 1950 and the beginning of 1951. Between 1950 and 1951, wholesale prices rose by 13 per cent, the cost of living less than 5 per cent, but the latter rose more rapidly during the winter of 1951/52. For the first six months of 1952 the cost of living was about 9 per cent higher than in the corresponding period of 1951, and retail prices of major

² *Dawn* (Karachi, Pakistan), 10 January 1952, quoted in International Monetary Fund, *International Financial News Survey*, 7 March 1952.

³ National Bank of Egypt, *Economic Bulletin*, No. 1 (Cairo, 1952). Non-controlled articles are defined as "those where government control, if exercised, is only in respect of profits".

⁴ *Ibid.*

consumer commodities, such as sugar, fat and cigarettes, increased greatly.

During the first part of the period under review, the effects of the stoppage of payments by the oil company and the relatively satisfactory agricultural situation offset to a large extent the pressure towards a rise in prices resulting from increased exports and stationary or declining imports. Payments made by the company for royalties and local expenditures, which had represented about one-tenth of the national income, were only partially replaced by the proceeds of direct sales of oil to the public. During recent years, 15 to 20 per cent of total budgetary expenditure had been financed by direct payments of the petroleum company to the Government. The customs revenues from imports financed by foreign exchange obtained from oil activities and the Government's receipts from resale at a premium of foreign exchange certificates constituted other important budgetary resources which disappeared following the dispute on nationalization. These were only partially replaced by drawing on reserves and on coverage of the national currency and by issuing government bonds;⁵ and credits for carrying out the seven-year plan were sharply reduced. Oil revenues were originally intended to constitute 54.2 per cent of the total receipts from December 1950 to May 1953 in the seven-year plan budget. Demand was thus weakened at the same time that supply was relatively abundant, owing to the good crops of 1950/51 and existing large stocks of imported goods.

The stagnation that resulted from this set of circumstances was somewhat alleviated by the effect of monetary and trade changes, especially at the end of the period. Exports increased during the last two years, under the stimulus of the international situation, and also of internal factors such as improved credit facilities granted to exporters, and above all higher rates for certificates of exchange. These rates, which were 7.5 to 16.25 rials for one dollar in early June 1951, were raised to 35.25 rials in January 1952 and 48 to 48.5 rials in September 1952.⁶ It was estimated that in 1951/52 the value of exports increased by 23 per cent, as compared with the previous year, while imports decreased by 21 per cent,⁷ in spite of the drawing on foreign exchange reserves, owing to the disappearance of exchange resources from the oil company and to a shortage of dollars resulting from the cancellation of the 7 September 1951 agreement with the Bank of England relative to conversion of sterling into dollars. At the end of 1951, a decree restricted the types of im-

⁵ The foreign exchange drawn from government and Bank Melli resources amounted to \$62 million between 20 March 1951 and 20 March 1952, and by August 1952 another \$9 million was utilized; a part of these funds was bought from the International Monetary Fund. The government bonds sold by the Treasury amounted to nearly 500 million rials by April 1952.

⁶ International Monetary Fund, *International Financial Statistics* (Washington, D.C.), November 1952. These rates for

ports to thirty-six, except when special permission was obtained. The unit value of imports increased in spite of the decline of prices on world markets, because of the higher rates for certificates of exchange, thus contributing to the upward trend of internal prices.

IRAQ

Prices in Iraq declined from 1948 to 1951, and then rose considerably. From 1950 to 1951, the cost of living increased by 7 per cent and wholesale prices by 10 per cent. During the second quarter of 1952, in spite of a decline in textile prices, the cost of living was 13 per cent above its level in the corresponding period of 1951.

The leading factor in this price increase was the inadequate supply of foodstuffs; the increase in prices of imported basic products and investments in the Wadi Tharthar project may also have contributed to it. The Government in 1951 introduced measures to combat the high cost of living, prohibiting exports of certain foodstuffs and grains and taking steps to regularize supply and prices through such means as buying sugar, textiles and drugs abroad, and selling them on the domestic market.

ISRAEL

In Israel the situation regarding prices was fluid in 1951/52. Up to then, as a result of the "austerity policy", pressures on prices had been to a large extent contained. At the end of 1951 and at the beginning of 1952, factors tending to increase prices prevailed. The new cost of living index reached 107 in December 1951 and 157 in June 1952 (September 1951 = 100). During the last months of 1951 and the beginning of 1952 there was speculative investment in durable goods and a marked depreciation of the value of the Israeli pound on the free market. The main factors which contributed to the inflationary pressure during 1951 may be summarized as follows.

The rate of immigration was extremely high in 1951, with 174,000 immigrants admitted, in addition to which must be counted the natural growth in population. This total population increase of about 14 per cent could not be accompanied by an expansion of production of similar magnitude. In September 1951, the Finance Ministry estimated that industrial and agricultural production had increased by 80 per cent since the establishment of the State, while the population had more than doubled.⁸ This discrepancy was not diminished in the second part of 1951, since climatic conditions severely reduced agricultural output and industrial production was somewhat hindered by various shortages, in particular the irregu-

exchange certificates are in addition to the basic official rate of 32.5 rials per dollar.

⁷ Computed from figures given by Bank Melli on the amount of credits opened in banks in Iran, or bills received by them, for imports.

⁸ Jewish Agency for Palestine, *Israel Economic Horizons* (New York), September 1951.

larity in supply of raw materials. At the same time, the effort to improve productive capacity resulted in increased capital investment, the immediate effect of which was to expand the income distributed without a counterpart in consumer goods. Investment exceeded £I 150 million in 1951, an amount which was estimated to represent approximately 37 per cent of national income, as against 33 per cent in 1950 and 25 per cent in 1949.⁹ Moreover, an important part of revenue had to be diverted to national defence expenditure.

The inflationary pressures arising from these various factors were only partially offset by the large import surplus which developed, in spite of increased exports, in the latter part of 1951. For 1951 as a whole, the balance of trade deficit reached £I 106 million as against £I 89 million the previous year; imports included a high percentage of capital goods and thus could not entirely remedy the shortage of consumer goods. It was estimated that, "calculated per head of population . . . available supplies—both local and imported—were 20 per cent lower in 1951 than in 1947".¹⁰ The balance of payments deficit, by its magnitude and tendency to increase, seemed in the later months of 1951 to reflect an inadequacy on the part of the Israel economy, in its present form, in respect to exporting sufficient goods to cover its required imports, and a discrepancy between its current productive capacity and the standard of living of its population.

Measures taken during the summer and autumn of 1951—such as the strengthening of quantitative credit controls, as well as stricter rationing, price fixing and control of prices—proved insufficient. At the beginning of 1952, the Government took a series of drastic measures, in order to stop inflation and prevent its recurrence without sacrificing the economic development of the country. The main steps were the following.

The Government presented to Parliament an ordinary balanced budget, including defence appropriations, which in previous years had been in a separate budget, not financed by ordinary resources, and presented also a development budget balanced without issuing additional Treasury bills and land bonds. Fiscal reforms were incorporated in the budget.¹¹

Multiple rates of exchange for the Israel pound were fixed on 13 February 1952: the official rate of \$2.80 per pound was retained for essential imports in order to alleviate the impact of the reform on the poorer sections of the population; a rate of \$1.40 per pound was applied to less essential goods, transfers of funds by national institutions and monetary exchanges by tourists in Israel; the rate of \$1 per pound was applied to all other imports and to most exports, as well as to investors bringing their capital to Israel.

⁹ Israel Office of Information, *Four Years of Israel's Statehood: Israel's Economy*, April 1952.

¹⁰ M. Ater, Principal Assistant to Minister of Economics, *Israel and the Middle East* (Tel Aviv), January-April 1952.

The bank-notes issued in 1948 by the Anglo-Palestinian Bank ceased to be legal tender on 9 June 1952, being exchanged for new notes issued by the Bank Leumi Le Israel. Ten per cent of the value of five-pound notes and higher denominations and of bank deposits exceeding £I 50 was subject to a fifteen-year compulsory non-negotiable loan bearing 4 per cent interest. It was announced that a special levy on property would be imposed to ensure that all property holders would share the burden of the compulsory loan.

The principle was put forward and first measures taken to ensure that the level of prices should henceforth be fixed by taking more fully into account the productivity of the most efficient enterprises in each industry and that the level of salaries should be determined by establishing a more direct relation between remuneration and output. A productivity council was established, to function under the auspices of the Government, with the Manufacturers' Association and the Federation of Labour participating.¹²

Furthermore, rationing and price control have been relaxed, with the aim of re-establishing competition wherever possible, lowering government expenditure on controls and subsidies and encouraging productivity by unrestricted sales of consumer goods. To these measures, which together form the "new economic policy", should be added the effort to slow down the flow of immigration, announced in November 1951 by a Jewish Agency statement that a selective screening programme would be put into effect.

It is too early to attempt to evaluate the results of this policy; to carry out some of the means of application will obviously require time, as in the case of the replacement of the "cost-plus" system by the "efficiency" criterion in fixing prices. Most of these measures, such as those aimed at attracting foreign investments, can not have full effect immediately. Finally, many adjustments are unavoidable; for example, during the first four months of 1952 cost of living allowances had to be revised three times as prices increased. A new grant-in-aid from the United States was received.

Some favourable symptoms have appeared recently. The number of immigrants was distinctly smaller in 1952 than in 1951, not exceeding 23,370—less than one-seventh of the number in 1951. The restrictions on credit became more effective in the period following devaluation, as prices rose and enterprises required larger working capital, especially since devaluation profits on stocks were taxable. The rate of increase in prices tended to slow down during the summer of 1952, and it was possible to put at three months the minimum interval of time between salary readjustments, as against one month before. But on the whole it still could

¹¹ See chapter 5 on public finance.

¹² Speech by the representative of Israel in the Second Committee of the General Assembly, 1952.

be estimated that "the expected continued inadequacy of imports for some time to come, resulting from the severity of the balance of payments position in the State of Israel, will of necessity make for further highly inflationary pressure. This pressure will be aggravated by a continued, even though sharply reduced, flow of immigration and by continued high development and defence expenditures . . . The solutions to the inflationary problem . . . must be sought in expanded production for home consumption and for exports".¹³

LEBANON

In Lebanon, internal prices were influenced by international commercial trends to a greater extent and with greater rapidity than in most other countries of the region, owing to closer dependence on foreign trade. Wholesale prices rose and, to a lesser extent, the cost of living after the outbreak of hostilities in Korea; from the middle of 1951 wholesale prices showed a downward tendency, except for food products, while the cost of living remained rather stable during 1951 and the beginning of 1952. The break-up of the customs union with Syria on 14 March 1950 contributed to the high cost of food products during the entire period.

SYRIA

From the middle of 1950, prices in Syria, which had declined during most of the post-war period, began to rise. From 1950 to 1951, wholesale prices of food increased by approximately 25 per cent and retail prices by 16 per cent. This increase was due to several factors, which contributed successively either to maintaining it or to amplifying it. A first factor was the expansion in exports, which exceeded imports during the last quarter of 1950 and the first quarter of 1951 by £S 36.3 million; this was the first time in post-war years that an export surplus had occurred. It was due in large part to high prices of wheat, cotton and wool on foreign markets. Another factor was the large increase in the amount of capital invested in cotton growing as a result of the boom in cotton in the spring of 1951. During the rest of 1951 and the beginning of 1952, exports decreased, an import surplus reappeared, investment in cotton became more cautious, and building activity tended to slow down. But prices kept on rising, owing mainly to poor grain crops in 1951. The increased prices of imports, which were one of the effects of hostilities in

Korea and which were in some cases a consequence of the break in the customs union, contributed to the increase during most of this period.

In the spring of 1952, prices of food, raw materials and local manufactures showed a tendency to decline. This decline was mainly due to good crop prospects, the decision by the Government to compel producers to sell wheat to the Government at a price of £S 230 per ton—one ton for each two tons exported—which encouraged producers to sell wheat in the domestic market, and the steady import surpluses connected with the change in the international economic situation. At the same time, industrial production increased, especially in the cement industry and textiles.

TURKEY

In Turkey the cost of living in 1951 was slightly below the 1950 figures, which were themselves under the 1949 level. While the cost of living showed a tendency to rise at the beginning of 1952, being for the first six months 6 per cent above the index of the corresponding period of 1951, it was on the whole remarkably stable during the period under review. This was also true in the case of the general index of wholesale prices, which increased moderately at the end of 1950 and the beginning of 1951, and which in early 1952 was at almost the same level as one year earlier owing to a decrease in prices of textiles, leather and hides, and other raw materials.

At the beginning of 1951, under the impact of Korean hostilities, wholesale prices of raw materials increased sharply, being for the full year 21 per cent above the 1950 level. Other factors tending to increase demand were the admission to Turkish territory, mainly during the latter part of 1950 and 1951, of 250,000 people from Bulgaria who had to be provided with food, clothing and housing; the high level of investments; and the increase in unit value of imports. These various factors, however, did not produce any marked increase in wholesale prices or cost of living, as they were largely offset by the effects of extremely good crops, especially in 1951, coupled with a great increase in imports in 1951 and the beginning of 1952. Import surpluses were £T 211.0 million in the first six months of 1952 as against £T 48.4 million in the corresponding period of 1951. While an increased part of these imports consisted of capital goods, imports of consumer goods also rose. The action of the Government during the whole period contributed to stability of prices: a ceiling was imposed on selling prices of raw materials, and purchasing and selling prices were controlled.

¹³ *Revenue Administration and Police in Israel* (ST/TAA/K/Israel/1), report prepared for the Government of Israel by an expert appointed by the Technical Assistance Administration of the United Nations.

Chapter 5

PUBLIC FINANCE¹

The budgetary and fiscal policies of the national governments of the Middle East are of especial significance in the economies of their countries. In general, municipalities constitute the only form of local government, and their financial administration is either directed by the central government or tightly supervised and controlled by it. The tax jurisdiction of local governments is limited to the assessment of city property taxes, certain minor duties and licence fees, and their expenditures consist of outlays for city functions only, with little or no control over education, health and welfare services. Moreover, the financial importance of the national government is accentuated by large govern-

ment land holdings and, in some countries, notably Afghanistan, Iran and Turkey, by the expansion of government functions into industry, commerce, banking and other fields. Similarly, because of the absence or inadequacy of private educational and health institutions, social services have been limited largely to those which the national government has provided, and these have been fairly uniform throughout each country. In Israel, however, non-governmental agencies, such as "National Institutions", conduct financial transactions of great magnitude, such as financing immigration costs and providing welfare services.

Recent Trends

Expanding expenditures in post-war years reflected to a large extent the progressive adjustment of national budgets to the higher price levels which resulted from war-time inflation. Government expenditure in the post-war period increased in real terms, while the increase in government appropriations during the war had not kept pace with the rise in prices. Expansion of the development activities of the governments, together with an increase in social services and in military expenditure—which remained at a high level in some countries and increased quite steeply in others—required spending beyond the actual revenues of the governments.

During the post-war years the rise in government outlays was met in Egypt, Iraq and, to a lesser extent, in Syria by surplus funds accumulated during the war. In Israel and Turkey deficits were covered by borrowing and by financial assistance from abroad. In recent years, and especially since 1950, increased oil revenues in Bahrein, Iraq, Kuwait and Saudi Arabia have provided sizable funds for the financing of government development projects. In Iran, following the nationalization of the oil industry, the revenue from oil was cut early in 1951 and this caused further deterioration in the country's financial situation. Attempts have been made recently to meet its financial difficulties by use of reserve funds, by domestic borrowing and by levying new taxes and increasing the efficiency of tax collection.

¹ Prepared by the Fiscal Division of the United Nations Department of Economic Affairs. In this section emphasis is on fiscal matters directly related to economic development in the post-war years. For fuller discussion see the following United

In Egypt, the Government substantially reduced the deficits of 1948 and subsequent years by not spending the full amounts appropriated for defence capital outlay.

Reorganization of government revenue systems has assumed high urgency in public finance policy during the post-war years. There has been a growing awareness of the monetary and inflationary implications of budgetary deficits. Remedy has been sought in increasing tax revenues rather than in decreasing expenditures since a high level was deemed necessary to finance the expanding scope of government services. Furthermore, attempts were made to improve equity aspects of the tax structure and to adjust taxes to the requirements of economic development.

Fiscal activities in recent years have been concerned principally with (a) reorganization of the tax structure with the objective of increasing yields, improving the distribution of the tax burden and giving more flexibility to taxation; (b) introduction of measures to implement government economic policies by encouraging development and maintaining price stability.

TAX MEASURES

Reorganization of the tax structure, and particularly progressive taxation of land and of income derived

Nations reports: Public Finance Information Papers, *Egypt* (ST/ECA/SER.A.1, 1950); *Iran*, (ST/ECA/SER.A.4, 1950); *Iraq* (ST/ECA/SER.A.5, 1951); also the forthcoming publication, *Revenue Administration and Policy in Israel*. See also United Nations, *Statistical Yearbook*, section on public finance.

from agricultural production received prime consideration in most countries of the Middle East, especially in Egypt, Iran and Lebanon. In general, the countries of the region have attempted to increase the yield from direct taxes and to avoid increased consumption levies, which had constituted the mainstay of government revenue. Such reorganization was also considered desirable in the interest of social equity in the distribution of the tax burden, a matter which acquired a higher degree of urgency after the experiences of the war-time inflationary period. A number of countries of the Middle East, one after another, replaced their existing income taxes, mostly fees on occupations, by a system of progressive taxation, some on a schedular and some on a global basis, with inclusion of minimum exemptions and dependency allowances. In Israel, the inflationary trend had somewhat impaired the equity features of the income tax. For this reason a start has been made towards a complete revision of the tax structure, which also involves strengthening indirect taxation. In conjunction with the recent currency devaluation, a number of corollary measures have been introduced.

However, despite the legislative measures taken in these countries, the tax revenues have not come up to expectation and, except in Israel and Turkey, direct taxes have not yielded more than a small fraction of tax revenues. Increasing consideration is being given to reform of tax administration and collection, which has been partly hampered by the scarcity of trained tax officials.

Another weakness which has impeded the smooth functioning of fiscal systems has been their lack of flexibility in the face of price fluctuations. Most tax levies have been in the form of fixed sums of money, and *ad valorem* taxes have been very limited. In times of rising prices, government revenues have remained at the same level, while higher expenditure was necessary, and when prices were declining the tax burden increased. As a corollary to the rise in prices of imported and domestic consumer goods, the level of *per quantum* tariffs and consumption taxes has declined in real terms. Consequently, fixed duties had to be increased at short intervals, rendering revenue administration and budgetary planning extremely complicated.

During the post-war period, the flexibility of the tax structure has been increased by expansion of coverage and by steepening rates in income and corporation taxes and in death duties. In some countries a shift has been made to *ad valorem* taxes in excises, turnover taxes and tariff duties. In new land tax laws introduced in Egypt, Iran and Lebanon, special consideration has been given to fluctuations in the prices of agricultural products. The cadastral revision of the land tax is to be made more frequently and, in addition, special revision is allowed by the tax department on its own discretion or

upon the request of taxpayers, when values fluctuate beyond a limited range. Lack of proper machinery and of methods for valuation still remains a handicap in the collection of *ad valorem* taxes.

FISCAL POLICY AFFECTING DEVELOPMENT

Among the fiscal measures taken by governments to influence the course of economic activities, the oldest and most important is the tariff protection given to domestic industries, protection which has in many cases been strengthened in recent years. On the other hand, importation of capital goods such as machinery, and of fertilizer and seed, was made wholly or partially tax-exempt, particularly in Egypt, Israel and Turkey. Simultaneously, exports were encouraged by a series of foreign exchange and tax incentives. Post-war quota systems and foreign exchange regulations in effect in many countries, especially Iran, Israel and Syria, were aimed *inter alia* at subsidizing exports and essential imports and penalizing non-essential imports. In Israel, legislative measures have been introduced in recent years to allow tax reductions in a variety of forms to foreign and domestic investors. In Iran the reorganization of the tariff system in 1950 led to complete abolition of all export duties, exemption from import duties for agricultural machinery and essential drugs, tariff reductions on various imported capital goods and increases in import duties on competitive foreign products. These measures were combined with administrative steps to improve the classification of goods, to unify overlapping duties collected by the customs administration on different accounts and to revise the valuation system for the increased number of *ad valorem* duties.²

Most of the Middle East countries have lowered the prices of certain essential items through subsidies. Governments, for example, have established a system for the compulsory delivery of a part of the wheat crop at a fixed purchase price. This part in turn has been sold, usually at a loss, to mills, bakers and retailers, exclusively for making and distributing bread to consumers. Such a policy has reduced average prices for essential food items. However, it has been contended that the policy has greatly benefited city dwellers, while certain classes of farmers, particularly sharecroppers, have sustained losses as a result of the price differential between the government monopoly purchase price and the going market price for that part of the food output which was delivered to the government. Since most of the government outlay of funds for financing the price scheme has been covered by regressive taxation, it is difficult to gauge the ultimate impact and the redistributive effect of the policy.

² Restrictive measures to reduce imports taken in Iran at the end of 1951 did not alter the structure of the tariff system; such measures are briefly described in chapter 6 on foreign trade.

Budgetary Operations

NET BUDGETARY POSITION

Egypt, which had budgetary surpluses during the war and immediate post-war period, has encountered difficulties in balancing its budget in recent years owing to an over-all increase in expenditure. Apart from transfer from reserve funds, the budget resulted in a deficit of about £E 15 million in 1948/49 (table 42). Deficits in 1949/50 were reduced to about £E 5 million and were about the same in 1950/51. Outlays for public works allocated to the different ministries were kept below the level of the original appropriations and, as a result of this policy, budget deficits were reduced substantially. However, the proportion of expenditure for new works in the budgets of 1949/50 and 1950/51 was close to 20 per cent and 17 per cent, respectively, of total expenditure, compared with 15 per cent in 1948/49. The budget estimates for 1951/52 showed a deficit of £E 16.25 million, but the preliminary budget estimates for 1952/53 indicated that the budget was expected to balance.

During the Second World War, the Government of Iran experienced deficits which in some years were substantial, but in the immediate post-war years deficits were lower. As a result of nationalization in March 1951, oil royalties were completely cut off. Consideration has since been given to increasing receipts by raising rates on progressive taxes and by introducing new levies on capital and land. At the same time, expenditure has been reduced through economies in various ministries and through scaling down development appropriations. Recent deficits have been covered in part by utilizing a fraction of the currency cover and by the issuance of bonds. The Government enforced further economy measures and increases in taxes in the 1952/53 fiscal year. One factor which added to the financial burden of the Government was the financing of that part of the outlays incurred in connexion with the nationalized oil industry which could not be met by the sale of oil in the domestic market. Statements of closed accounts are not available; actual revenues usually fluctuate widely from the original estimates, while actual expenditure is kept very close to the original appropriation.

Continued budgetary surpluses in Iraq during the war years were replaced by deficits in the immediate post-war period. However, these deficits were to some extent compensated by advances received from the oil companies. In recent years increased revenues from oil have offset low tax yield and have enabled the Government to meet the financial requirements of its extensive development projects. The prospect of further increase has influenced the current government policy in reducing the taxes called "istihlak" on land, land produce and animals.

Since the establishment of the State of Israel, its Government has been confronted with continuing deficits, which have been met by financial assistance from abroad and by floatation of bonds. Excluding such borrowing, heavy deficits occurred in the actual accounts for 1949/50 and 1950/51. The estimates for 1951/52 and 1952/53 also registered large deficits.

Until the end of 1948/49, the last year for which actual closed accounts were available, Jordan's budget, including expenditures of the Arab Legion, showed sizable deficits, but expenditure for the upkeep of the Arab Legion was fully compensated by grants-in-aid received from the United Kingdom. Complete data on United Kingdom grants for recent years are not available, and it therefore cannot be determined to what extent the budgetary deficits which occurred have been met from this source.

Not taking into consideration any transfers from reserve funds, the Lebanese budgets in 1950 and later years have resulted in small deficits. The budget estimates for 1951 and 1952, according to traditional budgetary procedure, show a balance between receipts and expenditures.

In the case of Syria, budgetary data available since 1946 consist of estimates only; no actual accounts have been published. These budget estimates, according to normal practice, are shown as balanced. However, available incomplete information leads to the conclusion that deficits occurred in the post-war years, especially in 1949. In that year additional appropriations were made for defence, to be met by special taxes introduced on imports and on some consumer goods. However, these special taxes were abolished before they yielded any sizable revenue. The deficits which occurred were covered by borrowing from the Banque de Syrie et du Liban. There are indications that in subsequent years the Syrian Government encountered difficulties in meeting rising expenditures, particularly for defence and development. Data are not available to determine the budgetary deficits for these years.

In Turkey budget deficits continued throughout the war and, to a lesser extent, into the post-war years. The budget estimates for 1951/52 and 1952/53 showed sizable deficits which would largely be covered, as before, by borrowing from the Central Bank and other banking institutions and by financial assistance from abroad. The general budget of Turkey does not reflect all government financial transactions; there are a number of separate subsidiary budgets for government enterprises operating in the fields of mining, industry and commerce. There has not been a consolidated account of aggregate financial transactions, and the net result cannot be assessed on the basis of available data.

Table 42. Government Receipts and Expenditure in Selected Countries, 1939 and 1947 to 1953
(Millions of national currency)

Country, unit and year	Expenditure	Receipts	Surplus, or deficit (-)	Country, unit and year	Expenditure	Receipts	Surplus, or deficit (-)
Egypt (Egyptian pound):				Jordan (Jordan dinar):			
1939	40.39	37.62	-2.77	1939	0.548	0.349 ^b	-0.199 ^b
1947	102.49	109.96	7.47	1947	3.182	1.945 ^b	-1.237 ^b
1948 ^a	94.55	98.93	4.38	1948	3.670	2.087 ^b	-1.583 ^b
1949	157.69	142.48	-15.21	1949	4.433	2.715 ^b	-1.718 ^b
1950	163.81	158.54	-5.27	1950 E.	3.548	2.679	-.869
1951	190.20	184.74	-5.46	1951 E.	6.543	4.450	-2.093
1952 E.	231.45	215.20	-16.25	1952 E.	6.682	5.205	-1.477
1953 E.	206.00	206.00	—	1953 E.	5.716	4.781	-.935
Iran (Iranian rial):				Lebanon (Lebanese pound):			
1939 E.	1,375	1,376	1	1939	6.37	7.20	0.83
1947 DE.	5,995	5,464	-531	1947	60.72	85.53	24.81
1948 DE.	8,021	5,559	-2,462	1948	70.07	78.66	8.59
1949 E.	6,904	7,154	250	1949	83.40	87.12	3.72
1950 DE.	10,687	7,785	-2,902	1950	84.52	83.21	-1.31
1951 DE.	10,060	10,060	—	1951 E.	89.45	89.23	-0.22
1952 DE.	10,152	10,153	1	1952 E.	94.25	94.16	-0.09
Iraq (Iraqi dinar):				Syria (Syrian pound):			
1939	9.04	7.84	-1.20	1939	10.85	11.43	0.58
1947	25.82	25.82	—	1947 E.	125.82	119.70	-6.12
1948	27.61	24.02	-3.59	1948 E.	127.91	124.81	-3.10
1949 E.	29.62	23.37	-6.25	1949 E.	130.71	130.71	—
1950 E.	31.55	27.16	-4.39	1950 E.	142.80	138.00	-4.80
1951 E.	24.10	24.21	0.11	1951 E.	67.75	67.75	—
1952 E.	29.10	28.36	-0.74	1952 E.	265.00	259.00	-6.00
1953 E.	35.91	36.13	0.22	Turkey (Turkish pound):			
Israel (Israeli pound):				1939	311.1	266.9	-44.2
1949	25.19	17.20	-7.99	1947	1,304.2	1,258.5	-45.7
1950	88.87	38.15	-50.72	1948	1,406.4	1,291.8	-114.6
1951	126.74	68.50	-58.24	1950 ^c	1,591.8	1,514.2	-77.6
1952 E.	184.21	107.30	-76.91	1951	1,422.9	1,389.0	-33.9
1953 E.	249.56	168.30	-81.26	1952 E.	1,579.8	1,345.0	-234.8
				1953 E.	1,750.9	1,551.5	-199.4

Source: Compiled from government budget documents and official statistical yearbooks. Figures represent closed accounts, unless otherwise noted as follows: E, estimates; DE, draft estimates.

Data refer only to central government operations and include current transactions and capital expenditures as shown in the general budget. Receipts exclude proceeds from loans; debt redemption is excluded from expenditure whenever ascertainable. For further details concerning classifications, see general note in United Nations, *Statistical Yearbook, 1951* (Sales No.: 1951.XVII.5), section on "Public Finance."

^a Figures for ten months.

^b Including United Kingdom grants as follows (in millions of Jordan dinars): 1939: 0.180; 1947: 1.465; 1948: 2.109; 1949: 2.066.

^c Figures for fourteen months.

Country notes (see also appropriate notes for tables 43 and 44):

Egypt. Financial year ending in April in 1939 and 1947, February in 1948 to 1951, and June in 1952 and 1953. Figures are for general budget only, including gross expenditures and receipts of public undertakings except for 1939, when railway, telegraph and telephone accounts were excluded from the general budget. Closed accounts represent cash receipts and cash payments. Expenditure includes debt redemption.

Iran. Financial year ending 20 March. Most data refer to the general budget only. The figures from 1947 include extraordinary

receipts (mainly oil royalties and special taxes) and extraordinary expenditures (railway, factory and highway construction, army supplies, etc.). The railway and tobacco monopoly accounts are included on a gross basis. Expenditure excludes debt redemption.

Iraq. Financial year ending 30 April. Figures represent the general budget, including the ordinary and capital budgets, and the gross accounts of the post, telegraph and tobacco monopoly. Only net results of the public undertakings outside the general budget are included. Closed accounts represent cash receipts and disbursements.

Israel. Financial year ending 31 March. Cash payments and receipts of the central government only; excluding extraordinary defence outlays. Central government transactions do not reflect outlays directly financed by national institutions such as the Jewish National Fund, Keren Hayesod and the Jewish Agency. Ordinary and development budgets are combined, and loans are excluded.

Jordan. Financial year ending 31 March. Receipts exclude United Kingdom grants except as indicated; expenditure includes outlays in connexion with United Kingdom grants.

Lebanon and Syria. Fiscal year ending 31 December, except for Syria in 1951 (half-year ending 30 June) and 1952 (18 months). Closed accounts are prepared on accrual basis. Transfers from reserve fund excluded.

Turkey. Financial year ending 31 May in 1939, 31 December in 1947 and 1948, and in February in 1950 to 1953. Data refer only to the general budget, which includes receipts from monopolies, railways and post and telegraph, etc.

RECEIPTS AND EXPENDITURES

Receipts

With the exception of Israel and, to some extent, Turkey, where the income tax yields about one-fourth of total revenues, the yield from progressive income taxes has ranged between 10 per cent and 15 per cent of total receipts (table 43). Taxes on agriculture have consisted of taxes on land and taxes on agricultural commodities sold in domestic markets. In Egypt, Iran, Israel and Lebanon, the major tax is on annual land value (rent). In Iraq, Syria and Turkey, agricultural

taxes consist predominantly of taxes levied on agricultural products or farm animals. The land tax yielded only a small percentage of total receipts. Because revisions were slow, taxes, which were assessed in money terms, lost their significance as prices followed an upward trend over the past decade. Taxes on agricultural produce are yielding close to 20 per cent of total receipts in Iraq and Syria as a result of the fact that such taxes have increased as prices of agricultural commodities rose. In Turkey, taxes on animals do not yield more than 2 per cent of the total revenue.

Table 43. Major Components of Government Receipts in Selected Countries, 1939 and 1947 to 1953
(As percentage of total receipts)

Country and year	Taxes on income and wealth	Taxes on land, land produce and livestock	Customs receipts	Other taxes	Total tax receipts	Oil revenue	Other revenue
<i>Egypt:</i>							
1939.....	1	16	42	10	69	—	31
1947.....	14	5	20	31	70	—	30
1948 ^a	13	5	23	32	73	—	27
1949.....	14	4	29	28	75	—	25
1950.....	11	4	28	33	76	—	24
1951.....	11	4	—59—	—	74	—	26
1952 E.....	15	8	—55—	—	78	—	22
1953 E.....	16	7	—53—	—	76	—	24
<i>Iran:</i>							
1939 E.....	11	—	31	39	81	—	19
1947 DE.....	9	2	22	34	67	12	21
1948 DE.....	9	4	24	32	69	12	19
1949 E.....	8	4	27	33	72	6	22
1950 DE.....	11	4	21	34	70	12	18
<i>Iraq:</i>							
1939.....	6	11	34	10	61	25	14
1947.....	9	17	20	23	69	9	22
1948.....	9	15	26	20	70	10	20
1949 E.....	10	16	27	22	75	9	16
1950 E.....	10	16	29	22	77	6	17
1951 E.....	11	16	31	25	83	—	17
1952 E.....	8	18	33	18	77	6	17
<i>Israel:</i>							
1949.....	24	—	37	29	90	—	10
1950.....	24	—	27	42	93	—	7
1951.....	28	—	13	41	82	—	18
1952 E.....	29	—	12	42	83	—	17
1953 E.....	28	—	11	49	88	—	12
<i>Jordan:</i>							
1939.....	...	...	37	39	76	—	24
1947.....	...	...	50	26	76	—	24
1948.....	...	...	45	20	65	—	35
1949.....	...	...	56	18	74	—	26
1950 E.....	...	...	50	22	72	—	28
1951 E.....	...	...	44	22	66	—	34
1952 E.....	...	...	42	20	62	—	38
<i>Lebanon:</i>							
1939.....	17	—	60	—	77	—	23
1947.....	13	1	37	41	92	—	8
1948.....	12	2	32	45	91	—	9
1949.....	15	1	30	46	92	—	8
1950.....	15	1	25	50	91	—	9
1951 E.....	16	1	24	48	89	—	11
1952 E.....	15	1	24	48	88	—	12

Table 43 (cont'd)

Country and year	Taxes on income and wealth	Taxes on land, land produce and livestock	Customs receipts	Other taxes	Total tax receipts	Oil revenue	Other revenue
<i>Syria:</i>							
1939.....	10	30	1	36	77	—	23
1947 E.....	12	17	25	38	92	—	8
1948 E.....	12	15	22	43	92	—	8
1949 E.....	9	13	28	36	86	—	14
1950 E.....	11	14	20	38	83	—	17
1951 E.....	8	10	26	39	83	—	17
1952 E.....	12	18	22	34	86	—	14
<i>Turkey:</i>							
1939.....	25	9	18	30	82	—	18
1947.....	30	2	13	42	87	—	13
1948.....	31	2	9	46	88	—	12
1950 ^b	31	2	9	50	92	—	8
1951.....	30	2	8	49	89	—	11
1952 E.....	24	2	10	55	91	—	9
1953 E.....	22	2	11	58	93	—	7

Source: Government budgets and official statistical yearbooks. Figures represent closed accounts unless otherwise noted, as follows: E, estimates; DE, draft estimates.

^a Figures for ten months.

^b Figures for fourteen months.

Country notes:

Egypt. Financial year ending in April in 1939 and 1947, February in 1948 to 1951 and June in 1952 and 1953. Taxes on income and wealth: schedular income tax, taxes on general income, excess profits, succession, property transfers, etc. Taxes on land, land produce and livestock: mostly taxes on land. Customs receipts: duties on imports and exports, additional and special customs receipts; in 1951, 1952 and 1953 shown jointly with "other taxes". Other taxes: excises, general consumption taxes, registration and stamp duties, etc.; for 1951, 1952 and 1953, including customs receipts. Total tax receipts: excluding transfers from reserve fund. Other revenue: gross receipts of public undertakings and administrative fees, etc.

Iran. Financial year ending 20 March. Taxes on income and wealth: taxes on income, inheritances, etc. Taxes on land, land produce and livestock: taxes on farm produce until 1944, land tax since 1946. Customs receipts: receipts from regular tariff duties on imports and exports, other special and additional customs duties and fees. Other taxes: excise taxes and receipts from tobacco monopoly, registration, stamp duties, etc. Oil revenue: only the part of oil receipts included in the general budget. Other revenue: including net results of public industries; gross accounts of the railways; administrative receipts; gross receipts from public domain; investment income.

Iraq. Financial year ending 30 April. Taxes on income and wealth: taxes on income, excess profits, property, etc. Taxes on land, land produce and livestock: taxes on land, agricultural products and livestock. Customs receipts: taxes on imports and exports, transit duties, etc. Other taxes: excise taxes, gross receipts of tobacco monopoly, stamp duties, etc. Total tax receipts: excluding advances and credits. Oil revenue: only the part included in the general budget, not including advances.

Israel. Financial year ending 31 March. Taxes on income and wealth: income and inheritance taxes. Taxes on land, land produce and livestock: including tax on rural property, which yields only slight revenue. Other taxes: excises, stamp duties, licences and land registry, etc. Total tax receipts: receipts of development and ordinary budgets combined, excluding loans. Other revenue: net results of public undertakings and special and miscellaneous revenues.

Jordan. Financial year ending 31 March. Customs receipts: customs and excises. Other taxes: excise taxes and licence fees, etc. Total receipts: not including United Kingdom grants. Other revenue: judicial and administrative fees, gross receipts of public undertakings and public domain, etc.

Lebanon. Financial year ending 31 December. Taxes on income and wealth: taxes on income, buildings, etc. The pre-war classification for this heading is not comparable with the post-war items. Taxes on land, land produce and livestock: taxes on land and on animals. Customs receipts: custom duties; until the end of 1943 receipts from Lebanese-Syrian customs union were transferred to the "Intérêts communs" budget, administered by the Mandate authorities. Beginning in 1944 and until early 1950, net customs receipts were divided between the two countries (56 per cent for Syria and 44 per cent for Lebanon). These receipts were first transferred to the reserve funds, from which withdrawals were made. In March 1950 the customs union was dissolved. Other taxes: general consumption taxes, tobacco monopoly and miscellaneous taxes, registration fees, stamp duties, judicial and notary fees. Total tax receipts: excluding transfers from reserve funds. Other revenue: including profits of state industrial enterprises, public domain.

Syria. Financial year ending 31 December except in fiscal 1951 (six months ending 30 June). Taxes on income and wealth: taxes on industrial, commercial and non-commercial income, and on salaries and wages, property transfer and registration tax, etc. Taxes on land, land produce and livestock: taxes on land, animals and agricultural produce. Customs receipts: see note on customs receipts under "Lebanon". Other taxes: general consumption taxes, stamp duties and taxes on property transfers, etc. Other revenue: including receipts from public domain and industrial enterprises.

Turkey. Financial year ending 31 May in 1939, 31 December in 1947 and 1948, and in February in 1950 to 1953. Taxes on income and wealth: taxes on income, on corporations, on artisans, succession duties and various taxes on income for special purposes. Taxes on land, land produce and livestock: taxes on animals and, in 1939, wheat. Customs receipts: export and import duties and additional charges. Other taxes: taxes on general consumption, turnover, property transfer, monopoly duties, stamp and registration taxes, etc. Turnover taxes in Turkey yield substantial revenue, about one-tenth of the total revenue in pre-war years, and approximately one-fifth in post-war years. Total tax receipts: in 1947, excluding £T 279.9 million, proceeds from currency devaluation. Other revenue: including revenue from public domain, government enterprises and miscellaneous receipts.

While in Israel and Turkey customs receipts yield only about 10 per cent of total revenues, in other countries of the Middle East income derived from this source has usually yielded from one-fifth to one-third of the total. In most countries of the region, the tax load is on mass consumer goods; it takes the form of consumption duties, excises, fiscal monopolies and, in Turkey, turnover taxes. In almost all of them, non-tax receipts, such as surpluses from public undertakings, sale or use of government land and various administrative fees, have yielded between 10 and 25 per cent of total revenues. In Iran (until 1951) and in Iraq, between 10 per cent and 20 per cent of the receipts recorded in the general budget were derived from oil revenue, while in other oil-producing countries oil revenue constituted the bulk of government receipts.

Expenditures

In the post-war years, expenditure in connexion with public debt service has not constituted a sizable part of the total, except in Turkey, where it has remained about 15 per cent of all expenditure (table 44). In

Egypt, Israel and Iran, such expenditure has ranged from one to 3 per cent of the total in recent years. While expenditure for education has not constituted more than 5 per cent of the total in Israel and Jordan, it has been between 10 and 15 per cent in other countries, and its relative importance has increased in recent years. Expenditure for health services has accounted for 3 to 5 per cent of the total in most countries, and close to 10 per cent in the budget appropriations of Iraq for the past two fiscal years. Other expenditures for social purposes during the past two years consisted largely of appropriations for social security in the case of Egypt, while in Israel financial assistance was given to immigrants by the Government. Expenditure for defence in the budget estimates of recent years accounted for about 20 per cent of the total in Egypt, Iran and Lebanon, between 25 and 30 per cent in Iraq and Turkey and over one-third in Syria. In Israel, defence expenditure shown in the general budget constitutes about 20 per cent of the total; to this should be added extra appropriations not recorded in the general budget, the amount of which cannot be ascertained on the basis of published data.

Table 44. Major Components of Government Expenditure in Selected Countries, 1939 and 1947 to 1953

(As percentage of total expenditure)

Country and year	Public debt service	Education	Health	Social welfare	Defence	Other current expenditure	Capital expenditure
<i>Egypt:</i>							
1939.....	11	11	6	—	12	60	23
1947.....	5	11	6	2	8	68	11
1948*.....	4	13	6	1	9	67	14
1949.....	3	10	5	2	21	59	15
1950.....	4	12	5	1	21	57	20
1951.....	3	11	4	1	22	59	17
1952 E.....	3	12	4	3	21	57	24
1953 E.....	3	13	4	2	18	60	16
<i>Iran:</i>							
1939 E.....	—	6	3	—	26	44	21
1947 DE.....	2	8	3	—	26	54	7
1948 DE.....	1	7	3	—	19	58	12
1949 E.....	1	9	3	—	24	45	18
1950 DE.....	1	9	2	—	23	50	15
<i>Iraq:</i>							
1939.....	—	8	4	—	18	27	43
1947.....	—	7	4	—	21	56	12
1948.....	—	8	2	—	16	61	13
1949 E.....	—	8	6	—	21	54	11
1950 E.....	—	7	6	—	21	57	9
1951 E.....	—	16	8	—	29	47	—
1952 E.....	—	15	9	—	26	50	—
<i>Israel:</i>							
1949.....	—	2	4	9	56	27	2
1950.....	2	2	4	9	27	16	40
1951.....	4	4	3	7	12	18	52
1952 E.....	3	4	3	8	21	16	45
1953 E.....	2	5	3	4	18	22	46

Table 44 (cont'd)

Country and year	Public debt service	Education	Health	Social welfare	Defence	Other current expenditure	Capital expenditure
<i>Jordan:</i>							
1939.....	6	5	3	—	36	32	18
1947.....	—	1	1	—	78	17	3
1948.....	—	1	1	—	67	26	5
1949.....	—	1	1	—	68	26	4
1950 E.....	—	2	2	—	17	67	12
1951 E.....	—	3	2	—	25	62	8
1952 E.....	—	5	4	—	27	54	10
<i>Lebanon:</i>							
1939.....	—	8	4	—	—	70	18
1947.....	—	8	6	—	16	44	26
1948.....	—	8	5	—	19	43	25
1949.....	—	8	6	—	21	44	21
1950.....	—	9	6	—	17	44	24
1951 E.....	—	12	5	—	20	43	20
1952 E.....	—	12	5	—	17	48	18
<i>Syria:</i>							
1939.....	—	15	3	—	—	63	19
1947 E.....	—	14	3	—	19	38	26
1948 E.....	—	16	3	—	21	38	22
1949 E.....	—	17	3	—	27	38	15
1950 E.....	—	17	3	—	33	36	11
1951 E.....	—	19	3	—	33	42	3
1952 E.....	—	19	3	—	42	29	7
<i>Turkey:</i>							
1939.....	18	5	4	—	30	30	13
1947.....	15	7	3	—	37	31	7
1948.....	15	11	3	—	35	29	7
1950 ^b	12	12	4	—	33	28	11
1951.....	15	12	4	—	29	33	7
1952 E.....	14	12	4	—	29	33	8
1953 E.....	12	11	4	—	29	34	10

Source: Government budgets and official statistical yearbooks. Figures represent closed accounts unless otherwise noted: E, estimates; DE, draft estimates.

^a Figures for ten months.

^b Figures for fourteen months.

Country notes:

Egypt. Financial year ending in April in 1939 and 1947, February in 1948 to 1951 and June in 1952 and 1953. Expenditure under each heading includes also appropriations for new works. The total appropriations of all departments for new works are shown separately under "capital expenditure". Public debt service includes some debt redemption. Social welfare refers to expenditure of Ministry of Social Affairs. Other expenditure includes gross expenditures of public undertakings and monopolies, general administrative expenditure, government employees' pensions. Capital expenditure includes new works (included in all appropriations) and expenditures for five-year development plan.

Iran. Financial year ending 20 March. Capital expenditure includes expenditures of the Ministry of Roads, outlays for various construction projects and public works, capital participation in enterprises and, since 1949, development expenditure.

Iraq. Financial year ending 30 April. Capital expenditure includes public works financed mainly by oil royalties until the end of 1950. Since then all capital expenditure has been transferred to the Development Board and not included in the budget.

Israel. Financial year ending 31 March. Public debt service includes redemption. Social welfare: including

social insurance, relief to immigrants, rehabilitation. Defence: ordinary expenditure and special appropriations only. Other current expenditure: including net surplus of public undertakings and general administrative expenditure. Capital expenditure: including development budget.

Jordan. Financial year ending 31 March. Public debt service: payments in connexion with the Ottoman debt covered by United Kingdom grants. Defence: including army, police, prison and frontier forces, mostly covered by United Kingdom grants. Other expenditure: including administrative expenditure. Capital expenditure: including recurring, non-recurring and additional appropriations.

Lebanon. Financial year ending 31 December. Capital expenditure: public works, including expenditure of the Ministry of Public Works and, from 1947, including public works appropriations of the Ministry of Agriculture.

Syria. Financial year: see note to table 42. Since 1944 the budget of Jebel Druze has been included, and since 1945 the budget of Latakia. Since 1947, post and telegraph expenditures have been excluded. Capital expenditure: Ministry of Public Works.

Turkey. Financial year ending 31 May in 1939, 31 December in 1947 and 1948, and in February in 1950 to 1953. Public debt service: includes ordinary debt repayment in 1947; excludes extraordinary debt repayment financed by proceeds from currency devaluation, amounting to £T 260 million. Capital expenditure: appropriations of the Ministry of Public Works, not including large capital outlays of the annexed budgets and autonomous government enterprises.

Judging from budgetary data, capital expenditures by the governments of the Middle East countries as shown in the general budgets constituted about one-sixth of the total in Egypt, Iran and Lebanon, and one-tenth of the total in Iraq, Jordan, Syria and Turkey.

If the development budget of Israel is included in the general budget, capital expenditures consisted of close to 50 per cent of the total. In addition to appropriations in the general budget, in many countries such as Iran and Iraq and, to some extent, Syria and

Turkey, expenditures for development projects are administered by development authorities with financial autonomy. If expenditures for such projects are added to capital appropriated in the general budget for various ministries, the proportion of aggregate capital outlay to total government expenditure is much higher in these countries. In Egypt, the five-year development plan has been directly financed by reserve funds, and annual expenditure in this connexion is small compared with the total outlay in the general budget on public works.

Significant Tax and Administrative Revisions

TAXES ON INCOME AND WEALTH

In Egypt, the income tax law of 1939, which had been modified in succeeding years and in the post-war period, was further revised in 1950 and 1951. In 1950, in addition to the schedular income tax then in force, a global or over-all income tax, based on aggregate income derived from all sources and having progressive rates, was introduced; the rates were increased from the original maximum of 50 per cent in 1950 to 80 per cent in the fiscal year 1952/53. The schedular rate on income derived from industrial and commercial profits was increased to a flat rate of 17 per cent and on profits derived from transactions on immovable property to a flat rate of 16 per cent. The coverage of the schedular income tax on land rent was also expanded to apply to the total value of annual rent, compared with the previous practice, which made only 50 per cent of that value subject to taxation.

In Syria, the schedule of rates for the newly established income tax was modified. Rates on income from professions and from industrial and commercial activities were increased from a maximum of 30 per cent in 1949 to a maximum of 36 per cent in 1951, and the basic exemption was reduced.

In Turkey, the income tax system was completely overhauled, and three types of rates were introduced for taxing personal and corporate income and income of artisans. In 1950, a progressive schedule, with a maximum rate of 35 per cent, was set up for personal incomes and a flat rate of 10 per cent was set on corporate incomes.

In Israel, the need for higher revenue gave rise to an increase in the progressive rates of personal and corporate income taxes in fiscal 1948/49 and 1949/50. A land betterment tax on profits from the sale of real estate was introduced. In 1950/51 the income tax law was amended, and a special law to encourage investment was enacted to provide tax incentives for the pur-

³ Provisions included partial or total exemption of profits from goods exported, deductions for deposits in approved banks, favourable tax treatment for additional wages earned on account of increased efficiency in production, adoption of accelerated depreciation rates for new machinery, establishment of a maxi-

pose of promoting investment and the production of export goods.³ The scope of indirect taxes was also widened by increasing excise rates and including a wider range of commodities under the luxury tax. In 1952/53 the income tax underwent important revisions with a view to reducing impediments to production and increasing tax equity and collection efficiency. Measures were taken to soften the sharply progressive rate schedule, especially for the lower income groups, and to establish preferential tax treatment in respect of overtime wages. To offset these tax concessions, the income tax base was widened to include capital gains and irregular and occasional incomes. In order to improve collection efficiency, the system of withholding at source was extended to all categories of taxpayers, and automatic penalties and fines were provided.

Attempts were made in the region to reorganize existing inheritance and death duties or, if such taxes were not in force, to introduce them. In Egypt, an inheritance tax with progressive rates was introduced.

In Syria, rates were increased and varied brackets and schedules were established for different types of inheritors. In addition, new gift and donation taxes were adopted. In Iran, increases in tax rates and revisions in death duties were under consideration in the Ministry of Finance. In Israel, a new inheritance tax system was introduced in 1949/50.

TAXES ON LAND

In the Middle East a land tax was traditionally levied in the form of a flat tax on the capital value of land and on revenue derived from it. Since this tax theoretically applied to both land value and agricultural income, no property taxes were levied on rural land, and income derived from agricultural production was not included in the general income tax. Tax liability under this system was fixed on a lump sum basis and revisions were made only at long intervals. Tax liability deter-

minum of 25 per cent for five years in the tax on income derived from approved investments, exemption of foreign income for seven years in the case of new residents, special tax allowances for foreign specialists and property tax exemptions for new investments in rural and urban property.

mined according to cadastral surveys therefore became relatively low in real value in view of the continued rise in prices of land and agricultural produce during recent decades. In order to compensate for the low yield, reliance was placed on taxes on agricultural products and on consumption duties. Attempts have recently been made to render the income derived from land subject to income tax, and in the meantime changes have been introduced into the land tax system so that land values might be taxed at higher rates.

In September 1951 a tax on agricultural income based on a "presumptive" assessment value was put into effect in Lebanon. Like a modern income tax system, it has progressive rates, ranging from 2 per cent on taxable incomes up to £L 5,000 to 35 per cent on incomes of over £L 200,000. The values are assessed by the tax commissions on the basis of a table giving presumptive income based on average yield for various categories of land and products. In cases where the owner supplies records of actual revenues, the assessment is based on such records. The disclosure of income data is mandatory when income is beyond a certain level. The presumptive assessment made by the tax agent is used for taxation over a period of five years, but in case the output of the land increases or decreases beyond 20 per cent of the assessed income the assessment may be revised. The new system in Lebanon may be regarded as a long step towards reform of the tax structure. The Tax Department of the Lebanese Ministry of Finance anticipated large revenue from this source.

In Egypt, the land tax was applicable to 50 per cent of the rent received by the landlord. By a law passed in 1950, retroactive to January 1949, the full rental value was made subject to the tax. Furthermore, since 1946 an upward revision has been made in assessed values. In Egypt, as in Iran, the land tax liability reflected in cadastral surveys is used for assessing the annual and capital value of the land. In the land reform law of Egypt, annual land valuation is calculated by multiplying tax liabilities by seven; capital value is computed by applying a coefficient of ten to the annual valuation. Total compensation thus is lower for lands subject to lower taxes.

In Iran, attempts have been made to introduce progressive rates into the land tax system of the country. In 1952, a progressive tax on immovable property was under consideration, with rates ranging between one per cent on total property values exceeding 500,000 rials to 10 per cent on the value of property exceeding 20 million rials. A new tax was also projected on unused rural and urban lands, in order to encourage cultivation of land in rural areas and sale or division of land in city areas. In addition, in 1952 the Government passed a decree lowering by 20 per cent the landlord's share in the crop: 10 per cent was to be added to the peasant's share and 10 per cent was to be used for

financing projected local agricultural co-operatives. In Iran, as in Egypt, the total value of the land is calculated as a multiple of the tax liability determined under the old land tax system. Such presumptive determinations have been found necessary in the absence of assessment machinery for prompt and efficient land valuation.

FISCAL ADMINISTRATION AND BUDGET MANAGEMENT

In the field of administrative reorganization and reform, tax administration and management of government accounts are the two fields which have received most attention in recent years. In Syria, a special committee was assigned to deal with reform of budget structure and procedures, and the services of a French consultant firm were utilized. Moreover, steps were taken to study budgetary structure and procedures in Europe and in the United States. The Government of Turkey, with the help of the United States Mutual Security Agency, initiated plans for the complete overhauling of administrative procedures of the Ministry of Finance.⁴ Practically all countries of the Middle East, and particularly Egypt, Israel and Turkey, have utilized United Nations technical assistance fellowship and scholarship programmes for specialized training of their officials. Services of United Nations technical assistance experts have been used in Iran and Israel in the fields of public administration, taxation and government finance.⁵

The most important change which has taken place with respect to customs administration has occurred in Lebanon and Syria. Until March 1950, under a system introduced during the French Mandate, the customs administrations of the two countries were directed by the Lebanese-Syrian customs union. Receipts from duties were collected by the joint administration, and the two countries divided the net receipts (44 per cent to Lebanon, 56 per cent to Syria). After the customs union was broken up, the general budget of each country included gross receipts from customs duties and expenditures by its customs administration.

Traditionally, in the countries of the Middle East, development projects, such as general construction and the building of railways and factories, have been handled by several ministries, but during the post-war period most of these public projects have been concentrated in single units under development plans. In Iraq, the rise in oil revenues since 1950 has resulted in rapid increases in appropriations for development plans. The traditional capital budget, which was financed by revenue from oil, was discontinued and was replaced by a new development budget. The development plan is administered by an independent unit supervised by the

⁴ United States Mutual Security Agency, Special Mission to Turkey, Office of Technical Assistance, *Final Report on Administration of the Turkish Ministry of Finance*, TA Project 77-36, (Ankara), August 1951.

⁵ See appendix B, dealing with technical assistance.

Development Board, which consists of the Prime Minister, the Minister of Finance and six members in high executive posts. In 1951, all revenue from oil royalties was appropriated for financing development projects, but in 1951/52 the rise in royalties from petroleum and technical limitations in implementing development projects resulted in limiting the appropriation to 70 per cent for development plans and transferring the remaining 30 per cent to the general budget for financing current expenditures.

In Iran, the seven-year development plan may also be regarded as the function of an independent government agency, with an autonomous financial system not subject to conventional control by the Ministry of Finance. In Turkey, development plans have usually been carried out as public undertakings with independent budgets. In Egypt, a five-year development plan is financed directly from the reserve fund.

In Israel, the budgetary system from 1949 to 1952/53 was composed of three elements. (a) The regular budget provided for the allocation of funds for current general

government expenditure. This budget was financed by ordinary revenue from taxes, duties and fees. The regular budget contained an item of expenditure for the Ministry of Defence. (b) The military budget, which was not published, included that part of the military expenditure which exceeded the amount in the regular budget and was financed by extraordinary revenue, mainly by borrowing through issuance of Treasury notes. By 1952/53 the Government decided to include this budget as an item in the regular budget. (c) The development budget provided for extraordinary expenditures designed for such projects as housing, construction and development of new industries and expansion of transport facilities. The development budget was financed by funds from abroad, including loans from the Export-Import Bank of Washington, grants-in-aid and funds from the Israel independence bond drive, as well as by receipts from domestic sources, such as the issuance of land bonds and other bonds to the public. In 1952/53 the Government decided, among other measures to curb inflation, to finance budgetary deficits by compulsory loans and to cease issuing land bonds.

Chapter 6

FOREIGN TRADE AND BALANCE OF PAYMENTS

The effect of the increased demand for raw materials and the rise in international price levels after the outbreak of the Korean war was greater in the Middle East in 1951 than in 1950. Both imports and exports increased considerably, and in most countries of the region this upward trend continued, especially for imports, during the first part of 1952. The deficit on merchandise trade, which had contracted to \$554 million in 1950, increased to \$704 million in 1951, and for

the whole of 1952 appeared likely to be greater than in 1951. Exports of Middle East countries to the United States, the sterling area and France increased more in 1951 than did imports from these areas; western Germany and the Union of Soviet Socialist Republics also increased the volume of their trade with the Middle East. In 1951 the terms of trade improved markedly in most countries, the main exceptions being Iran and Israel.¹

Foreign Trade

VOLUME AND VALUE

Exports of Middle East countries throughout 1951 increased considerably in value owing to the general upward trend of prices. Expressed in dollars, the total reached \$1,681 million, an increase of 25 per cent over 1950, against a 12 per cent rise between 1949 and 1950 (table 45). A distinct though unequal increase occurred (tables 45 and 46) in all countries for which data are available, except Jordan, and was especially large in the case of the Anglo-Egyptian Sudan and Syria. In the latter part of 1951 and in 1952, the prices of the raw materials and foodstuffs produced in the Middle East declined. Wool, cotton,² tobacco, gum arabic, hides and skins were particularly affected. Grain prices, which had increased less, also tended to fall but to a smaller extent. Mainly because of the lag between sales and shipment, however, these changes in prices were only partly reflected in export values during the first half of 1952, with some exceptions, such as Egypt and Iraq—where the decline was sharp—and the Anglo-Egyptian Sudan.

Owing to depressed prices and the low level of orders from the United Kingdom and India, exports of Egyptian cotton in the first half of 1952 amounted to \$165 million only, compared with \$303 million from January to June 1951. The price of Karnak (long staple) cotton in Alexandria dropped considerably and was back at the May 1950 level in September 1952, while quotations for Ashmouni (medium staple) were under the 1949 average. While the decline in cotton

¹ Wherever possible, exports of petroleum and imports by the petroleum companies have been excluded from the figures given in this chapter; they are discussed in chapter 3. Exports of petroleum from the Middle East, valued at f.o.b. prices, were about \$1,450 million in 1951.

exports was less abrupt in the Anglo-Egyptian Sudan, the fall in total export value for the first six months of 1952 as compared with the first half of 1951 was about 22 per cent. However, in other countries, such as Cyprus and Iran, export values during the first half of 1952 were still approximately at the same level as one year earlier. In Turkey, a marked decrease in tobacco and cotton exports was more than counterbalanced by higher exports of cereals, and total exports stood at \$181 million in the first part of 1952 as against \$157 million in the corresponding period of 1951.

Imports increased, in a proportion comparable to that of exports, from 1950 to 1951, standing at \$2,385 million in the latter year. This increase was between one-half and one-third in the Anglo-Egyptian Sudan, Iraq and Turkey. The general causes of this trend were the increase in unit values of imports, the greater availability of foreign exchange, resulting mainly from expanded exports, and, in some countries, the need for machinery for economic development. The increase in import values in Turkey in 1951 was 40 per cent over import values in 1950. This rise, which continued in the first months of 1952, may be attributed to a rising internal demand for consumer goods resulting from the exceptionally good harvests of 1951 and the excellent prospects for crops in 1952; relaxation of import restrictions within the European Payments Union; the increasing capital goods requirements resulting from the carrying out of development projects; and external financial aid. In the first half of 1952, import values decreased in some countries, such as Egypt and Iran, but were still rising in Turkey and in the Anglo-Egyptian Sudan.

² Wool prices first dropped in April 1951, and cotton in August and September of that year.

Table 45. Value of Imports and Exports (excluding gold), 1938 and 1949 to 1952
(Millions of United States dollars; imports c.i.f. and exports f.o.b.^a)

Country	1938		1949		1950		1951		1952 (first half)	
	Imports	Exports	Imports	Exports	Imports	Exports	Imports	Exports	Imports	Exports
Aden Colony ^b	30	16	121	99	117	109	141	124	83	65
Afghanistan ^{b, c, d}	30	24	52	47	...	...	...	...	...	...
Anglo-Egyptian Sudan..	32	30	89	109	78	95	121	184	90	65
Cyprus ^b	11	12	41	30	38	31	54	43	29	23
Egypt ^e	184	147	630	515	564	504	666	583	305	192
Iran ^f	45	37	209	53	191	108	210	133	83	61
Iraq ^g	41	18	148	41	105	60	143	81	83	23
Israel ^h	56	28	321	40	287	37	343	47	187	29
Jordan ⁱ	6	3	47	21	30	6	36	5	...	...
Lebanon ^j	37	22	217	51	84 ^k	24 ^k	136	41	65	16
Syria.....											86^{k}	95^{k}	133	126	69	77^{l}
Turkey.....	119	115	290	248	286	263	402	314	256	181
TOTAL ^m	561	428	2,113	1,207	1,903	1,349	2,385	1,681	1,268 ^l	735 ^l

Source: Statistical Office of the United Nations; International Monetary Fund, *International Financial Statistics* (Washington, D.C.).

^a Special trade unless otherwise indicated.

^b General trade.

^c Figures for twelve months beginning 21 or 22 March of the year stated.

^d Excluding silver.

^e Trade with the Anglo-Egyptian Sudan is not included.

^f Figures for Iran exclude imports and exports of the petroleum company and other concessionaires; figures for 1938 adjusted to annual rate on the basis of nine months; figures for subsequent years refer to the Iranian year beginning 21 or 22 March; "1952 (first half)" refers to the period 23 December 1951 to 21 June 1952; for 1949 to 1952 the official rate is used for conversion from rials to United States dollars.

^g Excluding pipeline exports of crude petroleum. Data for 1938 exclude imports of concessionaires, and refer to general trade.

^h Data for 1938 refer to the whole of Palestine.

ⁱ Excluding trade of concessionaires except for 1938. Import figures include customs duties for 1938. Data for 1949 may include some trade between Transjordan and Cisjordan.

^j Beginning 1950, excluding trade of the petroleum companies.

^k April to December only. Trade of the Lebanese-Syrian customs union for January to March 1950 (in United States dollars): imports \$37 million, exports \$17 million.

^l Partially estimated.

^m All totals exclude Afghanistan and show Iran without adjustment for overlapping months of fiscal year; trade of the Lebanese-Syrian customs union for the first quarter of 1950 is included.

Table 46. Value of Imports and Exports (excluding gold), 1938 and 1949 to 1952
(Millions of local currency; imports c.i.f. and exports f.o.b.^a)

Country and currency	1938		1949		1950		1951		1952 (first half)	
	Imports	Exports	Imports	Exports	Imports	Exports	Imports	Exports	Imports	Exports
Aden Colony ^b (pound sterling).....	6.1	3.2	31.2	26.6	41.8	39.0	50.2	44.4	29.7	23.0
Afghanistan ^{b, c, d} (afghani).....	324	258	779	717	...	...	...	...	...	...
Anglo-Egyptian Sudan (Egyptian pound).....	6.3	5.9	23.5	27.4	27.0	33.1	42.0	63.9	31.4	22.6
Cyprus ^b (pound sterling).....	2.3	2.4	11.0	8.2	13.5	11.1	19.2	15.3	10.5	8.2
Egypt ^e (Egyptian pound).....	36.8	29.4	166.5	137.8	196.5	175.4	232.1	203.1	106.1	66.9
Iran ^f (rial).....	750	619	6,750	1,721	6,150	3,494	6,758	4,275	2,655	1,964
Iraq ^g (dinar).....	8.4	3.8	40.4	12.4	37.6	21.6	51.0	29.2	29.5	8.2
Israel ^h (Israel pound).....	11.5	5.7	88.0	10.6	102.6	13.2	122.6	16.7	66.6	10.4
Jordan ⁱ (dinar).....	1.23	0.56	12.76	5.56	10.77	1.98	12.78	1.65	...	...
Lebanon ^j (Lebanese pound).....	64.8	39.3	474.9	111.1	183.6 ^k	51.9 ^k	298.4	89.7	143.3	36.1
Syria (Syrian pound).....											188.8^{k}	207.9^{k}	292.5	277.1	150.6^{l}	168.0^{l}
Turkey (lira).....	150	145	813	694	800	738	1,126	879	717	506

Source: Statistical Office of the United Nations; International Monetary Fund, *International Financial Statistics*.

^a Special trade unless otherwise indicated.

^b General trade.

^c Figures for twelve months beginning 21 or 22 March of the year stated.

^d Excluding silver.

^e Trade with the Anglo-Egyptian Sudan is not included.

^f Figures for Iran exclude imports and exports of the petroleum company and other concessionaires; figures for 1938 adjusted to annual rate on the basis of nine months; figures for subsequent years refer to the Iranian year beginning 21 or 22 March; "1952 (first half)" refers to the period 23 December 1951 to 21 June 1952.

^g Excluding pipeline exports of crude petroleum. Data for 1938 exclude imports of concessionaires and refer to general trade.

^h Data for 1938 refer to the whole of Palestine and are in terms of the Palestine pound.

ⁱ Excluding trade of concessionaires except for 1938. Import figures include customs duties for 1938. Data for 1949 may include some trade between Transjordan and Cisjordan.

^j Beginning 1950, excluding trade of the petroleum companies.

^k April to December only. Trade of Lebanese-Syrian customs union, January to March 1950 (in millions of Lebanese-Syrian pounds): imports 81.7; exports 37.2.

^l Partially estimated.

The changes in volume of trade (table 47) were not parallel to the changes in prices, especially in the case of exports. The quantum of imports showed an increase in most countries, the main exception being Iran; in the Anglo-Egyptian Sudan and Turkey the rise was particularly great.

The commodity composition of imports is shown in table 48. In recent years the most important trends have

been the decline in imports of cotton goods and the rise in imports of machinery; both of these changes reflect the development of industry in the region. The increase in imports of foodstuffs is attributable to the growth in population, which in the region as a whole has outstripped the rise in agricultural production, and to the tendency in some countries to divert acreage to cotton.³

Table 47. Indices of Quantum of Imports and Exports of Selected Countries, 1949 to 1952
(1938=100)

Country and item	1949	1950	1951	1952 First half
<i>Anglo-Egyptian Sudan:</i>				
Imports	121	136	153	209
Exports	111	110	142	56
<i>Egypt:</i>				
Imports	160	188	188	...
Exports	118	117	86	...
<i>Iran:</i>				
Imports	124	124	...	...
Exports	47	114	122	...
<i>Israel:^a</i>				
Imports ^b	100	114	113	105
<i>Turkey:</i>				
Imports	125	146	174	222
Exports	120	117	121	135

Source: United Nations, *Monthly Bulletin of Statistics*; for Egypt: National Bank of Egypt, *Economic Bulletin*, vol. V, No. 1, 1952; Israel: Ministry of Finance, *Foreign Trade of Israel* and Central Bureau of Statistics and Economic Research, *Statistical Bulletin of Israel* (Jerusalem). Indices for Iran constructed by dividing indices of rial values of imports and exports (excluding petroleum) by import and

export price indices from International Monetary Fund, *International Financial Statistics*.

^a Indices are not available for total exports. However, the indices of exports of citrus fruits were as follows: 1949, 38; 1950, 35; 1951, 32 (1938=100) for all of Palestine.

^b 1949=100.

The quantum of exports has been much slower to adjust to the favourable prices obtained for Middle East products in 1950 and 1951 than the quantum of imports. Except in Iran and Syria in 1950, and the Anglo-Egyptian Sudan in 1951, exports have tended to remain constant in volume, and in the case of Egypt, even to decline. The change in the volume of Iran's exports, which more than doubled in 1950, can be accounted for by the resumption of trade with the Union of Soviet Socialist Republics and with Germany and by good harvests, following the poor crops of 1949, more than by response to world shortages and price increases brought about by the Korean war. In Syria, the higher quantum of exports in 1950 may be explained by exceptionally good harvests and only to a limited extent by producers' reaction to favourable prices. Apparently, price elasticity of the supply of staple exports seems to have been effective mainly in the Anglo-Egyptian Sudan, where the quantum of exports as a whole rose by 30 per cent in 1951, though it is difficult to separate this effect from the rise in acreage

resulting from the extension of irrigation. However, in studying the response to price changes, it should be remembered that in several cases variations in yield due to unfavourable growing conditions obscured in the final statistics the effort of cultivators to adjust to the new prices. This was very clear in Syria during 1951, where the difference in cotton and wheat price trends prompted a threefold increase in area planted to cotton and a moderate decrease in wheat acreage; however, mainly as a result of adverse weather and insect blights, instead of a large increase in cotton, cultivators turned in quantities only slightly greater than the total harvested in 1950. In addition, for other crops and products the long period of growth necessary for fruits, nuts and animal products necessarily reduces or delays response to price stimuli.

The composition of Middle Eastern exports has not significantly changed during the period under review; in all countries two or three agricultural items make

³ See chapter 1.

Table 48. Quantity and Relative Value of Major Imports of Selected Countries, by Groups of Commodities, 1938 and 1949 to 1951

(Quantities in thousands of metric tons except as indicated)

Commodity and year	Egypt		Iran ^a		Iraq		Israel ^b		Lebanon ^c		Syria ^c		Turkey	
	Quantity	Per cent of total value	Quantity	Per cent of total value	Quantity	Per cent of total value	Quantity	Per cent of total value	Quantity	Per cent of total value	Quantity	Per cent of total value	Quantity	Per cent of total value
<i>Cereals and milled products:</i>														
1938.....	29.4	0.7	1.0	—	...	...	110.3	8.5	44.2	4.5	...	...	1.0	0.1
1949.....	601.6	10.7	224.9	10.6	25.2	2.9	242.1	8.5	88.5	6.3	...	...	171.9	5.0
1950.....	705.4	10.8	112.6	7.3	...	...	265.9	7.3	123.8	15.8	6.8	1.1	224.5	7.2
1951.....	1,156.7	16.9	1.6	0.1	...	...	...	9.1	164.0	13.2	32.0	4.0	113.4	3.0
<i>Sugar and confectionery:</i>														
1938.....	113.9	1.9	94.2	14.9	43.9 ^d	5.4 ^d	29.0	2.2	40.5	3.6	...	...	62.1	2.8
1949.....	42.0	1.0	153.6	9.5	52.2	5.6	32.0	1.5	36.9	2.6	...	...	20.2	1.0
1950.....	143.3	3.7	153.8	12.0	...	12.7 ^d	33.5	1.6	17.9	2.7	17.0	2.8	—	—
1951.....	4.2	0.3	114.4	10.8	...	11.4 ^d	...	...	17.5	2.3	22.3	2.7	—	—
<i>Tea, coffee and cocoa:</i>														
1938.....	18.1	3.2	9.0	13.3	3.2 ^e	3.6 ^e	2.7	1.1	2.1	1.2	...	...	6.4	1.6
1949.....	27.5	4.8	11.0	7.7	9.9	8.0	3.1	0.7	4.4	1.2	...	...	9.0	1.8
1950.....	23.7	4.6	8.5	6.8	...	7.7 ^e	2.9	0.9	1.3	1.3	1.4	1.5	8.5	2.8
1951.....	23.2	4.1	11.1	9.2	...	8.0 ^e	...	...	1.7	1.3	1.7	1.4	9.4	2.7
<i>Wood, cork and articles thereof:</i>														
1938.....	312.1 ^f	4.7 ^f	3.0	0.8	...	5.2	...	9.5	49.6	3.6	...	...	36.5	1.5
1949.....	347.0	5.5	2.6	0.3	...	2.3	...	4.1	46.7	2.5	...	...	182.5	4.5
1950.....	374.1	5.0	3.5	0.2	...	...	...	4.8	26.1	2.8	30.2	2.9	128.4	2.3
1951.....	370.3	5.3	3.2	0.3	...	...	...	5.3	32.5	2.6	42.6	3.0	137.8	2.2
<i>Cotton, silk, rayon and woollen yarns:</i>														
1938.....	3.6 ^f	2.2	0.3	1.0	...	...	0.9	1.9	5.0	7.1	...	...	7.7	5.8
1949.....	5.0	2.1	1.1	1.1	0.3 ^f	0.5 ^f	2.0	2.1	4.2	4.2	...	...	4.8	5.7
1950.....	3.6	1.6	1.3	1.8	...	...	2.3	2.7	0.7	2.0	7.3	10.6	3.4	3.5
1951.....	3.5	1.4	1.8	2.9	...	...	...	...	0.8	1.6	6.1	8.7	4.8	4.4
<i>Cotton piece-goods:</i>														
1938.....	17.0	7.7	7.5	16.5	50.4 ^g	8.9	2.4	2.9	7.9 ^h	12.1 ^h	...	...	12.2	11.4
1949.....	3.7	2.2	13.5	18.8	51.6 ^g	13.6	1.9	2.2	4.4	3.9	...	...	5.8	7.6
1950.....	4.5	2.3	9.0	12.7	...	13.4	0.5	0.8	1.1	2.8	1.7	4.4	5.9	6.2
1951.....	2.8	1.6	10.1	18.0	...	13.7	...	...	1.5	2.4	2.2	4.2	8.4	8.4
<i>Silk, rayon and woollen cloth:</i>														
1938.....	2.2	3.5	...	...	20.2 ^g	7.4	0.6 ^f	2.6	0.3	1.6	...	...	0.7	2.2
1949.....	3.0	4.2	1.6	4.4	5.8 ^g	4.5	0.7 ^f	1.7	1.7	4.5	...	...	0.2	0.7
1950.....	3.4	4.0	2.4	6.3	...	...	0.3 ^f	0.8	0.5	3.1	0.6	3.7	0.2	0.5
1951.....	3.1	3.6	1.9	6.7	...	...	...	...	0.8	3.4	0.8	3.3	0.3	0.7
<i>Petroleum and petroleum products:</i>														
1938.....	699.0	6.5	20.1	0.3	...	1.8 ⁱ	159.8 ^f	5.5	94.3	5.6	...	...	165.4	3.8
1949.....	1,263.0	5.9	4.4	0.3	...	3.4	627.7 ^f	6.6	364.3	6.4	...	...	478.8	7.7
1950.....	1,166.3	4.6	5.0	0.4	...	...	731.3	7.4	217.9	7.8	193.4	10.2	506.7	7.3
1951.....	1,380.2	5.7	8.0	0.7	...	...	...	9.3	248.8	6.3	276.5	10.2	665.3	7.6

<i>Chemicals and chemical products:</i>														
1938.....	587.6	13.1	...	...	...	6.7	15.4 ^j	3.2	13.6	5.5	...	...	33.6	5.4
1949.....	681.0	11.4	11.6	4.7	18.1 ^f	6.9	43.7 ^k	2.9	30.1	4.6	...	...	33.1	5.7
1950.....	774.6	11.6	10.8	5.4	...	...	47.8 ^k	2.8	20.1	5.4	10.1	4.9	37.1	5.6
1951.....	721.2	11.5	13.8	7.5	...	...	...	4.4 ^f	31.5	4.8	17.9	5.4	46.6	6.0
<i>Rubber and rubber products:</i>														
1938.....	2.2	0.8	2.1	4.8	...	1.1	0.8 ^f	1.9	1.2	1.3	...	...	1.9	1.4
1949.....	3.1	0.6	6.0	3.1	...	1.0	2.0 ^f	0.7	3.4	1.4	...	...	7.5	2.4
1950.....	5.6	1.0	5.3	3.5	...	...	2.0 ^f	0.7	1.3	1.3	2.1	1.7	6.9	2.4
1951.....	4.5	1.0	3.7	2.9	...	...	...	1.4 ^f	1.7	1.4	2.9	2.0	9.8	3.2
<i>Paper and paper products:</i>														
1938.....	73.5	2.8	5.6	3.8	...	1.6	12.4 ^l	3.5	9.2	2.5	...	...	28.9	3.1
1949.....	42.2	1.8	14.6	2.1	7.0 ^f	1.9	13.0 ^k	1.6	11.2	1.8	...	...	27.0	2.7
1950.....	75.6	2.5	9.4	1.7	...	...	13.8 ^k	1.4	6.6	1.8	4.3	1.5	25.5	1.7
1951.....	80.9	3.7	12.9	2.7	...	...	...	2.3 ^f	10.5	2.6	5.4	1.8	19.4	1.8
<i>Metals and metal manufactures:</i>														
1938.....	236.6	10.4	41.5	15.0	51.6 ^m	13.8	42.5 ^k	9.5	42.0	10.1	...	...	220.6	22.0
1949.....	271.4	8.7	52.4	7.1	81.9	13.2	84.8 ^k	8.9	128.7	13.2	...	...	122.1	13.1
1950.....	359.7	8.7	70.8	8.6	...	9.8 ^m	18.4 ^k	13.6	47.2	7.5	34.3	7.1	228.7	15.1
1951.....	274.3	7.3	84.6	8.5	...	12.4 ^m	...	9.6 ^f	64.2	7.6	49.3	8.7	178.4	12.4
<i>Machinery and appliances:</i>														
1938.....	31.3	7.3	2.6	5.9	...	13.2	...	7.7	4.7	6.1	...	...	31.0	15.4
1949.....	74.7	12.1	13.6	10.1	...	16.1	36.6 ⁿ	14.6	26.3	16.6	...	...	58.2	21.4
1950.....	64.9	10.3	20.7	13.5	...	14.6	28.8 ⁿ	14.2	5.8	8.4	9.1	11.2	72.6	23.1
1951.....	65.6	9.7	17.9	14.0	...	11.3	...	15.5 ^f	8.7	7.2	22.7	18.0	91.5	22.2
<i>Transport equipment:</i>														
1938.....	...	5.5	9.1	4.8	...	8.8	785 ^o	3.8	2.3	4.3	...	...	37.4	7.7
1949.....	36.3	5.3	15.5	9.2	...	6.9	5,325 ^o	7.6	13.5	8.2	...	...	81.1	6.6
1950.....	71.8	6.5	14.8	9.2	...	4.7 ^o	4,245 ^o	7.8	2.8	3.8	3.8	4.0	82.7	7.2
1951.....	33.9	5.8	8.9	6.0	...	3.6 ^o	...	5.0	4.4	4.0	6.2	4.5	61.3	8.2
<i>Other imports:</i>														
1938.....	...	29.7	...	...	...	...	...	37.2	244.1	30.9	...	...	...	15.8
1949.....	669.9	23.3	59.9	11.0	...	13.2	...	36.3	193.0	22.6	...	...	...	14.0
1950.....	607.7	22.8	76.1	10.6	...	...	...	33.2	133.5	33.5	136.5	32.4	157.2	15.0
1951.....	712.2	22.1	60.1	9.7	...	...	...	...	134.1	39.3	238.4	22.1	363.8	17.2

Source: Compiled from official trade statistics of the individual countries. Total value exclusive of gold, except for negligible amounts.

^a Excluding imports by concessionaires. Post-war figures refer to the Iranian year beginning 21 or 22 March of the given year. Figures for pre-war year refer to year ending 20 March 1940, since figures for 1938/39 covered only nine months.

^b Pre-war figures refer to Palestine.

^c Statistics for the customs union for 1938 and 1949 are given under Lebanon; for 1950 data cover only the period following the dissolution of the customs union.

^d Sugar only.

^e Tea only.

^f Partly estimated.

^g Millions of square metres.

^h Including cotton rugs, blankets and passementerie.

ⁱ Petrol and fuel oil only.

^j Not including prepared drugs and various chemical products for which quantity data are not available.

^k Not including items for which quantity data are not available.

^l Excluded printed matter.

^m Iron, cast iron and steel only.

ⁿ Including electrical equipment.

^o Automobiles and their parts and number of motor cars, lorries, omnibuses, and fire engines only.

up the bulk of export trade (table 49). The most important change has been the increase in exports of cotton from most of these countries.⁴

Several governments in the area made efforts late in 1951 and in 1952 to reduce the deficit in their balance of trade. The following measures may be mentioned. In Iran, controls were largely motivated by the shortage

⁴ See chapter 1.

of foreign exchange following the cessation of oil exports in August 1951 and the persistent high level of imports. In order to help pay for essential imports, the Government in August 1951 introduced a bill in the Majlis permitting the sale of £14 million which were part of the currency cover. In September, Bank Melli ceased supplying foreign exchange for non-essential imports. In December, the supply of official exchange for essential imports was also discontinued, and importers were obliged to purchase their exchange on the

Table 49. Quantity and Relative Value of Major Exports,^a Pre-war and Post-war

Country, commodity and year	Quantity (tons ^b)	Value (as percentage of total value of exports)	Country, commodity and year	Quantity (tons ^b)	Value (as percentage of total value of exports)
<i>Afghanistan:</i> ^c			<i>1951:</i>		
<i>1947/48:</i> ^d			Copper concentrates and pyrites	204,840	35.5
Persian lamb skins (thousands)	2,400	54.6	Iron pyrites.....	615,000	13.7
Fruits and nuts.....	31,600	35.5	Fruits.....	...	11.1
Wool.....	5,560	5.8	TOTAL		60.3
TOTAL		95.9	<i>Egypt:</i>		
<i>1948/49:</i> ^d			<i>1938:</i>		
Persian lamb skins (thousands)	3,230	...	Raw cotton.....	356,000	74.2
Fruits and nuts.....	45,760	...	Cotton-seed.....	405,000	5.6
Wool.....	4,590	...	Rice.....	65,000	2.4
			TOTAL		82.2
<i>Anglo-Egyptian Sudan:</i>			<i>1949:</i>		
<i>1938:</i>			Raw cotton.....	359,000	78.1
Raw cotton.....	62,310	62.4	Rice.....	339,000	10.6
Gum arabic.....	23,980	12.1	Cotton yarn.....	4,730	1.4
Millet.....	54,740	5.4	TOTAL		90.1
TOTAL		79.9	<i>1950:</i>		
<i>1949:</i>			Raw cotton.....	386,200	86.6
Raw cotton.....	65,030	72.0	Rice.....	173,550	4.4
Cotton-seed.....	102,930	7.9	Cotton yarn.....	5,263	1.4
Camels (number ^e).....	78,000	7.5	TOTAL		92.4
TOTAL		87.4	<i>1951:</i>		
<i>1950:</i>			Raw cotton.....	254,800	81.8
Raw cotton.....	66,530	71.3	Rice.....	311,400	7.2
Cotton-seed.....	97,420	6.0	Cotton yarn.....	9,850	3.5
Gum arabic.....	38,770	8.3	TOTAL		92.5
TOTAL		85.6	<i>Iran:</i> ^d		
<i>1951:</i>			<i>1937/38:</i>		
Raw cotton.....	97,460	76.3	Carpets.....	2,690	15.6
Cotton-seed.....	118,590	6.5	Fruits and nuts.....	52,410	13.3
Gum arabic.....	41,090	5.6	Raw cotton.....	18,320	13.0
TOTAL		88.4	TOTAL		41.9
<i>Cyprus:</i>			<i>1948/49:</i>		
<i>1938:</i>			Carpets.....	3,520	31.0
Copper concentrates and pyrites	662,000	52.6	Fruits and nuts.....	48,030	24.1
Carob beans.....	60,000	12.3	Hides and skins.....	4,090	8.5
Citrus fruits (thousands of cases).....	71,000	4.2	TOTAL		63.6
TOTAL		69.1	<i>1949/50:</i>		
<i>1949:</i>			Carpets.....	2,800	26.0
Copper concentrates and pyrites	191,000	25.7	Fruits and nuts.....	28,570	15.5
Iron pyrites.....	402,000	10.3	Raw cotton.....	6,030	10.0
Fruits.....	...	9.8	TOTAL		51.5
TOTAL		45.8	<i>1950/51:</i>		
<i>1950:</i>			Carpets.....	4,600	18.2
Copper concentrates and pyrites	215,570	27.0	Fruits and nuts.....	53,400	12.9
Iron pyrites.....	534,000	14.4	Raw cotton.....	19,750	24.9
Fruits.....	...	10.3	TOTAL		56.0
TOTAL		51.7	<i>1951/52:</i>		
			Carpets.....	4,130	15.3
			Fruits and nuts.....	70,710	17.0
			Raw cotton.....	9,290	11.1
			TOTAL		43.4

Table 49 (cont'd)

Country, commodity and year	Quantity (tons ^b)	Value (as percentage of total value of exports)	Country, commodity and year	Quantity (tons ^b)	Value (as percentage of total value of exports)
Iraq:			1950:		
1938:			Cereals ^a	18,930	25.5
Cereals	259,000	33.4	Wool and animal hair	1,050	14.4
Dates	186,000	25.3	Fresh vegetables	4,740	7.4
Wool	4,500	12.6	TOTAL		47.3
TOTAL		71.5	1951:		
1949:			Skins and hides . . . . .	...	6.6
Cereals	352,130	54.0	Wool and animal hair . . . . .	...	46.4
Dates	140,890	28.3	Fresh vegetables . . . . .	...	15.7
Wool	3,720	4.8	TOTAL		68.7
TOTAL		87.1	Lebanon:		
1950:			1951:		
Cereals . . . . .	...	59.4	Wool	4,400	24.3
Dates	212,000 ^c	21.4	Citrus fruit	43,000	8.5
Wool . . . . .	...	6.8	Deciduous fruits	6,500	5.1
TOTAL		87.6	TOTAL		37.9
1951:			Syria:		
Cereals . . . . .	...	53.2	1938 (Lebanon and Syria):^a		
Dates	351,000	19.2	Vegetables	67,300	13.3
Raw cotton . . . . .	...	6.2	Fruits	44,350	13.1
TOTAL		78.6	Cereals	61,800	8.8
Israel/Palestine:			TOTAL		35.2
1938:			1949 (Lebanon and Syria):		
Citrus fruit (thousands of cases)	11,700	74.9	Vegetables	36,500	6.3
Potash	47,500	5.7	Rayon textiles	920	9.3
Olive oil	1,370	1.6	Cereals	191,000	36.3
TOTAL		82.2	TOTAL		51.9
1949:			1950:ⁱ		
Citrus fruit (thousands of cases)	4,400	63.3	Wool	6,510	11.0
Polished diamonds (carats)	75,900	18.2	Raw cotton	15,170	27.4
Fruit juices	4,040	8.5	Cereals	325,370	31.2
TOTAL		90.0	TOTAL		69.6
1950:			1951:		
Citrus fruit (thousands of cases)	4,100	48.2	Wool	7,510	14.2
Polished diamonds (carats)	119,510	25.1	Raw cotton	24,090	42.1
Fruit juices	2,180	4.0	Cereals	45,540	4.2
TOTAL		77.3	TOTAL		60.5
1951:			Turkey:		
Citrus fruit (thousands of cases)	3,800	35.9	1938:		
Polished diamonds (carats)	132,450	26.1	Tobacco	43,500	27.1
Woollen yarn and piece-goods	260	7.2	Fruits and nuts	172,600	25.8
TOTAL		69.2	Cereals	346,800	12.2
Jordan:			TOTAL		65.1
1938:			1949:		
Cereals ^a . . . . .	...	61.6	Tobacco	79,900	37.4
Livestock . . . . .	...	3.9	Fruits and nuts	128,000	16.5
Fresh vegetables . . . . .	...	2.5	Raw cotton	32,300	11.0
TOTAL		68.0	TOTAL		64.9
1949:			1950:		
Cereals ^a	18,220	31.7	Tobacco	49,240	23.0
Lentils	1,980	3.7	Fruits and nuts	146,560	19.2
Fresh vegetables	3,300	6.0	Raw cotton	77,870	26.6
TOTAL		41.4	TOTAL		68.8
1950:			1951:		
Cereals ^a . . . . .	...	59.4	Tobacco	57,920	21.3
Dates	212,000 ^c	21.4	Fruits and nuts	95,580	12.6
Wool . . . . .	...	6.8	Raw cotton	56,570	24.6
TOTAL		87.6	TOTAL		58.5

Source: Official national trade statistics.

^a Only three major exports, by value, are given for each country; figures are exclusive of petroleum exports of major oil producing countries. Total export values exclude re-exports and gold.

^b Unless otherwise specified.

^c Pre-war data not available.

^d Year beginning 21 March.

^e Estimated from sales recorded on the Egyptian market.

^f Partly estimated.

^g Barley and wheat only.

^h Although total value of exports was revised upward from £S 29.3 million to £S 39.3 million, revised data for individual items were not available.

ⁱ March to 31 December 1950; Syria only.

free market, where the dollar rate reached 64.75 rials in December 1951. It rose to about 81 rials in September 1952. Direct controls were also imposed: all but thirty-six items of essential imports were made subject to special permits, and duties on non-essential goods were raised. In the first half of 1952, the rial value of imports fell by approximately one-third as compared with the corresponding period of 1951.

In Israel a system of multiple exchange rates was introduced in February 1952, aimed mainly at reducing the gap between internal and external prices, in line with the Government's policy of absorbing excess purchasing power in the struggle against inflation.⁵ Only a few most essential imports such as wheat are now paid for at \$2.80 to the Israel pound; \$1.40 has become the rate for a somewhat more numerous group of less essential imports, but the greater part of Israel's imports is now valued at \$1.00 per Israel pound. The greater price paid by a majority of local importers for foreign goods is expected to ration available foreign currency more efficiently, but, in view of the hardly compressible needs for raw materials, capital equipment and essential foodstuffs, it is doubtful whether the total volume of imports will be significantly decreased by these measures; imports from March to July 1952 amounted to £I 57.7 million as against £I 45.2 million for the corresponding period of 1951.

For exports, most goods are now also valued at \$1.00 per Israel pound, but until recently the volume of industrial exports has been inelastic, owing mainly to the shortage of raw materials and periodic shortages of electricity; a system of export financing has been introduced to facilitate the obtaining of foreign currency needed to pay for raw materials entering into export products. However, agricultural exports, such as citrus fruit, are limited in the short run by difficulties in increasing production. From March to July 1952, total exports from Israel were valued at £I 6.8 million against £I 7.7 million in the corresponding period of 1951.

In Egypt, in June 1952, imports from the sterling area and from countries with which Egypt had no special payments arrangements were subject to the approval of the Central Exchange Control in the case of wool and cotton fabrics, motor cars, and various luxury articles. On 7 October all imports into Egypt were made subject to import licensing.⁶ Statistics are not available to date to evaluate the effect of these new measures in restricting the flow of imports. On the export side, the suppression in May 1952 of the tax on cotton exported between May and August 1952 stimulated such exports in the last months of the 1951/52 season. Syria raised tariff rates on various manufactured imports in 1952, partly in order to bring

into balance the merchandise trade accounts of the country, but mainly in order to protect home industry.⁷ The most marked increases were in knitted woollens, ready-made clothing, and glass.⁸ On 23 September 1952 Turkey suspended the liberalization of imports from other members of the European Payments Union, owing to its increasing deficit in foreign trade.

TERMS OF TRADE

High cotton prices, which had greatly improved the terms of trade of Egypt and the Anglo-Egyptian Sudan in 1950, kept increasing during the greater part of 1951 and further improved the terms of trade of these countries since the increase in import prices was less (table 50). In 1952, however, Egypt's export price index dropped. In the Anglo-Egyptian Sudan, the rise in export prices during the first half of 1952 was about equal to price increases of imports, and the terms of trade remained at the 1951 level. Iran's terms of trade, judging from the official index of prices of selected imported and exported commodities on the local market, have become more unfavourable each year since 1948. The failure of export prices (expressed in rials) to recover in 1950, in spite of the rise in price of a majority of commodities traded on world markets, may be traced mainly to the fact that Iran did not devalue the rial in September 1949, while in 1951 and 1952 import prices increased sharply. After an improvement in 1950, the terms of trade of Israel worsened in 1951, partly as a result of lower citrus prices, which depressed average export unit values; other commodities failed to rise sufficiently to balance this downward pressure and keep up with swiftly rising import prices.

Lebanon has also been suffering in recent years from declining prices for oranges but its exports of hides and skins, fresh fruits and vegetables, which sold for high prices in 1951 and until the spring of 1952, probably enabled that country to keep up with the advance in the prices of its imports. No index of import prices has been computed, but analysis of wholesale prices of clothing and manufactures reveals that the rise in the prices of imported commodities included in this index probably did not match the increases in export prices. The marked fall in export unit values during the second quarter of 1952 may have brought about some deterioration. In any case, the trading position of Lebanon depends less on the actual relationship between the prices it pays for imports and those it gets for its exports—much lower values—than on the demand for its commercial and financial services; these, in turn, depend largely on the general volume of trade of adjacent countries, which was high in 1950 and 1951. The declining trend in trade after March may be a

⁵ See chapter 5.

⁶ Details of the new regulations appear in the *Economic Bulletin* of the Bank of Egypt, vol. V, No. 3 (Cairo).

⁷ Declaration by the Syrian Minister of National Economy, quoted in *Le Commerce du Levant* (Beirut), 9 July 1952.

⁸ The import of certain qualities has been banned entirely.

Table 50. Terms of Trade of Selected Countries, 1949 to 1952
(1938=100)

Country and item	1949	1950	1951	1952 First half
<i>Anglo-Egyptian Sudan:</i>				
Import prices.....	326	327	452	491
Export prices.....	459	536	777	848
Terms of trade.....	141	164	172	173
<i>Egypt:</i>				
Import prices.....	302	306	349	...
Export prices.....	392	506	798	...
Terms of trade.....	130	165	229	...
<i>Iran:</i>				
Import prices.....	565	524	624	680
Export prices.....	478	400	461	461
Terms of trade.....	85	76	74	68
<i>Israel:^a</i>				
Import prices.....	100	103	124	133
Export prices ^b	100	108	116	...
Terms of trade.....	100	105	94	...
<i>Lebanon:^a</i>				
Import prices.....	...	...	...	...
Export prices ^c	100	130	146	153
<i>Turkey:</i>				
Import prices.....	439	361	428	433
Export prices.....	409	418	494	512
Terms of trade.....	93	116	115	118

Source: United Nations, *Monthly Bulletin of Statistics*; National Bank of Egypt, *Economic Bulletin*, vol. V, No. 1, 1952.

^a 1949=100.

^b Index based on unit value relatives weighted by arithmetical averages of linked-year values, including the following items: Shamouti and Valencia oranges,

grapefruit, fruit juices, spirits, woollen yarns and tissues, and diamonds, together comprising 78 per cent of total domestic exports in 1950 and 67 per cent in 1951.

^c Including the following: fruit, onions, potatoes, animal skins, cement and cotton yarn, comprising about 50 per cent of Lebanese exports of local origin.

more serious factor than any unfavourable development in the terms of merchandise trade.

No indices are available for Syria, but in view of the predominance of cotton in its 1951 exports, it is believed that prices for its exports as a whole went up at least as much as import prices in 1951, and that a reversal occurred some time late in 1951 or during the first half of 1952. After some improvement in 1950, Turkish import prices began to move parallel with export prices, and the terms of trade therefore remained approximately constant in 1951. In the first half of 1952, the effects of the decline in tobacco and cotton prices were more than compensated by the rise in prices for cereals and chrome.

DIRECTION OF TRADE

While the pattern of Middle East foreign trade has not fundamentally altered in recent years, several changes in direction have occurred, due in part to new trade agreements (table 51).

Trade of Middle East countries with the United States was at a high level in 1951 (table 52). United States exports to the Middle East were \$440 million as against \$325 million of imports (of the latter \$65 million consisted of petroleum products); thus, exports increased about 40 per cent and imports 18 per cent as compared with 1950 figures. Middle East im-

ports from the United States in 1951 were especially high in the case of Egypt, Iraq, Saudi Arabia and Syria. Exports to the United States also rose, owing to greater shipments of wool from Syria and Lebanon, long staple cotton from Egypt and chrome and tobacco from Turkey.

Egypt's trade with the United States, which had shown a surplus of \$8 million in 1950, turned into a deficit of \$22 million in 1951; in addition, monetary gold valued at \$108.5 million was imported from that country. Including invisibles, the balance with the United States remained favourable. Turkey's imports from the United States declined in 1951, while its exports to that country increased. The higher value of Turkish exports to the United States may reflect in part the successful effort of the Government to channel exports directly to the United States instead of consigning Turkish products to Germany, Cyprus and Syria, from which they may then be re-exported.⁹ There was a surplus of \$22.8 million in 1951 as against a deficit of \$25.6 million in 1950. Israel's trade with the United States remained at a high level, representing about one-third of Israel's total imports and nearly one-quarter of its exports.

⁹ *Ulus* (Ankara), 15 June 1950 and International Monetary Fund, *International Financial News Survey*, vol. II, No. 50 (Washington, D.C.), 30 June 1950.

Table 51. Direction of Trade of Selected Countries, 1938 and 1949 to 1951

(Percentage of total value)

Country and year	Egypt ^a		Iran ^b		Iraq ^c		Israel/Palestine ^c		Lebanon ^d		Syria ^d		Turkey	
	Imports	Exports	Imports	Exports	Imports	Exports	Imports	Exports	Imports	Exports	Imports	Exports	Imports	Exports
<i>Belgium, France, Luxembourg and Netherlands:</i>														
1938.....	12.9	10.7	5.2	2.0	7.3	7.9	6.9	14.2	19.0	20.0	...	...	4.1	6.6
1949.....	12.9	10.6	4.9	5.9	4.3	9.0	6.6	7.3	17.1	8.4	...	...	9.7	9.8
1950.....	15.7	12.8	4.4	16.9	5.0	...	6.7	6.3	27.7	14.8	14.2	15.4	10.5	8.1
1951.....	12.1	11.8	...	...	8.5	...	11.7	7.6	17.0	7.8	15.1	19.4	12.5	9.5
<i>United Kingdom:</i>														
1938.....	22.5	31.8	8.1	6.2	30.1	24.4	13.2	49.2	13.4	6.1	...	...	11.2	3.4
1949.....	21.2	17.8	24.4	24.8	43.2	14.7	9.4	55.2	20.9	8.7	...	...	17.2	12.3
1950.....	19.2	21.3	28.0	19.1	48.9	16.1	8.8	31.1	9.3	6.0	14.7	6.0	10.4	14.0
1951.....	14.8	18.8	...	...	34.0	30.4	10.0	32.4	9.6	2.6	12.7	7.0	17.1	8.3
<i>Rest of Europe:</i>														
1938.....	35.2	33.3	64.1	67.9	16.9	6.5	43.3	19.4	25.0	15.7	...	...	67.5	71.3
1949.....	20.0	30.8	11.0	24.7	14.0	8.8	25.7	18.9	10.6	13.9	...	...	32.9	47.2
1950.....	25.3	31.2	19.7	26.7	11.5	...	21.6	34.4	10.9	4.4	18.3	13.5	38.5	50.1
1951.....	23.2	28.1	...	...	15.1	...	19.1	30.5	11.7	8.1	22.3	8.3	44.2	49.5
<i>United States:</i>														
1938.....	6.5	2.3	8.6	8.2	9.1	15.2	8.5	2.2	7.1	6.0	...	...	10.5	12.3
1949.....	8.1	2.5	42.1	8.5	11.4	4.1	30.3	15.2	23.1	3.4	...	...	20.2	14.3
1950.....	5.9	8.6	25.5	11.1	8.2	3.1	36.7	23.7	10.1	7.1	18.3	11.1	24.5	16.9
1951.....	23.1 ^e	9.5	...	...	13.8	3.3	31.8	22.9	17.8	23.1	18.2	13.5	11.0	21.2
<i>Middle East:</i>														
1938.....	7.1	7.3	0.3	4.4	8.4	23.0	16.6	11.8	15.8	44.8	...	...	0.7	1.7
1949.....	10.7	6.3	4.0	23.7	9.5	29.5	4.8	0.3	13.3	56.4	...	...	6.4	9.8
1950.....	8.7	4.8	7.7	15.8	6.9	...	3.4	0.5	32.1	64.3	25.9	51.8 ^f	7.8	8.2
1951.....	7.9	4.8	...	...	6.5	...	3.2	0.9	31.7	49.9	24.9	49.8 ^f	6.2	8.1
<i>India, Ceylon and Pakistan:</i>														
1938.....	3.1	5.1	8.4	4.9	6.9	8.2	2.4	0.6	3.4	...	...	...	1.6	0.1
1949.....	5.6	22.6	9.0	10.6	11.5	19.2	0.5	0.3	2.2	0.1	...	...	1.5	0.4
1950.....	5.1	13.2	10.3	6.8	14.3	...	0.4	0.1	0.7	0.3	3.0	0.6	2.2	—
1951.....	4.1	15.5	...	...	10.1	...	0.5	0.1	0.4	0.2	1.6	0.2	1.5	0.1
<i>Other countries:</i>														
1938.....	12.8	9.5	5.2	6.2	21.3	14.8	9.1	2.6	16.3	7.4	...	...	4.4	4.6
1949.....	21.5	9.4	4.6	1.8	6.1	14.7	22.7	2.8	12.8	9.1	...	...	12.1	6.2
1950.....	19.9	8.1	4.4	3.6	5.2	...	22.4	3.9	9.2	3.1	5.6	1.5	6.1	2.7
1951.....	14.8	11.5	...	...	12.0	...	23.7	5.6	11.8	8.8	5.2	1.8	7.5	3.3

Source: United Nations, *Direction of International Trade*, Statistical Papers, Series T, and official trade statistics. Re-exports included with exports; gold has not been excluded from the official trade returns.

^a Egypt's trade with Middle East includes trade with Anglo-Egyptian Sudan.

^b Post-war figures refer to the Iranian year beginning 21 or 22 March of the given year; 1938 figures are for the period between 22 June 1937 and 21 June 1938; imports and exports by concessionaires are excluded.

^c Exports for 1950 and 1951 exclude re-exports; include imports of petroleum companies and exclude exports of petroleum products.

^d Statistics for the customs union for 1938 and 1949 are given under Lebanon. Figures for 1950 cover March to December only. The breakdown by regional groups for the customs union and for Lebanon after March 1950 is only approximate.

^e Excluding monetary gold: 11.4 per cent.

^f Including exports to the Lebanese free zone for ultimate consignment elsewhere.

Table 52. Value of Foreign Trade with Canada and the United States, and with the Sterling Area, 1949 to 1952

(Millions of United States dollars)

Country and item	1949		1950		1951		1952 (first half)	
	Canada and United States	Sterling area						
<i>Anglo-Egyptian Sudan:</i>								
Imports.....	1.8	48.1	2.4	48.2	3.5	70.1	2.6	44.0
Exports.....	1.4	82.1	2.2	64.6	3.8	146.7	1.6	46.9
Balance.....	-0.4	34.0	-0.2	16.4	0.3	76.6	-1.0	2.9
<i>Cyprus:</i>								
Imports.....	2.4	24.8	1.8	22.1	3.8	29.5	1.6	17.2
Exports.....	2.7	6.3	2.0	7.8	2.9	9.2	2.5	5.2
Balance.....	0.3	-18.5	0.2	-14.3	-0.9	-20.3	0.9	-12.0
<i>Egypt:</i>								
Imports.....	79.3	257.8	41.3	218.1	84.3 ^a	245.0	57.5	79.0
Exports.....	13.2	231.2	44.8	182.4	56.9	217.3	32.3	44.7
Balance.....	-66.1	-26.6	3.5	-35.7	-27.4	-27.7	-25.2	-34.3
<i>Iran:^b</i>								
Imports.....	88.8	82.9	50.0	88.7	53.9	82.2	17.6	20.7
Exports.....	4.6	23.1	12.1	33.0	...	...	...	...
Balance.....	-84.2	-59.8	-37.9	-55.7	...	...	...	...
<i>Iraq:</i>								
Imports.....	17.4	84.0	8.7	68.2	20.0	65.5	17.4	38.0
Exports.....	2.8	23.8	...	...	...	...	...	...
Balance.....	-14.6	-60.2	...	...	...	...	...	...
<i>Israel:</i>								
Imports.....	109.1	59.7	117.6	47.4	118.7	57.8	76.3	25.3
Exports ^c	6.3	22.2	8.7	11.8	11.0	15.6	5.4	10.8
Balance.....	-102.8	-37.5	-108.9	-35.6	-107.7	-42.2	-70.9	-14.5
<i>Lebanon:^d</i>								
Imports.....	54.3	67.2	20.9	30.7	26.0	25.6	14.0	12.0
Exports ^c	1.7	14.7	3.2	5.8	10.3	3.3	1.2	3.6
Balance.....	-52.6	-52.5	-17.7	-24.9	-15.7	-22.3	-12.8	-8.4
<i>Syria:^d</i>								
Imports.....	...	...	16.8	25.0	26.5	27.1	...	...
Exports ^c.....	...	...	10.5	19.1	17.0	20.4	...	...
Balance.....	...	...	-6.3	-5.9	-9.5	-6.7	...	...
<i>Turkey:</i>								
Imports.....	73.7	71.0	73.5	47.5	45.9	92.7	20.1 ^f	53.2 ^f
Exports.....	44.8	36.1	46.0	43.5	69.5	32.1	22.0 ^f	13.3 ^f
Balance.....	-28.9	-34.9	-27.5	-4.0	23.6	-60.6	1.9	-39.9

Source: United Nations, *Direction of International Trade*, Statistical Papers, Series T, and official foreign trade statistics. Exports include re-exports; gold has not been excluded.

^a Excluding \$108.5 million of monetary gold.

^b For 1949 and 1950 data are for twelve months beginning 21 March of year indicated; 1951 and the first half of 1952 are calendar periods. For the exchange rate a composite rate of \$0.03101 to the rial was used.

^c Export of home produced goods.

^d Figures for 1949, representing imports and exports of the

Lebanese-Syrian customs union, are given under Lebanon. Trade with Canada not included. Sterling area includes only the United Kingdom, Cyprus, India, Iraq, Jordan and Palestine.

^e The value of exports to Canada, the United States and the sterling area has probably been overestimated as a result of calculating these values at official exchange rates. In fact, the law permits the transfer of export proceeds at free rates except in special instances, and it is understood that a large proportion of the export trade is carried on at free market rates.

^f January to May only.

United Kingdom exports to the region increased somewhat, from the equivalent of about \$425 million in 1950 to \$465 million in 1951, while its imports showed a sharp rise, from the equivalent of about \$515 million in 1950 to \$875 million the following year; nearly one-half of these imports consisted of crude and refined petroleum. Its imports from the Anglo-Egyptian Sudan rose from \$61 million to \$175 million and those from Egypt from \$112 million to \$133

million. Exports to the sterling area from Egypt and the Anglo-Egyptian Sudan amounted to \$245 million and \$70 million dollars in 1951. Imports from these two countries consisted mainly of cotton and reflected, in general, the strained supply position of cotton throughout the world and, in particular, the pressure of sterling area demand upon sources of supply outside the United States. Egypt's exports to the United Kingdom fell, however, to \$14 million during the first six

Table 53. Balance of Payments in Current Transactions of Selected Countries, 1949 or 1948/49 to 1951
(Millions of national currency)

	Egypt (Egyptian pound)			Iran ^a (Rial)			Iraq (Iraqi dinar)			Israel (Israel pound)			Lebanon ^b (Lebanese pound)	Syria (Syrian pound)	Turkey ^c (Turkish lira)	
	1949	1950	1951	1948/49	1949/50	1950/51	1949	1950	1951	1949	1950	1951	1950/51	1951	1949	1950
Merchandise:																
Credit.....	142.2	190.2	204.5	18,978	16,633	24,294	28.9	50.1	65.6	10.6	13.2	16.7	110.8	292	693.9	737.6
Debit.....	148.3	208.9	233.8	5,467	9,266	6,963	41.3	38.3	52.0	87.7	102.6	122.6	322.4	418	877.5	789.5
Balance.....	-6.1	-18.7	-29.3	13,511	7,367	17,331	-12.3	11.8	13.6	-77.1	-89.4	-105.9	-211.6	-126	-183.6	-51.9
Non-monetary gold movements (net):																
Credit.....	—	—	...	—	—	—	—	—	—	...	...	...	—	—	...	...
Debit.....	11.7	13.7	...	3	44	156	—	—	—	...	...	...	3.9	—	...	...
Balance.....	-11.7	-13.7	-9.6	-3	-44	-156	—	—	—	...	...	...	-3.9	—	...	...
Foreign travel:																
Credit.....	0.1	0.5	0.2	35	29	22	3.1	3.0	7.0	2.1	1.2	1.0	33.0	9	6.1	6.3
Debit.....	10.4	8.9	15.3	333	128	132	2.4	3.5	7.4	0.8	1.0	0.8	14.0	8	14.5	23.1
Balance.....	-10.3	-8.4	-15.1	-298	-99	-110	0.7	-0.6	-0.4	1.3	0.2	0.2	19.0	1	-8.4	-16.8
Transportation and insurance:																
Credit.....	36.7	4.8	34.1	8 ^a	7 ^a	29	1.5	1.6	1.5	1.2	0.9	1.7	49.0 ^e	5 ^e	11.7	12.4
Debit.....	12.8	17.1	7.6	27 ^a	7 ^a	14	0.3	0.4	1.5	0.3	1.9	2.5	—	—	89.1	86.7
Balance.....	23.9	-12.3	26.5	19 ^a	-4 ^a	15	1.2	1.1	—	0.9	-1.0	-0.8	49.0	5	-77.4	-74.3
Investment income:																
Credit.....	4.8	4.6	4.9	27	23	7	0.8	1.1	1.3	—	—	—	5.0	...	1.0	0.4
Debit.....	13.7	15.8	17.4	12,716	8,944	17,649	6.4	17.6	12.0	0.3	0.5	0.3	12.5	...	37.6	37.7
Balance.....	-8.9	-11.2	-12.5	-12,689	-8,921	-17,642	-5.6	-16.5	-10.7	-0.3	-0.5	-0.3	-7.5	...	-36.6	-37.3
Government transactions not included elsewhere:																
Credit.....	11.5	15.0	14.7	33	44	60	1.7	1.7	1.9	1.5	1.0	0.6	9.0	4	12.4	12.2
Debit.....	6.4	5.1	6.3	84	303	73	0.9	1.1	2.7	2.2	4.5	3.0	3.0	5	21.8	17.5
Balance.....	5.1	9.9	8.4	-51	-259	-13	0.9	0.6	-0.8	-0.7	-3.5	-2.4	6.0	-1	-9.4	-5.3
Miscellaneous:																
Credit.....	15.3	24.3	32.6	...	...	...	0.2	2.3	0.1	—	2.5	...	20.0	61	23.5	26.4
Debit.....	4.0	16.8	17.4	...	26	9	0.2	0.4	0.1	1.8	2.9	...	1.5	2	26.2	28.5
Balance.....	11.3	7.5	15.2	...	-26	-9	—	1.8	—	-1.8	-0.4	-6.6	18.5	59	-2.7	-2.1
Donations:																
Credit.....	...	...	1.2	15	123	217	0.3	0.3	—	37.6	34.7	47.8	105.0	21	273.9	283.7
Debit.....	...	...	...	20	32	27	0.2	0.2	—	1.0	1.5	0.5	4.0	—	69.6	36.5
Balance.....	...	...	1.2	-5	91	190	0.1	0.1	—	36.6	33.2	47.3	101.0	21	204.3	247.2
TOTAL, CURRENT TRANSACTIONS:																
Credit.....	210.6	266.5	292.2	19,096	16,859	24,629	36.6	60.1	77.2	53.0	53.5	67.8	331.8	392	1,022.5	1,079.0
Debit.....	207.3	277.5	307.4	18,650	18,750	25,023	51.6	61.7	75.6	94.1	114.9	136.3	361.3	433	1,136.3	1,019.5
Balance.....	3.3	-11.0	-15.2	446	-1,891	-394	-15.0	-1.6	1.6	-41.1	-61.4	-68.5	-29.5	-41	-113.8	59.5
Errors and omissions.....	0.4	2.2	...	330	176	397	4.2	-3.9	7.7	20.1	20.7	27.7	4.4	3	35.0	-264.5
Net movement of capital and monetary gold:																
Assets.....	-9.8	-44.2	-20.7	1,793	-1,838	177	-1.7	9.1	9.8	-8.5	-17.0	-9.9	...	...	-37.9	-152.0
Liabilities.....	-13.5	-35.4	-5.5	1,017	-123	180	9.1	14.6	3.6	12.5	23.7	30.9	...	...	40.9	53.0
Balance.....	3.7	-8.8	-15.2	776	-1,715	-3	-10.8	-5.6	6.2	-21.0	-40.7	-40.8	-25.1	-38	-78.8	-205.0

Source: International Monetary Fund, *Balance of Payments Yearbook, 1950-51*; for further explanation of the figures in this table, see the source.

^a Year ending 20 March.
^c Import values f.o.b.

^b Year ending 31 March.
^d Insurance only.
^e Transportation only.

months of 1952 against \$88 million in the corresponding period of 1951. Because of shifting an important share of its purchases from Egypt to the Anglo-Egyptian Sudan, the United Kingdom dropped from first to fifth customer on the export list though still retaining its position as Egypt's principal supplier of goods. Iranian imports from the United Kingdom in rial values declined by about three-fifths in the first six months of 1952 as compared with the corresponding period of 1951. Turkish imports from the United Kingdom doubled in 1951, while its exports declined slightly. Over half of British exports to Turkey consisted of machinery and motor vehicles.

France and the Benelux countries tended to increase their share of both exports and imports in trade with Israel, Syria and Turkey in 1951, while their share decreased in some countries, such as Egypt and Lebanon. Total exports from France to the Middle East reached approximately \$180 million in 1951, as against \$116 million in 1950; its imports were \$530 million as against \$328 million, due mainly to greater purchases of petroleum. Western Germany's exports to the Middle East more than trebled from 1949 to 1950 and nearly doubled from 1950 to 1951. More than half of these exports went to the Turkish market and consisted mainly of cotton goods, metal manufactures and machinery. Western Germany's imports from the Middle East (cotton, fruits and oil) have also increased at a rapid pace, the main supplier being Turkey, which in 1951 accounted for about one-third of them. Trade between Iran and western Germany has also increased substantially in the past two years, following the trade agreement of 1949.

The Soviet Union's trade with Middle Eastern countries has been mainly with Iran and Egypt; it has tended to fluctuate widely from year to year. Egypt's imports from the Union of Soviet Socialist Republics have increased in recent years, but in 1951 its exports to that country fell sharply. In the first half of 1952, contracts for barter of Egyptian cotton against Soviet wheat and sugar raised the value of exchanges, the total of which reached \$39.5 million as against \$14.8 million in the corresponding period of 1951. Iran's trade with the Soviet Union, though on the upswing, had not recovered by 1951 from the setback of 1947. In the first six months of 1952, however, its imports from the Union of Soviet Socialist Republics rose from 4.6 per cent of total imports in the first half of 1951 to 16.3 per cent; its exports from 5.9 to 20.6 per cent.¹⁰ This increase put the Soviet Union ahead of western Germany and the United Kingdom as Iran's leading customer, and second only to the United States as a source of supply. Middle East trade with eastern Europe has risen little, though there has been an increase in Lebanese imports from Czechoslovakia.

The Arab States' boycott continued to depress Israel's trade with the Middle East to a fraction of its pre-war level.¹¹ Nevertheless, trade within the region has probably risen as a percentage of total trade since 1938. If Israel's trade is excluded, regional trade has clearly become of greater importance, although it still constitutes only a small fraction of the total trade of the Middle East. The dissolution of the Syrian-Lebanese customs union in March 1950, however, which has increased the nominal value of regional trade while probably decreasing its real value, makes accurate comparison difficult.¹²

Balance of Payments

During the period under review, all the Middle Eastern countries for which information is available had an import surplus,¹³ which in some countries was heavy, continuing a trend that had set in during the Second World War or shortly after (table 53). Among the factors which accounted for this were the rising oil royalties, which enabled producing countries to have a constant import surplus; the large-scale investment in petroleum; the use of foreign exchange assets accumulated during the Second World War and the receipt of foreign aid by Israel and Turkey. In a few countries, notably Israel, Jordan, Lebanon and Saudi Arabia,

expenditures by tourists and pilgrims or donations from abroad also helped to finance the import surplus.

With very few exceptions, the balance of payments registered deficits on current account which were not fully covered by capital inflow. As table 54 shows, the gold and foreign exchange assets of these countries, which had been dwindling since the end of the Second World War, were somewhat replenished during the raw materials boom of 1950/51. By the end of 1951, however, they had dropped back below the 1950 level, and available figures for 1952 show a heavy decline.

¹⁰ United States Department of Commerce, *Foreign Commerce Weekly* (Washington, D.C.), 17 November 1952.

¹¹ See chapter 8, "Refugee Problem". In 1939 the Arab States accounted for the following percentages of total imports into Palestine: flour and wheat, 35 per cent; cattle, 50 per cent; feed for animals, 55 per cent. Iraqi and Iranian oil constituted the bulk of its oil imports before 1948.

¹² As a result of the duties imposed on various manufactured goods of local origin, industrial specialization and trade between Syria and Lebanon are probably less than they were in 1949.

¹³ Unless otherwise specified, import and export figures given in this section have been taken from foreign exchange control records as published in the International Monetary Fund's *Balance of Payments Yearbook, 1950-51*, (Washington, 1952); they do not, therefore, agree with the foreign trade returns shown elsewhere, which are based on merchandise movements.

Table 54. Gold and Foreign Assets Held by Official Institutions in Selected Countries, 1938 and 1949 to 1952

(Millions of United States dollars)

Country and item	1938	1949	1950	1951		1952	
				June	December	June	September
<i>Egypt (National Bank):</i>							
Gold.....	55	54	98	143	174	174	174
Foreign exchange.....	40	694	636	644	356	251	184
Foreign investments ^a	80	236	245	245	427	427	425
TOTAL	175	984	979	1,032	957	852	783
<i>Iran (Bank Melli and Treasury):^b</i>							
Gold.....	26	140	139	138	138	138	138
Foreign exchange.....	12	103	113	97	58	48	42
TOTAL	38	243	252	235	196	186	180
<i>Iraq:^c</i>							
Gold.....	—	—	—	—	—	—	—
Foreign exchange.....	—	8	25	25	22	20	25
Foreign investments (sterling).....	22	91	92	92	92	92	92
TOTAL	22	99	117	117	114	112	117
<i>Israel/Palestine (National Bank):</i>							
Gold.....	—	...	...	...	...	...	...
Foreign exchange.....	11	80	31	8	8	—	—
Foreign investments.....	22	...	...	...	...	...	...
TOTAL	33	...	...	...	...	...	...
Other banks.....	34	28	32	44	26	24 ^d	...
<i>Lebanon (Government and Bank of Lebanon):</i>							
Gold.....	2 ^e	13	20	24	26	29	29
French francs.....	...	...	16	13	12	10	9
Other foreign exchange.....	...	...	2	1	1	1	1
TOTAL	...	...	38	38	39	40	39
<i>Turkey (Central Bank):</i>							
Gold.....	29	154	150	150	151	150	146
Foreign exchange.....	5	49	65	61	66	51	36
TOTAL	34	203	215	211	217	201	182

Source: International Monetary Fund, *International Financial Statistics*. Figures represent end of period except as otherwise indicated; certain additional banks have been included with the official bank (Anglo-Palestine Bank and, after April 1951, the Bank Le Leumi) to increase the coverage in Israel.

^a Including long-term securities of the United Kingdom Gov-

ernment and other holdings.

^b Data for year ending 20 March of the following year.

^c Holdings of the Currency Board to June 1949 and of the issue department of the National Bank thereafter.

^d March.

^e 1939 figure.

EGYPT

During the period covered in table 53, namely 1949 to 1951, as well as in the first half of 1952, Egypt's balance of payments had the same pattern. The trade balance always showed an import surplus, amounting to £E 34.6 million during the first half of 1952. Other items on current account registered a surplus—£E 4.1 million in the first half of 1952—but, except in 1949, this was insufficient to offset the deficit in the balance of trade, and there was a deficit in the total current account. A breakdown of transactions by regions brings out the fact that, in all four periods, transactions with the Western Hemisphere showed a surplus; this was largely due to efforts by the Government to increase exports and to reduce imports from that area and to purchases of dollar goods from non-dollar countries against payment in Egyptian pounds. There was also a surplus in transactions with the sterling area except during the first half of 1952. These surpluses were, however, more than offset by deficits with other parts

of the world. Capital movements also followed much the same pattern. Each year, Egypt drew on its sterling balances to cover its deficit on current account and used its dollar surplus to increase its holdings of gold, hard currency and other foreign exchange. Reductions in sterling balances amounted to £E 22 million in 1949, £E 29 million in 1950, £E 54 million in 1951 and £E 30 million during the first half of 1952, while increases in gold and foreign exchange were £E 9 million, £E 23 million, £E 35 million and £E 4 million respectively.¹⁴

IRAN

Until nationalization of the oil industry in 1951, the main elements in the balance of payments of Iran were, on the one hand, a large import surplus, accentuated by other debit items on current account and, on the other hand, foreign exchange contributions made by the Anglo-Iranian Oil Company. During the years 1949/50,

¹⁴ National Bank of Egypt, *Economic Bulletin* (Cairo).

1950/51 and 1951/52, excluding exports of petroleum and imports by the petroleum company, both of which are included under merchandise in table 53, the import surplus was 5,601 million rials, 4,220 million rials and 4,390 million rials, respectively. The total deficit on current account, excluding operations by the oil company, was 5,915 million rials, 4,296 million rials and 4,579 million rials, respectively. Of this, proceeds of foreign exchange from the Anglo-Iranian Oil Company covered 4,024 million rials in 1949/50 and 3,902 million rials and 1,026 million rials in 1950/51 and 1951/52. In 1951/52, the sharp reduction in revenues from petroleum left a large deficit, which was met by the sale of foreign exchange assets and the incurring of short-term liabilities aggregating 2,452 million rials, as well as an \$8.7 million loan from the International Monetary Fund.

IRAQ

The pattern of the balance of payments of Iraq is fundamentally similar to the one prevailing in Iran before nationalization of the oil industry. Merchandise trade leaves an import surplus, generally large, which is offset to only a slight extent by other credit items on current account, notably expenditure by pilgrims and disbursements by foreign ships in the port of Basra. The remaining deficit has been covered, in whole or in part, by the contribution of foreign exchange from the oil companies, including their capital investments, which, owing to pipeline construction and other forms of development, averaged nearly ID 10 million a year in 1948-51.

The import surplus (excluding transactions by the petroleum companies) amounted to ID 16.1 million in 1949, ID 2.9 million in 1950 and ID 8.2 million in 1951. Owing to the low level of oil production, royalties, local expenditures and capital investments by the oil companies amounted to only ID 7.6 million (net) in 1949 and ID 7.9 million in 1950, but in 1951, owing to expanded production, they rose to ID 19.3 million.

ISRAEL

Outstanding features of Israel's balance of payments were the heavy import surplus on the one hand and the large inflow of donations on the other. These donations covered five main groups of private remittances: cash donations by individuals, amounting to £I 5.2 million in 1949, £I 5.0 million in 1950 and £I 5.8 million in 1951; donations by Zionist national institutions, equal to £I 24.5 million, £I 18.9 million and £I 11.5 million, respectively; gifts in kind, amounting to £I 2.4 million, £I 5.5 million and £I 9.9 million; transfer of personal effects by immigrants, amounting to the equivalent of £I 3.7 million, £I 2.9 million and £I 2.4 million; and transfer of immigrants' capital equal to £I 1.8 million, £I 2.4 million and £I 13.2 million, respectively. In

addition, the 1951 figure included an official grant of £I 5 million, representing the portion released in that year of a \$65 million grant made by the United States under the Mutual Security Act for the fiscal year 1951/52.

In all three years covered by the table, donations were not sufficient to meet the deficit in other current transactions. It was met by reducing sterling and dollar balances, selling foreign securities and drawing on the proceeds of Export-Import Bank loans and the Independence Loan floated in the United States. Releases of sterling balances amounted to £I 8.5 million in 1949 and £I 14.9 million in 1950. Drawings on the Export-Import Bank loans amounted to £I 6.6 million in 1949, £I 16.2 million in 1950 and £I 12.9 million in 1951, while the Independence Loan contributed £I 18.0 million in 1951. The figures shown under "errors and omissions" cover imports without payments in official foreign exchange (£I 8.6 million in 1949 and £I 1.9 million in 1950) as well as commercial credits and short-term loans, mostly in United States dollars.

Figures for the first six months of 1952 showed an import surplus of £I 56.3 million, of which £I 16.4 million represented imports "without payments" or "against additional obligations". National funds contributed £I 7.6 million, and a United States grant-in-aid £I 11.6 million. The balance was met by issues of "independence bonds", amounting to £I 9.8 million; drawings on the Export-Import Bank loan, amounting to £I 8.3 million; and the sale of foreign securities worth £I 2.3 million.¹⁵

LEBANON

Lebanon's balance of payments normally has a heavy import surplus, covered partly or wholly by earnings on services and donations. In 1950/51 its import surplus amounted to £L 12 million. Expenditures by tourists totalled £L 33 million. Earnings on transit trade and profits on foreign exchange transactions amounted to £L 69 million. Donations, including gifts to schools and other institutions (£L 16 million), remittances by emigrants and transfer of capital by immigrants (£L 50 million) and international aid to Palestine Arab refugees (£L 39 million), aggregated £L 105 million. The remaining deficit on current account was covered mainly by capital investment by petroleum and other foreign companies.

SYRIA

In 1951 Syria's import surplus amounted to £S 126 million against £S 68 million in 1950. The most important offsetting items on current account were £S 54 million received from the petroleum companies as transit dues and local expenditures, £S 11 million

¹⁵ Bank for International Settlements, *Press Review* (Basle), 20 November 1952.

contributed by the United Nations Relief and Works Agency for Palestine Refugees and £S 10 million representing emigrants' remittances. The remaining deficit on current account, £S 41 million, was covered by a \$4 million loan from Saudi Arabia, by capital inflow of £S 12 million and by sale of gold and foreign exchange. Figures for the first nine months of 1952 showed a small export surplus, and it appeared likely that complete data for the year would show no deficit on current account.

TURKEY

Since 1947, Turkey's balance of trade has consistently shown an import surplus, which in some years was fairly large. This has been covered, to a large extent, by United States grants and various foreign loans, the balance being met by sale of gold and other assets.

The import surplus was £T 184 million in 1949 and £T 52 million in 1950; these figures do not include transport costs which, together with other items, raised the deficit on goods and services to £T 318 million and £T 188 million, respectively. Moreover, the figure

shown for 1950 under "errors and omissions" is believed "to reflect primarily unrecorded prepayments for imports and proceeds of exports left abroad".¹⁶ The gap thus left in current accounts was partly met by grants and loans and by liquidation of gold and foreign assets aggregating £T 14 million in 1949 and £T 133 million in 1950.

No balance of payments data are available for 1951 or 1952. The import surplus, as recorded in foreign trade statistics, widened from £T 62 million in 1950 to £T 247 million in 1951 and £T 211 million during the first half of 1952. As in previous years, the deficit was mostly covered by loans, grants and drawing rights. During the period 1 July 1950 to 30 June 1952, United States grants to Turkey totalled \$109.2 million and United States loans — total drawn — \$40.5 million. In 1950, the International Bank for Reconstruction and Development advanced to Turkey loans aggregating \$25.4 million; this amount does not seem to have been drawn upon until the following year. Such loans and grants, however, do not seem to have completely covered the deficit; there was a decrease in the gold and foreign exchange holdings of the Central Bank.

Trade Agreements

The trade agreements concluded by Middle Eastern countries during the past few years fall into three main groups. The first consists of agreements between Arab States, designed to implement the Arab League's recommendations for closer economic co-operation among its members. The second comprises trade agreements made by Israel with a large number of European, Asian and Latin American countries. The third group, the most important, comprises agreements between Middle Eastern countries on the one hand, and western Germany, the Soviet Union and other European countries on the other.

Trade agreements between Arab States include those signed by Egypt and Saudi Arabia in 1949; Egypt and Syria in 1950; Egypt and Jordan, Egypt and Lebanon in 1951; Lebanon and Jordan in 1952; Syria and Jordan in 1952. Following the breakup of the customs union between Lebanon and Syria, in March 1950, two agreements were concluded between these two countries.

In view of the fact that the economies of the Arab countries are complementary in only a few respects, trade between them is at a low level and the value of transactions covered in these trade agreements is small. Egypt and Lebanon, the most industrialized, have undertaken to export certain manufactured goods in exchange for foodstuffs and raw materials. The list of Egypt's exports to Jordan, Lebanon and Syria specified fine cotton yarn and thread, electric bulbs, fezes,

books, cinema films and phonograph records; in addition, Lebanon was to receive raw cotton, Jordan cotton fabrics and Syria certain petroleum products. Egypt's stipulated imports included wheat and barley, olives, olive oil, potatoes and hides from Syria; livestock, dairy products, vegetables, fruit, soap and raw wool from Jordan; vegetables, fruit, oil, silk and woollen fabrics, cement, confectionery and books from Lebanon.

For some time after the breakup of the customs union between Lebanon and Syria, trade declined substantially. The commodities most affected were Lebanese fruits, cotton yarn, matches and beer, which became subject to a duty in Syria, and Syrian wheat and milk products, which were no longer protected against foreign competition in the Lebanese market; likewise, Syrian silk textiles were subject to a duty in Lebanon. In December 1950, the two Governments signed an agreement removing prohibitions on importation from either country of agricultural and domestic industrial goods, that is, goods containing local raw materials to a value of at least 50 per cent. Such goods were, however, to continue to be subject to the usual customs duties in both countries and to require import licences for entry into Syria.

In February 1952, a comprehensive commercial and financial agreement was concluded. Agricultural prod-

¹⁶ International Monetary Fund, *Balance of Payments, 1949-50* (Washington, D.C.), page 375.

ucts of both countries were to be exchanged free of duty, as were also a few industrial goods such as glass, containing only a small proportion of foreign raw materials; certain other industrial goods, including cement, soap, macaroni and similar products, beer, skins and some textile products, were to benefit from a 33 per cent reduction on ordinary tariffs; other industrial goods were to pay the full duty levied on foreign goods. In addition, Syria declared its willingness to purchase imported goods in Lebanon, to authorize free travel to that country and to settle all outstanding debts. So far, however, this measure has failed to increase trade between the two countries appreciably, while travel between them is still at a low level. Syria's attempts to divert import trade to the port of Latakia have met with only a limited measure of success; some two-thirds of imports, by volume, still enter the country through Beirut. The larger part of sea-borne exports, however, is sent through Latakia.

Israel's trade agreements have been influenced by the fact that it has an import surplus in its trade with most countries and at the same time disposes of relatively large amounts of hard currency. Hence, commercial agreements have tended to follow the same pattern, providing that the value of imports is to be met partly by exports of Israel goods and partly in hard currency or capital transfers. During 1949, agreements were concluded with Finland, Hungary, the Netherlands, Poland, Uruguay and Yugoslavia, providing for imports aggregating \$33,916,000 and exports totalling \$8,998,000. In 1950, agreements with Argentina, Czechoslovakia, Finland, Hungary and the Netherlands provided for imports worth \$33,560,000 and exports worth \$12,060,000.¹⁷ Recently, as certain industries in Israel have increased their output, there has been a tendency to conclude agreements in which imports are fully met by exports of Israel products. Thus, in 1950, an agreement with Turkey provided for the exchange of up to \$840,000 of goods; an agreement with Finland, in the same year, provided for the exchange of \$3,600,000 of goods, and an agreement with Norway in 1951 provided for an exchange of \$2,240,000 of goods. Nevertheless, most agreements still stipulate a surplus of imports by Israel. For example, an agreement concluded with Yugoslavia in 1951 provided that 85 per

¹⁷ Jewish Agency for Palestine, *Israel Economic Horizons* (New York), November 1950.

cent of the value of imports was to be met by exports of Israel goods, with the balance in foreign exchange. An agreement with Poland, in the same year, provided for exports up to 65 per cent of imports, and a 1951 agreement with Uruguay provided for exports up to 20 per cent of imports.

The third type of trade agreement mentioned covered agreements between various Middle Eastern countries on the one hand and certain European countries on the other. The most important of these agreements have been with western Germany, which is raising its already large share of Middle Eastern trade by agreements with Afghanistan, Egypt, Iran, Iraq, Lebanon, Syria, and Turkey. In addition, a German reparations offer to Israel of \$714 million was scheduled to be paid in goods.

The range of countries with which Middle Eastern States have recently concluded agreements may be illustrated by Egypt, which during the past four years has signed agreements with Czechoslovakia, France, western Germany, India, Jordan, Lebanon, Pakistan, Poland, Saudi Arabia, Switzerland, Syria, the Soviet Union and Yugoslavia. In value, the most important of these was the trade and payments agreement with western Germany, concluded in April 1951 and extended in June 1952 to May 1953. The value of transactions was originally fixed at \$50 million and, in June 1952, raised to \$79.1 million. Egyptian exports include cotton, cotton yarn, manganese ore, calcium phosphate, onions and garlic, while German exports include machinery, metal manufactures, electrical equipment and chemicals.¹⁸

The Union of Soviet Socialist Republics concluded barter agreements with Egypt in 1951 and 1952, providing for the exchange of wheat against Egyptian cotton and rice. It concluded one with Iran in 1950, extended in 1951, for the exchange of cotton piece-goods, sugar, rails and other iron and steel products, cement, glass and paper against rice, cotton, dried fruits, oil-seeds, tobacco, wool and goatskins.

As a result of these trade agreements, western Germany and the Union of Soviet Socialist Republics have appreciably increased their trade with Egypt, Iran and Turkey, partly at the expense of the United Kingdom and the United States.

¹⁸ National Bank of Egypt, *Economic Bulletin*, vol. IV, No. 2, 1951 and vol. V, No. 2, 1952.

Chapter 7

FOREIGN CAPITAL IN THE REGION

Only meagre data are available on foreign capital in the region. With a few exceptions it may be said that neither the Middle East countries which receive foreign capital nor the countries which provide it give a detailed account of capital movements. Therefore, no attempt can be made to present an over-all picture of the amount of foreign capital and its origin. In view

of the importance of this subject, however, an endeavour has been made to provide a summary of the scanty information available as to foreign capital derived from private sources; foreign capital received from government sources; and foreign capital obtained from international organizations.

Private Foreign Investments

By far the greatest part of foreign investment has been in the petroleum industry of the Middle East; there are few data on private investment in other fields, except in Israel, or on investments originating from creditor countries other than the United States.

INVESTMENTS IN THE PETROLEUM INDUSTRY

The petroleum industry in the Middle East has been developed almost entirely by foreign capital—American, British, Dutch and French. Nearly one-half of this investment has been made since 1945, when the industry undertook large-scale development projects to increase production from the huge reserves that had been discovered during the past two decades. In 1925 total investment in the petroleum industry of the Middle East was about \$100 million; most of this amount was invested in Iran. By 1935, the total had increased to about \$350 million, mainly as a result of the development of new fields in Iraq and Bahrein, together with construction of transport and other facilities, as well as further development of the Iranian oil industry. A decade later, in 1945, total investment reached about \$1,000 million, owing largely to the opening of Saudi Arabian fields, construction of several new refineries, and extension of existing facilities. In post-war years, a shift of emphasis to the Middle East by the oil industry to meet an increasing part of the rising world demand for petroleum resulted in the carrying out of large-scale development programmes which raised gross investment to \$1,900 million by 1951.¹ The greater part of this increase was accounted for by the reinvestment of earnings.

There are no figures available on the total amount of foreign capital invested in the Middle East each

¹ Figures on investment from Arabian American Oil Company, *Middle East Oil Development* (New York, 1952).

year, but there are indications that the inflow has been declining recently, since the oil industry reached the peak of its construction activities in the period 1948 to 1950. For instance, capital movements from the United States for direct investment in the petroleum industry of the Middle East countries (excluding Bahrein, Kuwait and Turkey) declined from \$98 million net in 1949 to \$85 million in 1950; and in 1951 there was a disinvestment of \$26 million.²

Over nine-tenths of all investment in the oil industry of the region was controlled by United States and British interests prior to nationalization of the Iranian oil industry in March 1951. According to an unofficial estimate, United States-controlled oil interests accounted for over two-fifths of the 1951 value of investment in the fixed assets of the petroleum industry of the Middle East. The share of British-controlled interests was estimated at nearly half of the total, but this proportion was greatly reduced by nationalization of the properties of the Anglo-Iranian Oil Company in Iran. Dutch and French interests each represented around 4 per cent of these assets; the remaining one per cent was owned by the Governments of Egypt, Iraq and Turkey.³

In 1951 about 90 per cent of this investment was in the major oil producing and refining countries of the region: Iran, Saudi Arabia, Iraq, Bahrein and Kuwait, part of it in connexion with pipelines and harbour facilities required for oil operations. In addition to these investments, in the past two decades about \$90 million has been spent by certain concessionaires in

² For purposes of comparison, net direct investments in petroleum from the United States to Latin American countries amounted to \$56 million in 1950 and a disinvestment of \$48 million in 1951. For definition of direct investment, as used in this chapter, see footnote 8.

³ Yeganeh, M., "Investment in the Petroleum Industry of the Middle East", *Middle East Journal*, vol. 6, 1952.

Table 55. Consolidated Net Income, before and after Foreign Government Taxes, of Certain Oil Companies, 1948 to 1951
(Millions of dollars)

Year	Net income before foreign government tax		Net income after foreign government tax		
	Anglo-Iranian Oil Company ^a	Bahrain Petroleum Company	Anglo-Iranian Oil Company ^a	Arabian American Oil Company ^b	Bahrain Petroleum Company
1948.....	211.1	...	97.9	83.2	56.4
1949.....	152.7 ^c	69.5	68.2 ^c	115.1	61.4
1950.....	236.5	73.7	94.5	127.4	50.6
1951.....	142.2	148.9	69.6	180.1	98.4

Source: *Moody's Industrials* (New York); Anglo-Iranian Oil Company, Ltd., *Annual Report and Accounts* (London); Federal Trade Commission, *International Petroleum Cartel* (Washington, D.C., 1952).

^a Excluding funds accumulated in a "special contingencies account" in the period 1948 to 1951, amounting to £49,987,440 (nearly \$140 million) which would have been paid to Iran if the 1949 "supplemental agreement" had been ratified. A part of this amount (which has been estimated at about £22 million by Iranian sources) represents the share of Iran in the

general reserves according to the 1933 concessionary agreement, and the balance additional payments under the 1949 "supplemental agreement". An amount of £178 million (around \$600 million) was used for capital expenditures out of earnings from 1948 to 1951.

^b Based on 30 per cent equity share of Standard Oil Company of California in the Arabian American Oil Company.

^c Adjusted to take into account the 1949 depreciation of the pound.

several other parts of the region without discovery of oil in commercial quantities.

As to the pattern of investment, it has been estimated that refineries in the Middle East have absorbed nearly two-fifths of the value of fixed assets. Investment in pipelines and port facilities was computed to amount to almost one-third of the total; the remaining part—a little more than one-quarter—represented investment in production, including exploration, drilling and storage facilities, and in complementary installations, such as housing and other buildings, roads and airports, roughly in the proportion of two to three, respectively.⁴

The actual amount of gross or net profits obtained by the oil companies from their investments in different countries of the Middle East is extremely difficult to ascertain. Some companies do not publish financial statements. In other cases, before the latest profit-sharing agreements were made, some companies operated on a cost basis in accounting to their parent companies; the profits resulting from their local operations were not shown separately in the income accounts of the parent companies. In another instance, though the producing company operated on a profit and loss basis, its parent companies divided its production among

themselves at lower than market prices. Sometimes the income accounts published by an oil company are consolidated, covering world-wide activities, without showing separately the income drawn from a particular country, though most of its operations are in the Middle East. Other difficulties arise out of the fact that certain companies do not show the amount of profits reinvested or the depreciation cost; sometimes the total paid in taxes to foreign governments is not stated. Table 55 shows income before tax⁵ and after tax for three of the major oil companies operating in the Middle East.

NET DIRECT INVESTMENTS FROM THE UNITED STATES⁶

For the Middle East⁷ the inflow of net direct foreign investments⁸ from the United States amounted to \$114 million in 1949 and \$102 million in 1950 (table 56). There was a disinvestment of \$13 million in 1951, when capital flow was reversed owing to the fact that oil

data on United Kingdom investments, for three Middle East areas only and in nominal capital values (all securities; in millions of pounds sterling):

End of year	1938	1943	1948	1950
Anglo-Egyptian Sudan.....	17	13	11	11
Iran.....	34	34	34	...
Egypt.....	10	7	9	10

⁷ Including Egypt, Iran, Iraq, Israel, Jordan, Lebanon, Oman, Saudi Arabia, Syria, Trucial Oman, Turkey and Yemen.

⁸ Direct investments include (1) net assets of foreign branches of United States companies; (2) the value of the United States equity in foreign business organizations owned to the extent of 25 per cent or more of the voting securities of the foreign enterprises by persons or other interests ordinarily resident in the United States; (3) United States equity in foreign corporations whose voting stock is publicly held within the United States to an aggregate extent of 50 per cent or more, even when no investor or affiliated group of investors owns as much as 25 per cent; (4) outright ownership of real property. The data on the outflow of direct investment capital from the United States include reinvestment earnings of foreign branches but not of subsidiaries.

⁴ *Ibid.*

⁵ Foreign government tax; for payments to Middle East governments by the oil companies, see chapter 3.

⁶ While some other countries have important private investments in the Middle East, no comprehensive data are available on them. British and French investments in the region are considerable but, in the main, they were made before 1939. In the post-war period, investment by these two countries has reached significant proportions only in the petroleum industry. In Israel, British and French capital has represented an appreciable share of total foreign investments since 1948.

Bank of England publications, *United Kingdom Overseas Investments, 1938 to 1948* (London, 1950) and *United Kingdom Overseas Investments, 1949 and 1950* (London, 1952), give some

enterprises in the Middle East began to turn over to parent companies in the United States the cash proceeds from their sales which they no longer required for investment after completion of such major construction projects as pipelines. On United States investments in Egypt there was an outflow in 1950 of \$16 million net owing to the surrender of exploration concessions, but a net direct investment of \$3 million in 1951. In Turkey, United States direct investment amounted to approximately \$1 million net in 1950 and \$2 million in 1951. The flow of capital from the United States for direct investment in Middle East activities other than petroleum amounted to approximately \$17 million net in 1950 and \$13 million in 1951,⁹ constituting about 17 per cent of United States total net direct investment in the Middle East in 1950 as against about 14 per cent in 1949.

Table 56. United States Net Direct Investment in Middle East Countries,^a by Major Fields, 1949 to 1951

(Millions of United States dollars)

Industry	1949	1950	1951
Manufacturing.....	12 ^b	9	6
Petroleum ^c	98	85	-26
Other ^d	4	8	7
TOTAL	114	102	-13

Source: United States Department of Commerce, *Survey of Current Business* (Washington, D.C.), December 1951 and September 1952; outflow from the Middle East represented by minus sign. Data include reinvested earnings of branches but not of subsidiaries.

^a Egypt, Iran, Iraq, Israel, Jordan, Lebanon, Oman, Saudi Arabia, Syria, Trucial Oman, Turkey and Yemen; reinvestment of earnings in subsidiaries of United States companies in Bahrein were \$41 million in 1947, \$35 million in 1948 and \$32 million in 1949 (United States Department of Commerce, *Balance of Payments of the United States, 1949-1951*, Washington, D.C., 1952).

^b Manufacturing and distribution.

^c Investment in the Turkish petroleum industry included under "other".

^d Includes agriculture, public utilities and miscellaneous.

The share of the Middle East in 1950 in the total of United States net direct foreign investments was about 15 per cent, if petroleum is included. If petroleum is excluded, the proportion was approximately 5 per cent in 1950 and 3 per cent in 1951. Compared with United States investments in Latin-American countries, its net direct investments in the Middle East were about one-eighth in 1950 and one twenty-fifth in 1951, petroleum excluded. They were higher than its investments in Ceylon, India and Pakistan, which were \$7 million in 1950 and \$1 million in 1951 if petroleum is excluded—\$13 million and \$7 million, respectively, if petroleum is included.

⁹ United States Department of Commerce, *Survey of Current Business* (Washington, D.C.), December 1951 and September 1952.

The total value of outstanding United States direct investments in Egypt and the Anglo-Egyptian Sudan was \$39.7 million in 1950 as against \$16.8 million in 1943; in Saudi Arabia, Iraq, Jordan, Lebanon and Syria the total was \$574.6 million in 1950, more than ten times the figure in 1943.¹⁰ Of the \$39.7 million invested in Egypt and the Anglo-Egyptian Sudan in 1950, \$8 million was invested in manufacturing, \$0.5 million in transport, communication and public utilities and \$2.8 million in trade. In the second group of countries, \$1.1 million was invested in transportation, communication and public utilities and \$1.7 million in trade. The total amount invested in petroleum in these same Middle East countries was \$596.1 million. Furthermore, it is likely that a considerable proportion of the \$148.6 million listed as representing outstanding investment in petroleum "in other . . . dependencies" (that is, other than in the Western Hemisphere and Africa)¹¹ refers to investments in Bahrein and Kuwait. In Turkey, outstanding United States investments "exceed \$33 million. Of this amount, approximately \$11 million is invested in oil distribution facilities, \$8 million in American-sponsored schools and hospitals, and \$6 million in tobacco processing installations. Other fields of activity involving considerable American investment include sewing-machine distribution, electric-light bulb production, licorice processing, pharmaceutical manufacture and the distribution of photographic equipment."¹² It may be mentioned that the total outstanding in 1950 for United States direct investment in India, Indochina, Indonesia and Pakistan was \$108.2 million, and the total for Latin American republics, \$4,675 million.

PRIVATE INVESTMENTS IN ISRAEL

The only Middle East country for which there are some comprehensive data on foreign private investments is Israel. In recent years it has had the largest inflow of foreign private capital of any country if investment in the petroleum industry is excluded. Out of a total of 731 enterprises approved by Israel's Investment Centre from 1950 up to 31 July 1952, 601 were of foreign origin, representing a total capital outlay of \$138.8 million. United States and Canadian capital ac-

¹⁰ United States Department of Commerce, *Survey of Current Business*, December 1952. The data on outstanding investments presented in this paragraph are not strictly comparable with the data on direct-investment capital movements presented above. An important factor is the exchange rate at which the foreign currency in which the assets are presented is converted into United States dollars. In general, the valuation of United States direct investments abroad in the 1950 census is considerably lower than estimates based on data concerning capital outflow. One reason is that the 1950 data represent book values, in which fixed assets appear at the depreciated original cost, which in the aggregate is much less than their replacement cost at present price levels, and also lower than the market value. Necessary data were not available for another way of valuation.

¹¹ *Ibid.*

¹² G. C. McGhee, United States Ambassador to Turkey, quoted in *Foreign Commerce Weekly* (Washington, D.C.), 20 October 1952.

counted for about one-third of all foreign private investments in Israel (table 57). Four-fifths of the approved projects were in industry.¹³ Mention should also be made of donations, since a large proportion of them has been used for investment. Remittances from abroad amounted to £I 31.1 million in 1949, £I 27.9 million in 1950 and £I 26.7 million in 1951, while capital transfers by immigrants amounted to £I 11.4 million, £I 12.8 million and £I 15.6 million, respectively.¹⁴

Table 57. Private Foreign Investments Approved in Israel to 31 July 1952

(Thousands of United States dollars)

Country or area	Number of projects	Capital invested
United States and Canada.....	219	46,800
Central and South American countries	19	2,000
Europe:		
Great Britain.....	46	12,400
Switzerland.....	41	11,000
France.....	54	10,900
Benelux countries.....	46	8,800
Italy.....	38	7,100
Germany and Austria.....	22	3,500
Scandinavian countries.....	7	1,000
TOTAL FROM EUROPE	254	54,700
Other countries.....	109	35,300
WORLD TOTAL	601	138,800

Source: Jewish Agency for Palestine, *Economic Horizons*, September 1952. These figures do not include private investments not under the jurisdiction of the Investment Centre.

STEPS TO INCREASE THE INFLOW OF FOREIGN CAPITAL

In only one country of the region, Lebanon, are foreign exchange transactions entirely free from restrictions. This result was brought about in successive steps, of which the latest was the abolition, in May 1952, of the obligation of concessionary companies to purchase 80 per cent of their requirements of local currency at the official rate of exchange. At present, exchange transactions and transfers of capital may be effected, without restriction, at the free rate of exchange. In other countries foreign exchange transactions are subject to controls, but during the past few years various measures have been taken to encourage the inflow of foreign investments.

In Egypt a decree law of 1952 authorized foreign enterprises, in establishing new companies or increasing the capital of existing companies, to hold 51 per cent of the capital instead of the maximum of 49 per cent allowed under a 1947 law; if within one month the share reserved for Egyptian capital is not subscribed, the proportion of foreign capital is allowed to go above 51 per cent. Transfer of profits abroad has

also been facilitated.¹⁵ The provisions of the 1947 law requiring that at least 40 per cent of the directors, 65 per cent of the salaried employees and 90 per cent of the wage earners of any joint stock company in Egypt must be Egyptian have not been modified.

A law for the encouragement of investment was passed in March 1950 by the Parliament of Israel. Simultaneously, an Investment Centre was established as an independent department of the Ministry of Trade and Industry to decide whether a proposed investment should be approved as beneficial to the economy. Among the privileges granted under this law to such "approved undertakings" were the following. A non-resident investor is entitled to withdraw, in the foreign currency in which the investment was made, an amount up to 10 per cent of the capital invested, either as profit or as amortization, or both. Investment in imported machinery and equipment is considered similar to an investment in foreign currency, and the foreign exchange required is provided at the official rate of exchange. Tax reductions, exemptions or deferments are granted on income tax, import duties and property tax. A depreciation rate twice as high as the normal rate is allowed during the first three years on the equipment and plant of new enterprises and one and a half times the normal rate during the next two years.¹⁶ In February 1952 another incentive to foreign investors was provided by making the highest of the exchange rates for the United States dollar applicable to foreign investments, which can be made now at the rate of one dollar per Israel pound.

Moreover, Israel and the United States have signed an agreement under which future United States private investments in Israel will be insured by the United States against the risk of loss by expropriation or non-convertibility of profits and principal into United States dollars. A prospective investor, after having his project approved by the Israel Government Investment Centre, will negotiate the guarantee with the Mutual Security Agency in Washington. If the investor is unable to convert the profit or capital accruing to him, the United States Government will reimburse him in dollars, acquire in counterpart his Israel pounds, and have them converted by the Israel Government at approximately the normal exchange rate current at the time of transfer.¹⁷ This insurance does not protect against depreciation of the local currency in terms of foreign exchange.

The Israel Parliament also enacted a general law in 1952 regulating petroleum exploration and exploitation in that country.

¹⁵ International Monetary Fund, *International Financial News Survey* (Washington, D.C.), 15 August 1952.

¹⁶ S. P. Doron, "Private Foreign Investment in Israel" (Israel Office of Information), July 1952.

¹⁷ Jewish Agency for Palestine, *Economic Horizons*, September 1952.

¹³ Jewish Agency for Palestine, *Economic Horizons*, September 1952.

¹⁴ International Monetary Fund, *Balance of Payments Yearbook, 1950-51* (Washington, D.C., 1952).

In Syria a decree law of 21 April 1952 simplified exchange regulations, giving greater freedom for transfers of capital. To facilitate the channelling of foreign exchange earned from exports through authorized banks to pay for licensed imports, export proceeds were to be converted at free rates. On the other hand, steps which might restrict inflow of foreign capital in certain fields were taken to ensure that foreign companies in Syria registered before undertaking any activity, and utilized Syrian agents in Syria; the president and the majority of directors of any enterprise must be Syrians and the majority of capital invested in the enterprise must be owned by Syrian nationals.¹⁸

In Turkey a law to encourage foreign investments was enacted in 1951. This law was rather comprehensive in its protection of foreign investments, but did not apply to foreign capital already invested in Turkey. For the purpose of the law, the following are considered as foreign capital: foreign exchange; machinery, equipment and construction materials; concessions, patents and trade-marks brought into Turkey for approved projects in the fields of industry, power, mining, public

works, transportation or tourism. A proposed project must be approved by a committee set up by the Council of Ministers in order to qualify. Enterprises set up with foreign capital have the same rights, facilities and immunities as local enterprises. The foreign investor may each year transfer as profits, interest or dividends up to 10 per cent of the capital brought into Turkey, at the same rate of exchange as that originally prevailing. He may also transfer the principal after a period of time to be determined by the Council of Ministers—not less than three years after the date of entry of the foreign capital. Profits exceeding 10 per cent of the capital may either be transferred as profits in a subsequent year in which the total is less than 10 per cent of the invested capital, or transferred along with the capital invested. Capital and interest on long-term loans from foreign countries to enterprises in Turkey have the same privileges as foreign capital invested and may benefit from a special guarantee granted by the Council of Ministers. It was announced in December 1952¹⁹ that Turkey was prepared to permit the participation of foreign capital in exploring for petroleum and exploiting any oil found in Turkey.

Foreign Capital from Government Sources

The greater part of governmental foreign aid to Middle East countries comes from the United States.²⁰ United States Government foreign aid to Israel and Turkey amounted to \$245.3 million from 1 July 1950 to 31 March 1952, this total accounting for about 90 per cent of all its grants and credits to Middle East countries in that period (table 58).

Loans from the Export-Import Bank of Washington, D.C., have represented the largest part of loans made to Middle East countries during recent years. For the period 1 July 1950 to 31 March 1952, they represented \$127.8 million out of a total of \$130.2 million of loans and credits utilized. The beneficiaries of these loans were Afghanistan, Egypt, Israel, Saudi Arabia and Turkey.²¹ In Israel, of the \$135 million in loans and credits authorized as of 30 June 1952 from the Export-Import Bank, \$58.8 million had been utilized for agricultural production, \$21.2 million for housing materials and \$16.1 million for development of ports, transportation and telecommunication. The total disbursed amounted to \$110.8 million, out of which only \$14.7 million had been devoted to industrial development;

such development was to a large extent financed by other sources, among them foreign private capital. The total of loans and authorized credits to Turkey from the Export-Import Bank amounted to \$33.9 million as of 30 June 1952; \$29.4 million had been disbursed and \$16.0 million had been repaid.²² Of the total, \$8 million had been devoted to reconversion of vessels, \$3.8 million to railways, \$8.0 million to iron works, \$2.6 million to airport equipment and \$1.4 million to sea-ways and harbours.

In Saudi Arabia \$14.8 million was utilized from the loans and credits granted by the Export-Import Bank for raw materials, equipment and development projects. In Afghanistan \$13.8 million was devoted to public projects, consisting of the construction of a dam and a canal. In Egypt the loans and credits from the Export-Import Bank, which amounted to \$7.25 million on 30 June 1952, had been entirely used in the construction of a fertilizer plant, and were outstanding.

Grants from the United States to Middle East countries from 1 July 1945 to 30 June 1950 totalled \$165.7 million (table 58) and from 1 July 1950 to 31 March 1952 were \$139.5 million. The major part of these grants consisted of \$65.4 million for economic and technical assistance to Turkey, and \$25.8 million to

¹⁸ International Monetary Fund, *International Financial News Survey*, 18 April 1952; *Middle East Economist* (Forest Hills, New York), May 1952.

¹⁹ Turkish Information Office, *News from Turkey* (New York), 11 December 1952.

²⁰ There is no information on grants to Middle East countries by other governments, except the grants-in-aid and loans to Jordan by the United Kingdom, which were estimated to amount to about £23 million from 31 March 1945 to 31 March 1952, and to about £8 million for the fiscal year ending March 1953.

²¹ Export-Import Bank of Washington, *Fourteenth Semi-annual Report to Congress*, for the period January-June 1952 (Washington, D.C.).

²² *Ibid.* These figures are for direct loans and do not include loans and credits by the Export-Import Bank for the Mutual Security Agency, European programme.

Table 58. United States Government Foreign Aid: Grants and Credits
Utilized from 1 July 1945 to 31 March 1952
(Millions of United States dollars)

Country	1 July 1945 to 30 June 1950			1 July 1950 to 31 March 1952			Cumulative total		
	Grants	Credits	Total	Grants	Credits	Total	Grants	Credits	Total
Afghanistan.....	—	—	—	0.1	12.6	12.7	0.1	12.6	12.7
Egypt.....	0.3	17.6	17.9	0.1	0.3	0.4	0.5	17.9	18.4
Iran.....	0.8	23.2	24.0	2.4	2.4	4.8	3.2	25.6	28.8 ^a
Iraq.....	—	0.9	0.9	—	—	—	—	0.9	0.9
Israel.....	—	32.1	32.1	25.8	69.8	95.6	25.8	101.9	127.7 ^b
Jordan.....	—	—	—	1.5	—	1.5	1.5	—	1.5
Lebanon.....	—	1.6	1.6	0.2	—	0.2	0.2	1.6	1.8
Saudi Arabia.....	1.6	14.3	16.0	0.1	4.6	4.7	1.7	18.9	20.6
Syria.....	—	—	—	0.1	—	0.1	0.1	—	0.1
Turkey.....	163.0	76.8	239.7	109.2 ^c	40.5	149.7 ^c	272.2 ^c	117.3	389.5 ^d
TOTAL	165.7	166.5	332.2	139.5 ^e	130.2	269.7 ^e	305.3 ^e	296.7	602.0 ^e

Source: United States Department of Commerce, *Foreign Aid by the United States Government* (Washington, D.C.), June 1952; *Survey of Current Business*, October 1952. Reverse grants and other returns on United States grants and any principal collected on credits extended are not deducted. They amounted for the period under review to about \$10 million for Iran, \$2 million for Israel, \$6 million for Saudi Arabia and \$31 million for Turkey. Data do not include most of the military aid furnished under the Mutual Security Program.

^a Total to 30 June 1952, \$37 million.

^b Total to 30 June 1952, \$174 million.

^c Including "special resources" of \$47.5 million made available during the year 1951/52 by the United States Government for settlement of the deficit incurred by Turkey with the European Payments Union; but excluding an initial credit balance in the European Payments Union of \$25 million in 1950/51.

^d Total to 30 June 1952, \$423.5 million.

Israel, with a further \$158.6 million to Turkey under the Greek-Turkish Aid Act. In 1951/52 another \$47.5 million was made available to the latter for settlement of the deficit incurred by it with the European Payments Union. Tables 59 and 60 show the types of

Turkish development projects financed with funds received through the Mutual Security Agency and with counterpart funds. During the second quarter of 1952, Israel, Turkey and Iran received a total of \$90 million in grants and credits.

Table 59. Turkey: Use of Counterpart Funds, 3 April 1948 to 30 November 1952

Type of project	Local currency (millions of liras)	Dollar equivalents (millions of dollars)
CUMULATIVE TOTAL.....	428.6	153.1
<i>Promotion of production:</i>		
Agriculture:		
Farm credit.....	19.3	6.9
Research and extension services.....	12.1	4.3
Land reclamation.....	9.0	3.2
Other agricultural programmes.....	2.7	1.0
Total, agriculture.....	43.1	15.4
Extractive industries:		
Coal mining.....	35.1	12.5
Other mining and quarrying.....	6.1	2.2
Total, extractive industries.....	41.2	14.7
Basic textiles.....	8.7	3.1
Miscellaneous manufactures.....	19.0	6.8
Roads and highway bridges.....	37.0	13.2
Merchant and fishing fleet.....	3.7	1.3
Electric, gas and power facilities.....	1.7	0.6
Loans to commerce and industry ^a	5.1	1.9
TOTAL, PROMOTION OF PRODUCTION.....	159.6	57.0
<i>Military production, construction and materials.....</i>	238.0	85.1
<i>Other purposes:</i>		
Care of refugees.....	30.0	10.7
Health and sanitation.....	1.0	0.3
TOTAL, OTHER PURPOSES.....	31.0	11.0

Source: Mutual Security Agency, *European Program: Local Currency Counterpart Funds* (Washington, D.C.), 30 November 1952.

^a Not specified elsewhere.

Table 60. Turkey: Approved Industrial Projects, and Mutual Security Agency Paid Shipments as of 30 November 1952
(Thousands of United States dollars)

Type of project	Number of projects	Estimated original cost ^a	Mutual Security Agency financing		
			Total approved	Total procurement authorized	Paid shipments
TOTAL, INDUSTRIAL PROJECTS	13	\$216,933	\$62,325	\$57,018	\$43,461
<i>Raw materials extraction:</i>					
Coal mining.....	2	50,831	14,217	14,163	12,214
Iron mining.....	1	5,000	1,000	991	990
TOTAL, EXTRACTIVE INDUSTRIES...	3	55,831	15,217	15,154	13,204
<i>Manufacturing:</i>					
Meat packing and storage.....	1	7,444	1,425	1,000	934
<i>Transport, communication and utilities:</i>					
Power facilities.....	2	56,110	16,270	15,711	8,668
<i>Road and miscellaneous transport facilities:</i>					
Roads.....	1	61,155	19,215	19,084	15,126
Air transport.....	1	4,326	714	714	689
Total, roads and miscellaneous transport facilities.....	2	65,481	19,929	19,798	15,815
Waterways and harbours.....	2	16,310	5,324	2,460	1,956
Road equipment.....	1	3,000	1,000	—	—
TOTAL, TRANSPORT, COMMUNICATION AND UTILITIES.....	7	140,901	42,523	37,969	26,439
<i>Agriculture:</i>					
Grain storage and handling facilities....	1	7,907	2,500	2,500	2,489
<i>Engineering:</i>					
Engineering and technical services.....	1	4,850	660	395	395

Source: Mutual Security Agency, *Monthly Report* (Washington, D.C.), 30 November 1952.

^a Dollar equivalents.

Aid by the International Bank for Reconstruction and Development²³

The International Bank for Reconstruction and Development provided aid to several Middle Eastern countries. The total amount advanced to the region was \$63.4 million up to the end of June 1952. The main financing by the Bank during the past two years has been in the following countries.²⁴

EGYPT

On the basis of the report of a Bank mission which visited Egypt in the summer of 1951, the Bank informed the Egyptian Government that it was willing to consider financing a number of development projects, subject to certain technical and financial conditions. It was arranged that an engineering consultant would be sent to Egypt in the second half of 1952 to study the capital works programme of the Egyptian State Railways.

²³ Aid provided by other agencies of United Nations and by the United Nations Relief and Works Agency for Palestine Refugees is discussed in chapter 8 and appendix B. Sales of currency have been made by the International Monetary Fund to Egypt, Iran and Turkey, but being short-term transactions, these operations have not been included in this chapter.

²⁴ The following paragraphs are drawn from International Bank for Reconstruction and Development, *Sixth Annual Report, 1950-51; Statement of Principal Activities of the International Bank for Reconstruction and Development*, covering the period 1 July 1951 to 31 March 1952 (Washington, D.C., 30 April 1952), and *Seventh Annual Report, 1951-52*.

IRAN

After expressions of interest on the part of Iran and the United Kingdom, the Bank offered in November 1951 to try to work out interim arrangements for resumption of oil operations in southern Iran. Upon the invitation of the Prime Minister of Iran, a mission consisting of a Bank official and an oil consultant arrived in Tehran at the end of December. This mission reported that the properties had been carefully looked after and that there were no insuperable technical difficulties standing in the way of resuming operations.

Early in February 1952 the vice president of the Bank went to Tehran to discuss further the possibility of effecting resumption of large-scale oil operations. As a basis for discussion, the Bank put forward a proposal,²⁵ which was discussed in Tehran and in London. Understanding in general terms was reached on a number of questions but on several major points there was no agreement. In the absence of real progress in reconciling views on these points, it was mutually decided to recess the talks, with the understanding that they could be resumed later if it should appear that a basis for agreement could be reached.

²⁵ For a summary of this proposal, see International Bank for Reconstruction and Development, *Seventh Annual Report, 1951-52*, page 18.

IRAQ

On 15 June 1950 the Bank had made a loan of \$12.8 million to Iraq for a project to prevent the Tigris River from periodically flooding Baghdad and the agricultural area around it. Flood control is to be accomplished by means of a barrage and sluices which will divert excess water from the Tigris through a channel thirty-three miles long into a large land depression north-west of Baghdad, known as the Wadi Tharthar. In October 1951, a contract was awarded to a British firm for construction of the channel, and work on this first phase of the project began early in 1952.

The report of the Bank's economic survey mission was presented to the Iraq Government in February 1952.²⁶ The mission had been impressed by Iraq's potentialities for economic development. Furthermore, rapidly rising revenues from oil make it possible for the Government to undertake a large-scale development programme over the next few years. The mission outlined a five-year development programme calling for a total expenditure equivalent to \$470 million. In June 1952 a Bank representative visited Iraq and discussed with the Government the recommendations in the mission's report and the action taken by the Government to carry them into effect.

LEBANON

In May 1952, a Bank representative visited Beirut for exploratory talks with the Government of Lebanon on the financing of development projects. Further discussions as to the type and extent of possible financial assistance from the Bank are in prospect.

SYRIA

After a Bank mission had visited Syria at the end of 1950, the Bank advised the Syrian Government in June 1951 that it was prepared to negotiate loans on projects for drainage and irrigation, highway improvement and the development of the port of Latakia. In May 1952, when a Bank representative visited Damascus, the Government informed him that it was ready to open negotiations for loans for the purposes mentioned. Likewise, the Syrian Government made it known that it also wished the Bank to consider, at the same time, the financing of additional projects. The Government's proposals are under study by the Bank.

TURKEY

On 7 July 1950 the Bank had made loans totalling \$16.4 million for projects to develop Turkish ports and to provide grain storage facilities at various shipping points throughout the country. Construction work has begun on inland storage sheds and grain elevators,

and a consultant has been retained to draw up plans and specifications for the three large grain storage elevators which are to be built at ports. Equipment was being ordered both for constructing storage facilities and for handling grain. Several of the subsoil and engineering studies necessary for the reconstruction and development of Turkish ports have been completed.

On 7 July 1950, the International Bank for Reconstruction and Development had lent the new Industrial Development Bank of Turkey \$9 million to provide it with foreign exchange resources. By the end of May 1952, fifteen months after the start of operations, this new industrial bank had approved loans for several projects, amounting to £T 22 million (about \$7 million). Five of these projects, requiring foreign exchange equivalent to approximately \$1.9 million, have been submitted to the International Bank in accordance with the loan agreement and have been approved: one for construction of a cotton-ginning and oil-seed plant; one for the building of a transmission line; three for construction of cotton textile mills. In August 1951, the Turkish Government signed a contract with the Bank by which the latter would make loans to private enterprises to the extent of £T 54.5 million of Economic Cooperation Administration counterpart funds.

In June 1951 the report of the Bank's comprehensive economic survey mission was presented to the Turkish Government.²⁷ This report contained an analysis of the Turkish economy and recommendations designed to create the essential framework within which the Turkish Government could work out a long-term economic development programme. The Government established a committee to study these recommendations, and at the close of 1951 Bank representatives visited Turkey to discuss, in the light of the mission's report, the investment plans of the Turkish Government and its financial and economic policies. As a result of these discussions, a loan of \$25.2 million was made on 18 June 1952 for multi-purpose dam and power facilities on the Seyhan River, near Adana. This loan will finance the foreign exchange required for a dam, a power-generating plant and power-transmission lines to industrial centres.

The dam is the key to the Seyhan project, a comprehensive plan being carried out by the Turkish Government for the control and use of the waters of the Seyhan River. The power plant at the dam will have an initial capacity of 36,000 kilowatt-hours. Housing will be provided for an additional generator with a capacity of 18,000 kilowatt-hours, which may be installed later. When completed, the power-generating and transmission facilities will be turned over to a private corporation for operation. Both the Government and private capital will share in the ownership of this corporation, but the majority of the stock will be held by private interests.

²⁶ *The Economic Development of Iraq* (Baltimore, 1952).

²⁷ *The Economy of Turkey* (Washington, D.C., 1951).

Chapter 8

THE REFUGEE PROBLEM¹

The Refugee Population

Nearly four years after the cessation of Arab-Israeli hostilities there were still some 865,000 Arab refugees receiving relief from the United Nations in four Middle East countries—Egypt, Jordan, Lebanon and Syria. In addition, there were approximately 5,000 refugees in Iraq who were maintained by the Government of Iraq and 19,000 displaced Arabs living in Israel itself, for whose welfare and eventual reintegration into the national economy the Government of Israel has taken responsibility. Finally, there were several thousand persons originating from Palestine who did not appear on the registers of relief recipients of the United Nations Relief and Works Agency for Palestine Refugees (UNRWAPR) because they were not in such need as to qualify for relief, or for other reasons.²

This large population originated in different parts of Palestine and, with some exceptions,³ generally moved to the nearest neighbouring Arab country. Thus inhabitants of the districts of Acre, Haifa, Safad and the Galilee area went north-west into Lebanon and Syria. Some of the people of Jaffa and most of those from the Gaza and Beersheba districts crowded into the area held by the Egyptian army, which at the time of the armistice consisted of a narrow strip of territory about 40 kilometres long and 5 kilometres wide, stretching from the Egyptian frontier to a point just north of Gaza. The population of the rest of the coast area, including some from Haifa and Jaffa, together with

¹ Prepared by the United Nations Relief and Works Agency for Palestine Refugees. This account deals with economic aspects of the refugee problem in Arab countries only. For basic general information, see *Final Report of the United Nations Economic Survey Mission for the Middle East*, parts I and II, December 1949 (United Nations Publication 1949.II.B.5.); "Report of the Secretary-General on assistance to Palestine Refugees" (A/1060), Official Records of the Fourth Session of the General Assembly, *Ad Hoc Political Committee*, annex, vol. II, 1949, page 14; *Interim Reports of the Director of the United Nations Relief and Works Agency for Palestine Refugees*, General Assembly Official Records: Fifth Session, Supplement No. 19 (A/1451/Rev.1), 1951; *Report of the Director of the United Nations Relief and Works Agency for Palestine Refugees*, General Assembly Official Records: Sixth Session, Supplement Nos. 16 (A/1905) and 16A (A/1905/Add.1); *Annual Report of the Director of the United Nations Relief and Works Agency for Palestine Refugees*, covering the period 1 July 1951 to 30 June 1952, General Assembly Official Records: Seventh Session, Supplement No. 13 (A/2171), 1952; and "Special Report of the Director and Advisory Commission of the United Nations Relief and Works Agency for Palestine Refugees" (A/2171/Add.1), 17 October 1952 (mimeographed).

most of the inhabitants of the Ramleh and Jerusalem districts, moved into the hilly area then known as Arab Palestine and later, in April 1950, annexed to Trans-jordan.

Since the original displacement, there has been comparatively little change in the number and location of refugees receiving relief and, in particular, very little movement of refugees between the host countries. In December 1949 the report of the United Nations economic survey mission for the Middle East⁴ gave the "ration strength" of the United Nations Relief for Palestine Refugees (UNRPR), then responsible for refugee relief, as 940,000.⁵ In May 1950, when the United Nations Relief and Works Agency for Palestine Refugees took over, the number of refugees receiving relief was 957,000. Changes in numbers and location at six-month intervals since that date are indicated in table 61.

Owing to continuing difficulties in identifying and enumerating refugees entitled to rations,⁶ efforts to exclude refugees not in real need and other illegitimate claimants have been only partly successful. Rapid reduction in the rolls has also been impeded by the high rate of natural increase of the refugee population itself, which shows no sign of dropping below the figure of 30 per thousand per annum reported in Palestine for the years 1941 to 1944.⁷

² The term "registered refugees", as used by the United Nations Relief and Works Agency for Palestine Refugees, refers to all refugees eligible for the relief and reintegration services of the agency, and includes infants under one year of age who receive only milk rations, adults who may, because of special circumstances, receive half rations, and adults and children receiving full rations. Not all refugees are entitled to assistance from the United Nations Relief and Works Agency for Palestine Refugees; eligibility is conditional on need, as well as on loss of home and means of livelihood as a result of the conflict.

³ A large proportion of the minority of Christian Arabs moved to Lebanon.

⁴ Part I, page 22.

⁵ The report at the same time estimated that the total number of non-Jews "who could have fled Israel" was 726,000, some 85 per cent of the total non-Jewish population within the boundaries of Israel territory. The ration rolls were known to be inflated from the beginning with large numbers of claimants who were not entitled to relief.

⁶ Frequently referred to in the reports of the Director of the United Nations Relief and Works Agency for Palestine Refugees, e.g., report for 1951, page 3.

⁷ Government of Palestine, *Survey of Palestine* (Jerusalem, 1946), vol. I, page 144.

Table 61. Number of Refugees Receiving Relief, by Location,
May 1950 to October 1952

(Thousands of persons)

Date	Gaza	Israel	Jordan	Lebanon	Syria	Total
May 1950.....	201	46	500	129	82	957
November 1950.....	200	24	464	117	82	887
May 1951.....	200	24	463	107	84	878
November 1951.....	199	20	463	106	83	871
May 1952.....	204	19	470	104	84	881
October 1952.....	205	—	471	103	85	865

Because of the high rate of natural increase, the average size of the family is large—about five persons—and the population is young. Nearly 50 per cent are aged 15 and under, and only 6 per cent are aged 60 and above. By western standards this suggests a high rate of dependency, but the minimum working age is of course much lower in the Middle East; children under 15 in large families often make sizable proportionate contributions to the family income.

The occupational distribution of the population before displacement can only be conjectured, since the last count was taken in 1931. But on the assumption that the displaced group was representative of the population of Palestine as a whole, it may be said that possibly 50 per cent of the earners among them had some acquaintance with non-farming occupations. Of a total Arab labour force in Palestine estimated at 300,000 in 1944,⁸ the numbers engaged in various branches were as follows (in thousands):

Agriculture, livestock, fisheries and forests.....	152
Industry and handicrafts.....	13
Building and construction.....	20
War Department, civilian employment.....	26
Palestine troops.....	2
Transport and communications.....	15
Commerce and finance, hotels, restaurants and cafés...	29
Government and local authorities.....	32
Other.....	11

In 1943 a government survey listing 14,631 non-Jewish workers in skilled trades showed 62 per cent of them distributed as follows (in percentage of total):

Mechanics and fitters.....	17
Carpenters.....	13
Shoemakers.....	8
Weavers.....	8
Blacksmiths.....	5
Tailors.....	5
Tinsmiths.....	3
Masons.....	3

⁸ P. J. Loftus, *National Income of Palestine, 1944* (Government Printer, Palestine, 1946), page 27. The size of the Arab labour force is considerably understated because of the exclusion of part-time family labour.

The 1943 survey was incomplete, however, and the total number of skilled workers was certainly larger. The general impression from the available data is that the refugee population, though basically rural, was much more urbanized and had had more contact with manufacturing and other urban occupations than the populations of the host countries.⁹

About one-third of the refugees live in some sixty organized camps, varying in size from a few hundred persons to over 20,000; the other two-thirds are scattered among the towns and villages of the host countries, sometimes paying rent but mostly inhabiting makeshift dwellings in barracks, mosques, churches and unfinished or abandoned buildings and caves. At first, refugees who had the means to do so stayed away from camps, but exhaustion of their means has resulted in considerable pressure to increase accommodations in camps, where such amenities as schools and welfare centres are available and where the type of shelter provided has in many cases improved from the original tents to mud brick and stone huts which will stand bad weather better. The refugees are provided with blankets and they receive a minimum standard monthly food ration consisting in summer of the following (in kilogrammes): flour 10, sugar 0.6, rice 0.5, pulses 0.6, margarine 0.15 and vegetable oil 0.25. In winter 0.5 kilogramme of dates and a further 0.3 kilogramme of pulses are added.

The level of income of the Arab population before displacement from Palestine was estimated by the government statistician at the low figure of about £P 40 per person in 1944. Although there is some evidence that the present material standard of living of the refugees is not worse (and in some cases may be better) than that of the poorest nationals of the host countries, there is little doubt that it is deplorably low and far lower than it was in Palestine before the exodus.

⁹ Egypt, a possible exception, is hardly a host country in this sense, since refugees in the so-called Gaza strip are not normally allowed into Egypt proper.

The Host Countries

On the assumption of development of their natural resources, the long-run economic prospects of some of the Middle East countries to which the refugees found their way are undoubtedly bright, but the situation in all of them when the refugees arrived was unpromising. As the report of the United Nations economic survey mission stated in 1949, "it is only too clear that the Middle East suffers from poverty in the extreme", characterized by "conditions of intense pressure of hungry populations upon closely limited resources".¹⁰ Moreover, at the time of the survey, the countries of the Middle East were generally still wrestling with post-war adjustments following the conclusion of hostilities in 1945 and with what were for some of them the more difficult problems left by the Palestine war. Broadly speaking, the first related to the reorganization and reorientation of industry and agriculture, both of which had been affected by war-time conditions; and the second, apart from problems due to refugee immigration itself, related to financial and other burdens arising from hostilities in Palestine. In Iraq, for example, these burdens involved not only paying for part of the war effort of 1948 but also forgoing oil royalties following the stoppage of oil supplies to the Haifa refinery. For Jordan, there were financial burdens entailed by the absorption of eastern Palestine, a territory cut off from its natural markets by a new armistice line, and the disadvantages of loss of access to the sea through Haifa.

With the exception of Lebanon, where the commercial sector is more important, the host countries are predominantly agricultural, and even in Lebanon more than half the population is rural. Industries are of small size and, in the absence of adequate capital and natural advantages, seem likely to remain so. Population pressure on land resources is heavy. Some measure of the potentiality of a given territory to support its agricultural population can be constructed by estimating the *lot viable* on the minimum size of the plot that

can be worked profitably, at current prices, by a farm family working full time, without hired labour and using locally available tools. The size of the plot actually worked by the average farm family then gives a rough measure of the pressure of population on the land, though appropriate allowances must be made for subsidiary farm occupations, such as livestock raising, and earnings from non-agricultural sources. Application of the *lots viables* developed by Sir John Hope Simpson for Palestine and cited before the Anglo-American Committee¹¹ suggests in the case of Transjordan and what is now known as West Jordan that, with due allowance for differences in rainfall, the agricultural population in 1946 was about twice that which could reasonably be supported on the land. "Signs of land hunger" were reported by an authoritative observer before the war.¹² In Lebanon, even allowing for more abundant rainfall, the population which could be supported on the *lots viables* was still only half the actual population in 1946, though here the position was relieved by non-agricultural earnings and remittances from abroad. Only in Syria does the area of cultivated land appear to be adequate to support the population on the basis described. It is of course understood that the *lot viable* test can give only the most approximate results and that it relates only to the agricultural sector and does not purport to give a comprehensive impression of the disproportion between population and resources as a whole. Moreover, the test refers to the agricultural situation as it is and takes no account of the area of cultivable land not yet cultivated, which is small in Jordan and Lebanon, non-existent in Gaza but large in Syria. However, with respect to the situation at the time of the refugee exodus, the test suggests that population pressure was already severe in Jordan and Lebanon, if not in Syria, before the refugees came, and that subsequent immigration has increased the pressure in those host countries which, by reason of the disparity between their population and their agricultural resources, are least able to bear it.

Economic Impact of Refugee Immigration

The first consequence of the refugee emigration was the increase in the population of the host countries, that is, in the number of consumers and potential workers. The relative increase is shown in table 62.

The refugees, though in the main poor persons whose small property was largely in the form of agricultural land, nevertheless managed to bring with them various

movable assets in the form of goods, securities and cash; the former included miscellaneous collections of property of small commercial value, ranging from household furniture and personal effects to buses, cars, livestock, machinery and trading stock. The securities consisted mainly of shares in companies operating in Israel, though it is estimated that in 1949 some £P 1.7

¹⁰ *Final Report*, part I, page 34.

¹¹ *Survey of Palestine for the Anglo-American Committee of Enquiry* (1946), vol. 1, page 272.

¹² M. G. Ionides, former Director of Development of Transjordan, *Report on the Water Resources of Transjordan* (1939),

page 231. The report also stated "it is quite certain that even now much land is cultivated which can sustain only the lowest standard of living and it may be questioned whether such eastward expansion as is now taking place can offer any hope of permanent success".

Table 62. Refugee Population in Relation to Local Population
in Host Countries

(Thousands of persons)

Item	Gaza	Iraq	Jordan	Lebanon	Syria
Estimated local population, 1947.....	70 ^a	4,800	941 ^b	1,186	3,043
Refugee population at end of 1949.....	202	4	502	138	81
Refugee population, 1949, as percentage of local population, 1947.....	288.5	0.08	53.3	11.6	2.6

^a *Final Report of the United Nations Economic Survey Mission for the Middle East*, part I, page 29.

^b Including 450,000 persons who before 1948 were living in what is now known as West Jordan.

million of Palestine Government bearer bonds were held outside Israel by refugees. Although statistics of transfers of refugee bank deposits are not available, it is estimated by the bankers concerned that the rise in bank deposits in Jordan in 1947 and 1948 attributable to transfers by refugee depositors was of the order of 10 million Jordan dinars. No similar movements which can be identified with the migration occurred in the bank accounts in the other host countries, and no estimates are available of the volume of refugee transfers.

Transfers of bank-notes were, as might be expected, substantial. In 1948 some £P 27 million of Palestine Currency Board notes then circulating in Palestine were exchanged by the Government of Israel for new Israeli currency. Of the £P 33 million remaining in non-Israel hands out of a total circulation of £P 60 million, different portions were scattered throughout the neighbouring Arab countries. The host populations in Gaza and West Jordan are estimated to have held, altogether, about £P 10 million and, on the basis of the relative number of refugees in various host countries, with some adjustment for differences in host countries chosen by refugees of differing income levels, it is estimated that about £P 10 million was brought to Jordan, £P 3 million to Lebanon, £P 2.5 million to Gaza, £P 1.5 million to Syria and probably some £P 100,000 to £P 200,000 each to Egypt and Iraq.

On the most optimistic assumption as to the assets the refugees brought with them, it is beyond question that in all the host countries they added less to capital than to the labour supply, and therefore exaggerated the disproportion between man-power and other resources from which these countries already suffer. Some development did occur, but certainly not enough to absorb the number of refugees involved without damage to the existing standard of living. Individual refugee businesses or shares in local businesses are identifiable in Beirut, Damascus, and even in Gaza, and some individual newcomers have secured employment created in part by the refugee migration itself. Many refugees with established business connexions in Arab countries outside Palestine found it comparatively easy to re-establish themselves. But the total new investment rep-

resented by these efforts was small in relation to the mass of indigent and homeless people seeking employment.

Probably the greatest absolute effect has been registered in Jordan, where the total money supply (bank-notes plus bank deposits) was approximately doubled as a result of refugee transfers; and, following a phenomenal increase in rents as refugees sought homes, mainly in cities, the way was paved for a building boom of unprecedented size for the country. The number of building licences granted and the area of new buildings constructed tripled within the period 1948 to 1951 and, on a conservative estimate of building costs, it is probable that at least JD 4 million to JD 5 million was invested during the period—over three times as much as total public investment by the Jordan Government in those years. However, the effects of the boom were largely dissipated in increased imports, the value of which doubled between 1947 and 1949. Moreover, the country's capacity to export was of course not improved by the building boom; in fact, the value of exports fell off after 1948. Although the short-run effect of the boom in providing temporary employment was substantial, the improvement in Jordan's "absorptive capacity" through the use of funds brought by refugees was therefore dubious.

The obverse of the rise in prices and rents in Jordan and the similar, but smaller, rise caused by the refugee migration in other host countries was the fall in wages. While in Lebanon and Syria refugees are not free to accept gainful employment on the same conditions as nationals, they have equal opportunities in Jordan, and numbers of refugees have found employment in all the host countries—most of it admittedly precarious and spasmodic, regardless of legal restrictions. The pressure on wage levels has thus been continuous, probably lightest in Syria, except around the camps, and most severe in Gaza and Jordan. Changes in average wages of unskilled and semi-skilled workers in the small industries of five towns in Jordan, as shown by a recent government survey, confirm the impression that the large concentrations of refugees around Nablus, Jerusalem and Hebron have lowered wage rates in these places. In September 1952, the average daily wage of

adult workers in five important sectors (building, food industries, transport, crafts and services, and other industries) was as follows for the towns named (in Jordan piastres):

Amman.....	25.2
Jerusalem.....	22.1
Nablus.....	20.9
Irbid.....	20.8
Hebron.....	17.8

The current wage rate for unskilled work in Gaza and in West Jordan, where scores of thousands of refugees are crowded in villages near the frontier, is now about JD 4 (equivalent to US \$11) a month, close to starvation level. Ration recipients can survive on such wages. The original wage-earning inhabitants of these areas, together with a group of some 120,000 so-called "economic refugees" in West Jordan whose lands are cut off by the armistice line but who are not entitled to United Nations rations, are unquestionably on the verge of starvation. Of the original population in the Gaza strip, estimated at 70,000, about 60,000 were discovered by a recent inquiry of the Egyptian Government to be indigent and in need of relief.

Without intruding into political questions, it may be noted that the capacity of some of the host countries to support the refugees or to enable them to earn a living has been affected by the economic blockade which has been in force between Israel and the Arab States since 1948. In 1946, Palestine was an important supplier, largely of manufactured goods and petroleum products, to Egypt, the Lebanese-Syrian customs union and Transjordan, and these countries in turn were important suppliers of food and raw materials to Palestine.¹³ In addition, a transit trade with Iran and Iraq had begun, following the commercial opening of the desert route in 1935. The normal export balance in favour of the neighbouring Arab countries was partly settled through Palestine's large export trade with the United Kingdom in citrus products. In 1946, total imports of Palestine from Egypt, Iraq, the Lebanese-Syrian cus-

¹³ The last year for which complete data are available is 1946. In interpreting these data, however, it should be borne in mind that, at the time, war-time dislocations had not yet been overcome and overseas supplies were tight. Hence, both Palestine exports of manufactured goods to its neighbours and its imports of agricultural products from them were at a relatively high level.

toms union and Transjordan were £P 17.0 million or 25 per cent of all imports. The total exports of Palestine to the same group of countries in the same year were £P 6.3 million, or 25 per cent of all exports, while transit trade through Palestine for Transjordan amounted to £P 3.7 million and for Palestine through the Lebanese-Syrian customs union, to £P 3.6 million. In 1949, however, all forms of trade between Israel and the Arab countries ceased, Tripoli replaced Haifa as a source of oil for the Arab countries and central Europe began to supply food to Israel. Transit trade followed new channels through Beirut instead of Haifa.

The costs of adaptation to the situation created by the blockade are of course shared by all the countries concerned. On the Arab side, the impact of these changes was somewhat reduced by the fact that large numbers of refugees moved into the areas from which part of the former food supply of Palestine was obtained and to which the markets of Israel were not accessible. For the period 1939 to 1946, average annual exports of wheat from Syria and Transjordan were in fact nearly equal to average annual imports of wheat into Palestine.¹⁴ The availability from time to time of food supplies on an export basis in the host countries has been reflected in the supply operations of UNRWAPR.

The direct financial burden of refugee support on the governments and peoples of the host countries became appreciable in 1948. The Syrian Government has estimated that total outlay, both government and private, on behalf of the refugees during 1948 amounted to £S 7 million to £S 8 million. In Lebanon, 1948 expenditure on refugees was estimated at £L 5.2 million of government funds and more than £L 1 million of private funds. Local government contributions to the United Nations Relief for Palestine Refugees and to the United Nations Relief and Works Agency for Palestine Refugees after the United Nations entered the field of relief distribution are shown in table 63, below. The contributions were in cash, kind, direct aid to refugees and contributions of services. The total is shown in relation to total budget revenue for the years 1948 to 1952.

¹⁴ Food and Agriculture Organization of the United Nations, *Report on the Palestine-Arab Refugee Problem, with special reference to emergency food supplies*, September 1948.

Table 63. Local Government Contributions to UNRPR and UNRWAPR, 1948 to 1952
(Thousands of United States dollar equivalents)^a

Country	1 December 1948 to 30 April 1950	1 May 1950 to 31 December 1951	1952 (First half)	1948 to 1952 (First half)	Total budget revenues ^b 1948 to 1952
Egypt.....	2,817.9	1,961.3	2,680.8	7,460.1	2,335,319.0
Jordan.....	1,262.7	604.9	131.4	1,999.0	45,301.2
Lebanon.....	1,302.9	471.3	13.6	1,787.7	179,941.5
Syria.....	2,325.1	865.8	187.9	3,378.9	343,138.0

^a Converted at official rates.

^b From closed accounts and budget estimates.

United Nations Operations

The United Nations Relief for Palestine Refugees (UNRPR) was set up by the General Assembly in December 1948 when it became obvious that the problem of distributing relief to the increasing number of refugees from Palestine could not be handled with the limited resources available to local governments, specialized agencies of the United Nations and voluntary groups then working in the field. During its existence from December 1948 to April 1950, UNRPR spent \$39.1 million in providing, for a peak number of about a million refugees, a minimum of food, clothing, shelter and medical services, together with the rudiments of education for a part of the refugee children of school age. Although there were substantial emergency imports from outside the area in the early stage, a large part of the food requirement was bought in the Middle East countries themselves—the flour, for instance, from Jordan and Syria, the pulses from Jordan, Lebanon and Syria, and the fats, oil and other foods from Lebanon. On the basis of incomplete records, it is estimated that some \$10 million may have been spent within the period of UNRPR operations on food supplies in the three countries named. These expenditures undoubtedly cushioned the shock in Arab countries of the immigration of nearly a million non-producers who were in effect enabled to consume on the spot at least a part of the produce which had formerly been exported to their home countries before the troubles started.

After April 1950, the relief programme was continued by the United Nations Relief and Works Agency for Palestine Refugees (UNRWAPR), which was authorized during the period 1 January 1950 to 30 June

1951 to distribute relief to diminishing numbers of refugees. Following the main recommendations of the report of the United Nations economic survey mission for the Middle East, UNRWAPR was also authorized to spend \$34 million on work programmes calculated to provide gainful employment to the refugees in lieu of relief. For various reasons, of which not the least important was that the agency did not start operations until May 1950, expenditure on “works and technical assistance” reached only \$2.5 million by June 1951. Thereafter, by authority of a further resolution of the General Assembly,¹⁵ the relief programme was continued, and a “reintegration fund” of \$30 million was set up to finance “the reintegration of the refugees into the economic life of the Near East, either by repatriation or resettlement”. Half-way through the fiscal year, these arrangements were replaced by the \$250 million three-year programme for relief and reintegration which was endorsed by the General Assembly in January 1952¹⁶ and which envisaged the expenditure of \$200 million for economic investment projects that would improve refugee living conditions during the period July 1951 to July 1954. It is under the three-year programme, amended to authorize a somewhat higher proportion of expenditure on relief, that UNRWAPR is operating.

Since 1948, the main object of these operations has been to distribute relief supplies among the refugees, to find employment for them where possible and, more recently, to provide homes and work for them through a three-year programme of self-support. In the course of its relief activities, UNRWAPR has built up a large

¹⁵ Resolution 393 (V) of 2 December 1950.

¹⁶ Resolution 513 (VI) of 26 January 1952.

Table 64. Value of UNRWAPR Purchases, by Origin, 1950 to 1952^a
(Thousands of United States dollar equivalents)

Period	Origin						Total
	Egypt	Jordan	Lebanon	Syria	United States	Rest of world	
1950:							
May and June.....	85	692	15	514	52	504	1,861
Third quarter.....	39	1,874	68	1,351	65	1,227	4,624
Fourth quarter.....	123	813	32	1,337	26	1,783	4,113
1951 quarters:							
First.....	134	228	93	1,537	1,458	2,621	6,071
Second.....	68	191	134	273	1,370	1,810	3,845
Third.....	24	69	45	571	168	875	1,752
Fourth.....	—	9	177	203	2,985	746	4,119
1952 quarters:							
First.....	—	—	106	20	1,253	2,497	3,876
Second.....	—	118	233	—	2,066	4,959	7,376
Third.....	18	941	113	125	2,797	1,241	5,235
TOTAL	491	4,935	1,015	5,931	12,239	18,262	42,873

^a Data are not complete; figures exclude medical and certain other supplies.

supply service for staple foods and other commodities; in particular it has become one of the largest buyers of flour in the Middle East, its annual purchases amounting to over 100,000 tons. In buying necessary supplies, the agency has brought in imports from Europe, the American continent and other parts of the world (table 64), but has relied substantially on local resources.

Practically all the purchases made in Egypt were for Gaza, and all buying in Jordan was for local consumption. A small part of the purchasing in Syria was exported to Jordan and Lebanon, and the major part of the Lebanese purchasing was also exported, largely to Jordan but in part to Gaza and Syria. Only in Jordan have UNRWAPR purchases for the year exceeded 5 per cent of the given country's annual exports,¹⁷ but the supply operation has from time to time had con-

siderable effect on the local markets in particular commodities, for example, the wheat market in Jordan and Syria. Realizing this, the agency has tried to protect local markets from disturbances due to its operations, that is, it has supported local producers when needed commodities were offered at prices comparable to international levels, and it has brought in imports from outside the area in times of scarcity. Thus, flour was bought in Syria after the favourable wheat crop of 1950 but was imported into the area from the United States during 1951 in view of the failure of the Syrian harvest as a result of drought.

On account of the size of its local supply programme and its local administration, UNRWAPR has also purchased sizable amounts of local currencies (table 56).

Table 65. UNRWAPR Purchases of Local Currencies, 1950 to 1952
(Thousands of United States dollar equivalents)

Period	Lebanon	Syria	Jordan	Egypt	Israel	Total
1950:						
May to December	6,827	2,313	2,548	2,970	28	14,686
1951 quarters:						
First	2,749	1,645	—	650	—	5,044
Second	1,756	350	490	350	—	2,946
Third	1,990	502	560	360	15	3,427
Fourth	2,145	347	448	175	25	3,140
1952 quarters:						
First	1,453	366	630	100	8	2,557
Second	979	237	770	210	13	2,209
Third	993	568	770	268	20	2,619
TOTAL	18,892	6,238	6,216	5,083	109	36,628

In no case has UNRWAPR in any one year purchased more than 6 per cent of a country's foreign exchange receipts as shown in the balance of payments. This proportion was reached in Jordan in 1950, when UNRWAPR exchange operations were a distinct source of support for the Jordan balance of payments, though the currency itself is tied to parity with sterling through the sterling exchange standard.

With the exception of Lebanon, all the host countries have varying systems of exchange control, reflecting the scarcity of particular currencies, chiefly dollars and sterling. Of the total contributions of \$78.9 million (dollar equivalents) received by UNRWAPR in cash during the period 1 May 1950 to 30 June 1952, 74 per cent (\$58.3 million) was in United States and Canadian dollars, 18 per cent (\$14.2 million) was in sterling and 5 per cent (\$4.3 million) was in French francs. Conversions of sterling outside the sterling area into the currencies of Egypt, Israel, Lebanon and Syria were limited to approximately 50 per cent of the United Kingdom contribution, and conversions of French

francs outside the franc area into the currency of Lebanon were limited to 60 per cent of the French contribution. Supplies of free currencies accruing to the host countries were therefore mainly dollars. The importance of these supplies to the countries concerned cannot be easily estimated in the absence of a balance of payments statement on a regional basis for each country, but in Egypt, where an estimate has been made,¹⁸ UNRWAPR purchases of Egyptian pounds against dollars amounted to about 3 per cent of the net surplus with the American monetary area in 1951 and less than one per cent of total dollar receipts. In Jordan and Syria, such purchases were probably very much more important.¹⁹ Purchases of Israeli currency were very small, and the bulk of the dollars spent locally were channelled through the Beirut market, which is not subject to exchange control and in which no currency is "scarce" in the sense used above.

The agency itself is a large employer. Its international staff of 131 persons is small, but it employed a

¹⁷ In 1950, UNRWAPR purchases in Jordan were equal to 80 per cent of Jordan's exports and in 1951, to 11 per cent.

¹⁸ National Bank of Egypt, *Economic Bulletin*, "Egypt: Balance of Payments, 1951 and January to June 1952", vol. V, No. 2-3 (Cairo), 1952.

¹⁹ Both countries normally have a large passive trade balance with the United States.

local staff consisting of 5,951 persons at the end of October 1952, including 2,334 in Jordan, 1,840 in Gaza, 1,121 in Lebanon, 624 in Syria, 25 in Egypt, 4 in Iraq and 3 in North Africa. In addition, during 1950/51 the agency created employment for a peak number of 12,227 persons on a works programme which included the building of nearly a hundred kilometres of roads and the afforestation of about 4,000 hectares of land in Jordan, Lebanon and Syria, besides experimental house building, various municipal improvements and the organization of a sizable weaving industry in Gaza. The total wage bill for this programme, based on the current rate paid in the various countries, was \$1.3 million—some 55 per cent of the total cost of the programme. Except in Gaza, the number employed by UNRWAPR, either on the works programme or on its own staff, has not been large enough to affect substantially the general conditions of employment or the level of wages, though for skilled and professional workers in

Jordan the employment offered by the agency has probably been a protective factor of some importance. In the Gaza strip, where UNRWAPR is the largest single employer, the largest supplier and the largest importer, economic conditions are quite abnormal, and there the wage level set by the agency, its total local expenditure and its imports are decisive economic factors.

The general economic impact of UNRWAPR operations may thus far be described as minor, certainly in relation to what they may be when political and other conditions are favourable to the utilization of the reservoir of man power now being preserved in the refugee population through the maintenance of an extensive relief system. The expenditures have, however, cushioned the shock of refugee immigration and economic disturbances following the end of hostilities; with the exception of Gaza, where conditions are unique, and Jordan, they are not a major economic factor in the host countries.

New Programme

Results of considerable economic importance may be expected from expenditures under the three-year self-support programme of the United Nations Relief and Works Agency for Palestine Refugees, which in its original form provided for the expenditure of \$50 million in the first year, \$100 million in the second and \$50 million in the third, entirely apart from the \$50 million necessary to maintain relief throughout the three-year period for a diminishing number of beneficiaries. A start has been made with the first year of the programme in Jordan and Syria, and further large expenditures are being considered for Jordan.

The chief item of immediate practical importance in the programme is the plan for vocational training, for which a total of \$5 million has been set aside. In October 1952 agreement was reached between UNRWAPR and the Jordan Government for the establishment of a large vocational training centre near Jerusalem with an intake of some 600 students annually. Similar arrangements have been made for Gaza by UNRWAPR with the Egyptian Government, and plans are also being worked out in Iraq and Syria. In addition, certain agricultural development schemes based on land provided by the Syrian Government are being examined in Syria, and further projects of some size will shortly be considered in Libya, following the agreement of the Government to accept some 1,200 refugee families. Finally, an important project for the utilization of the Yarmuk and Jordan waters for irrigation and hydroelectric power in Jordan is being studied intensively by the Jordan Government, UNRWAPR and the Technical Cooperation Administration of the United States. This project offers the possibility of providing self-support for between 100,000 and 150,000 people by expenditures estimated at about \$50 million to \$60 million.

The construction of a dam, main canals and generating station is expected to employ a peak labour force of some 15,000 men for two or three years, and the project as a whole, if carried out as planned, will transform the entire Jordan economy. An agreement for the expenditure of a further \$11 million on various self-support projects not directly related to the Yarmuk-Jordan scheme has been signed by the Jordan Government and UNRWAPR. Negotiations and plans are under way with other countries for similar investment projects to improve refugee living conditions.

Parallel with the investment plans of UNRWAPR, which are motivated by the desire to improve living conditions of refugees, the national governments of the host countries have their own programmes for which external aid is in most cases likely to be necessary and forthcoming in the near future. In Iraq, where domestic resources will probably be more than sufficient to finance the five-year £155 million economic development plan, it is improbable that any external financial aid beyond the loan already received from the International Bank for Reconstruction and Development will be necessary. In Lebanon and Syria, however, where very large river development schemes based on the Litani, the Euphrates and the Khabur have been under study for some time, large capital imports will be necessary. In Jordan, external aid may very likely be invited for power production arising out of the Yarmuk-Jordan scheme. Given reasonable prospects of external aid, it is therefore probable that substantial economic development schemes parallel with the UNRWAPR programme may be worked out by the host countries in the next few years. The realization of these possibilities should ameliorate considerably the lot of refugees in the Arab countries.

Appendix A

SURVEY OF MAJOR INDUSTRIES

SURVEY OF MAJOR INDUSTRIES

In general, the development of industry¹ in the Middle East has followed lines similar to those in other under-developed areas; the main determining factors have been the nature of local demand, the presence of agricultural and other raw materials, the availability of skilled labour and the relative scarcity of capital. Hence, the most developed branches have been light industries, such as textiles and food processing, which utilize domestic raw materials and cater to local demand. Except in Cyprus and Turkey, mining and quarrying are relatively unimportant. In some countries, the presence of oilfields or refineries has ensured an abundant and relatively cheap supply of fuel, and during the past two decades a marked expansion has taken place in the production of electricity for lighting, irrigation and industrial purposes. Cement is another industry which expanded rapidly; cement is required for urban construction and public works, and the industry is favourably situated because of high transport costs for imported cement.

The chemical and pharmaceutical industries have expanded only slightly outside Egypt and Israel, and

basic metallurgical industries are still largely confined to Turkey. The range of the engineering industry, which formerly consisted mainly of repair yards for railways and ships, has been extended. A motorcar assembly plant is in operation in Egypt and there is also one in Israel; in addition, several minor industries, such as manufacture of refrigerators, radios and electrical implements, have been established in these and other countries. In Israel, the relative abundance of capital and the presence of skilled workers and technicians have made it possible to establish some industries not found elsewhere in the region, notably diamond cutting, which provides an important export item.

The following paragraphs briefly describe the major industries of the region.² At present, the largest part of the output of the industries mentioned below is accounted for by factories which have been established recently. Handicrafts still play an important part in certain fields, notably pottery, leather goods, weaving and rug making, but practically all the other industries which are described consist of relatively modern plants.

Mining and Quarrying

Cyprus and Turkey are the only countries of the Middle East in which mining (other than petroleum) plays a significant part in the national economy. Most of the region has not been adequately surveyed and, owing to poor communications, scarcity of water, lack of capital, shortage of skilled labour and other factors, full use has not been made of known resources. Table A-1 shows the output of the principal minerals since 1939.

Turkey

If oil is excluded, Turkey's mineral resources, chief of which are coal, chromium and copper, are much greater than those of the other countries of the Middle East. Extraction of chromium near Bursa and of coal from the Zonguldak fields began before the First World War, but systematic and large-scale exploitation of the country's other minerals started only in 1935, under the auspices of the Mining Research Institute (Maden

Tetkik ve Arama Enstitüsü), a government agency which has made extensive surveys, and the Eti Bank, which has financed and managed mining operations. According to the figures for 1950, the nominal capital of the bank was £T 150 million, of which £T 68.7 million was paid up,³ and about 40,000 persons were employed in its various enterprises.⁴ The bank operates through seven mutually independent agencies, namely, Eregli Coal (capital £T 52 million), Western Lignite (capital £T 11 million), Divrigi Iron (capital £T 4.2 million), Turkish Copper (capital £T 25 million), Eastern Chromite (capital £T 1.3 million), Keçiborlu Sulphur (capital £T 1.3 million) and Coal Sales.⁵

The coal deposits of Turkey have been estimated at about 500 million tons of bituminous and over 125 million tons of sub-bituminous coal. Most of the coal is of coking quality. In 1940, the mines operated by foreign companies were expropriated, and since that time the

¹ In this appendix, some information has been drawn from non-official sources in order to supplement official data.

² Important industries which have been omitted include the following: the rubber industry, chiefly in Egypt and Israel; the munitions industry in Iran and Turkey, and the motion picture industry in Egypt and Turkey.

³ United Kingdom Board of Trade, *Overseas Economic Survey: Turkey* (London, April 1950); International Bank for Reconstruction and Development, *Economy of Turkey* (Washington, 1951).

⁴ *Great Britain and the East* (London), September 1947.

⁵ *Ibid.*; also Thornburg, Spry and Soule, *Turkey: An Economic Appraisal* (New York, 1949), page 94.

Table A-1. Output of Minerals, 1939, 1943, 1945 and 1948 to 1952

(Thousands of metric tons)

Country and mineral	1939	1943	1945	1948	1949	1950	1951	1952
<i>Anglo-Egyptian Sudan:</i>								
Gold (kilogrammes)	234	66	50	111	128	110	...	...
Salt	41	41	45	37	44	41	46	...
<i>Cyprus:</i>								
Asbestos	8.9	1.4	3.2	8.1	12.6	15.0	17.2	...
Copper ore (Cu content)	31.1	0.1	0.5	11.4	19.7	15.6	17.7	...
Chrome ore (Cr ₂ O ₃ content)	3.9	0.2	1.6	5.2	6.6	7.8	5.9	...
Pyrites	853	9	36	414	671	606	723	...
<i>Egypt:</i>								
Gold (kilogrammes)	121	28	94	120	218	332	...	...
Manganese ore (Mn content)	35	2	—	17	40	44	45	...
Phosphate	548	319	349	300	350	497	515	405 ^a
Salt (exports)	442	107	255	360	350	539	607	...
Talc	0.8	...	3.9	5.5	5.6	3.7	...	...
<i>Iran:^b</i>								
Iron oxide	10 ^c	...	0.2	5	11	7	...	...
<i>Iraq:</i>								
Salt	11	23	15	14	...	...	...	...
<i>Israel/Palestine:</i>								
Potash (K ₂ O content)	32	47	45	50 ^d	—	—	—	—
Salt	9	18	20 ^e	5	9	7	2	...
<i>Lebanon:</i>								
Salt . . . . .	...	7	7	8	9	...	...	...
<i>Saudi Arabia:</i>								
Gold (kilogrammes)	497	1,326	1,181	2,300	2,079	2,059	...	...
<i>Syria:</i>								
Salt	14	12	15	8	21	22	...	...
<i>Turkey:</i>								
Antimony (Sb content)	0.7	—	—	0.5	0.5	1.3	2.2	...
Boracite	15.2	—	5.0	5.3	7.1	9.8	...	...
Copper (smelter production)	6.7	9.7	9.9	11.0	11.3	11.7	17.5	19.1 ^a
Chrome ore (Cr ₂ O ₃ content)	92	76	72	140	217	202	287	...
Emery	10.0	7.8	2.2	7.9	8.9	1.4	...	...
Iron ore (Fe content)	155 ^f	59	82	121	136	143	143	195 ^g
Manganese ore (Mn content)	0.9	1.1	2.0	3.3	11.1	15.8	24.7	...
Coal	2,696	3,166	3,720	4,023	4,183	4,360	4,730	4,063 ^h
Lignite	185	625	725	1,010	1,272	1,203	1,255	...
Quicksilver	13.6	6.4	5.4	0.9	—	—	...	...
Salt ^b	240	266	254	266	318	310	273	...
Sulphur	2.6	3.4	4.2	2.6	3.1	6.0	7.4	...

Source: Statistical Office of the United Nations; Fédération égyptienne de l'industrie, *Annuaire 1950-51* (Cairo); *Statistique annuelle du commerce extérieur de l'Iran* (Tehran); *Recueil de statistiques de la Syrie et du Liban, 1942-43, 1945-47* (Beirut); Turkey, Central Statistical Office, *Annuaire statistique 1951* (Ankara); *Konjonktur* (Ankara).

^a Nine months.

^b Exports during twelve months beginning 21 March of year stated.

^c Approximate.

^d 1947/48.

^e 1944.

^f 1938.

^g Ten months.

^h Twelve months beginning 1 June of year stated.

Government has invested nearly £T 150 million in the basin. There has been a steady rise in total production, but little increase in productivity, which, owing partly to the tilting of seams and numerous faults, remained very low (0.51 ton per eight-hour shift in 1946 compared with an average of 0.47 ton in the period 1938 to

1941).⁶ Costs per ton rose from US \$2.40 in 1938 to \$3.54 in 1940 and \$3.50 in 1946. Owing to greater domestic consumption, exports, which in 1939 and again in 1946 amounted to 200,000 tons, became negligible. Output of 5 million tons was planned for 1953.

Proven lignite deposits, situated in central and western Anatolia, amount to 200 million tons, and estimated

⁶ Thornburg, Spry and Soule, *loc. cit.*, page 94.

reserves are as high as 1,500 million tons.⁷ Production increased substantially, but costs also rose sharply, from \$2.65 per ton in 1938 to \$7.80 in 1946. The entire output is consumed locally.

Chromium was first discovered near Bursa in 1848, and extraction was begun in the eighteen fifties. At the beginning of the twentieth century, the competition of Rhodesian fields caused a set-back, but in the nineteen thirties new deposits were discovered and output rapidly increased. Turkey is now one of the principal producers of chromium. Reserves are estimated at several million tons, but the main deposits, with a chromium oxide content of 49 per cent, are located at Guleman, in central Anatolia, where transportation costs to the sea coast are high. These mines are operated by the Eti Bank which, in 1949, also opened a new mine at Sori. The Bursa deposit is worked by a private company. Other deposits have been located at Eskisehir, Denizli, Fethiye and other places. The Fethiye mines are operated by a French company while the Marmaris deposits have been developed by an Anglo-Swedish company. The chromium content of the deposits varies from 44 per cent to 57 per cent. Since all the chromium mined in Turkey is exported, production tends to fluctuate widely, according to changes in world demand; in recent years the trend has been upward.

Iron ore deposits were located at Divrik, east of Sivas, in 1937; actual reserves are estimated at 15 million tons and potential reserves at 35 million tons, with an average iron content of 65 per cent. Another deposit, with iron content of 40 per cent, has been located at Adapazari, in western Anatolia. The ore mined at Divrik is at present carried about 1,100 kilometres by rail to the steel mill at Karabuk, but a new line is projected which will reduce the haul to 800 kilometres.

Copper is located in two deposits, at Ergani, in central Anatolia, and Murgul, on the Black Sea coast near the frontier of the Union of Soviet Socialist Republics. Reserves at Ergani are estimated at 1.7 million tons,⁸ with a copper content of 6.5 to 10 per cent. At Murgul, reserves have been estimated at from 2 million tons to 8 million, but the copper content is lower, ranging from 2.5 to 13 per cent in general; arsenic content is high. The installation of new machinery, from 1948 to 1950, made it possible to increase production considerably; at present, Murgul produces 70 per cent of Turkey's output.⁹

The principal deposit of sulphur, at Keçiborlu in south-western Anatolia, contains over a million tons of ore, with a sulphur content ranging between 10 and 60 per cent; an adjoining deposit has a sulphur content of

⁷ Turkish Information Office, *Mineral Resources in Turkey* (New York).

⁸ United States Economic Cooperation Administration, *Country Data: Turkey* (Washington, 1950).

⁹ *New York Times*, 19 October 1952.

80 per cent. Since 1943, operations have been carried out by the Eti Bank; efficiency is high and exports have competed successfully in the world market.

Manganese ore, of fairly high manganese content, is found in Turkey in over fifty small deposits. The fact that the deposits are scattered and that transportation costs are high held up large-scale production until recently.

Emery is produced by two companies near Izmir (Smyrna) and in the Menderes Valley. The output is entirely exported, mainly to the United Kingdom. The competition of synthetic abrasives, and high transport costs, have curtailed production.

Boracite is mined near Sultan Cayirli, but difficulty has been experienced in competing on the world market. Asbestos is found in various regions, especially between Eskisehir and Kutahya; production, however, is on a very small scale. Meerschaum and antimony are also extracted in small quantities. Zinc and mercury were formerly produced, but the reserves of these metals seem to have been exhausted.

Until recently salt was extracted by the government monopoly from salt pans on the sea coasts and salt lakes, but private production has been authorized. Output is sufficient to cover domestic requirements and leave a small export surplus.

Current plans for economic development envisage a considerable expansion of mineral production in Turkey. The main emphasis has been on coal and lignite, to meet the growing domestic demand; on chrome, copper and manganese, for export to hard currency areas; and on petroleum drilling. Table A-2 shows the investment programme of the Eti Bank; included in the total are £T 107 million of foreign aid.¹⁰

Afghanistan

In Afghanistan several minerals are produced on a small scale, and others are known to exist. Coal deposits are estimated at 15 million tons; though production is only 10,000 tons per annum, the amount is expected to increase several-fold during the next few years. Salt is quarried both from rock deposits in Gatgan province and from sediments in other areas; annual production amounts to 25,000 tons, some of which is exported to India. Other minerals extracted at present on a small scale include gold, marble, lapis lazuli and talc. Deposits of lead, zinc, chromite and asbestos have been located, but not thoroughly surveyed.

¹⁰ The bulk of this represents European Recovery Program funds for the Zonguldak coal mines and harbour; British credits have financed the copper installations at Murgul and a small part of the Zonguldak development; and Export-Import Bank loans have assisted in the financing of Agaçli, Tunçbilek and Soma lignite, Guleman chromium and Ergani copper. International Bank for Reconstruction and Development, *Economy of Turkey* (Washington, 1951), page 112.

Table A-2. Turkey: Post-war Mining Investment Programme of the Eti Bank
as on 30 June 1950

(Thousands of Turkish pounds)

Project	Total estimated cost	Expenditures to 1949	Allocations for 1950	Remaining to be allocated
Zonguldak coal mines.....	276,856	66,031	35,883	174,942
Western sub-bituminous coal mines.....	31,084	10,216	15,345	6,523
Murgul copper mines.....	27,520	21,675	4,567	1,278
Bolkardag-Keban lead mines.....	8,403	—	—	8,403
Divrigi iron mines.....	7,338	3,680	2,773	885
Ergani copper mines.....	5,035	3,084	1,017	934
Guleman chrome mines.....	4,232	2,871	802	559
Agaçli lignite mines.....	3,647	2,847	250	550
Keçiborlu sulphur mines.....	3,026	181	200	2,645
Turhal antimony mines.....	1,725	—	—	1,725
TOTAL	368,866	110,585	60,837	198,444

Source: International Bank for Reconstruction and Development, *Economy of Turkey* (Washington), page 112.

Anglo-Egyptian Sudan

Several deposits of gold have been discovered in the Red Sea region of the Anglo-Egyptian Sudan, but their quality is poor, and only one mine is being operated at present. Production of rock salt in Nubia provides an export surplus. Some small gypsum and alabaster quarries are also being operated in Nubia.¹¹

Cyprus

Mining, which employs about 5,000 workers in Cyprus, makes a relatively large contribution to the national income and accounts for about one-third of the exports. Copper continues, as in ancient times, to be the leading product; it is extracted, in the form of cupreous concentrates and cupreous iron pyrites, from four mines in the northern part of the island.¹² Deposits are estimated at 15 million tons of ore, with a content of 500,000 tons of metal.¹³ Other minerals include asbestos, gypsum, of which 50,000 tons were exported in 1950,¹⁴ chrome, gold and terra umbra. As table A-1 shows, mining activity slackened considerably during the war years, but has again risen.

Egypt

Output of the three major products of Egypt, phosphate, manganese and gypsum, was unfavourably affected by war-time conditions but has since been restored to approximately pre-war levels. Part of the phosphate is converted into superphosphates and the rest exported eastward to avoid Suez Canal tolls. The

loss of the Japanese market to United States producers in 1949 led to a decline in production, but output recovered in 1950. Reserves are estimated at 179 million tons¹⁵ and have a content of 60 to 70 per cent; two deposits are being worked, one near Esna, in upper Egypt, and one near the Red Sea port of Quseir.

Egypt's manganese ores were also customarily shipped to Japan, but an increasing portion is being taken by the United States. Production fell off sharply on the outbreak of war, but started to recover in 1948, and regained the pre-war level in 1950. The main deposits of ore are estimated at 12 million tons and are located in Sinai peninsula and at Hamata, in the south-east desert area; both high-grade ores (90 per cent) and low-grade ores (28 to 30 per cent) are exported.

Before the war, Egypt ranked as the sixth largest producer of gypsum, with exports of 28,000 tons in 1939. Production in 1946, the latest figure available, was 78,000 cubic metres.¹⁶

The only other mineral available in Egypt in large quantities is iron. Deposits near Aswan are estimated at 14 million tons, and the iron content of the ore varies between 38 and 61 per cent; potential reserves are believed to be high, possibly in the neighbourhood of 300 million tons.¹⁷ Present plans envisage the extraction of 100,000 tons of iron per annum for local consumption. Other minerals extracted on a small scale include natron (a mixed carbonate and sulphate salt, used for caustic soda) with an annual output of 4,000 to 5,000 tons; gold, chromium and talc. Deposits of molybdenum

¹¹ France: Ministère des affaires économiques, La documentation française, *La Vie économique du Soudan anglo-égyptien* (Paris, July 1949).

¹² United States Department of Commerce, *International Reference Service: Cyprus* (Washington, 1948).

¹³ France: Ministère des affaires économiques, La documentation française, *L'Industrialisation des pays du Moyen-Orient* (Paris, April 1949).

¹⁴ United Kingdom Colonial Office, *Colonial Annual Reports: Cyprus* (His Majesty's Stationery Office, London, 1950).

¹⁵ K. D. Jacob, "World Resources of Principal Inorganic Plant Nutrients", Proceedings of United Nations Scientific Conference on the Conservation and Utilization of Resources, vol. II, *Mineral Resources*, page 276.

¹⁶ Report of the Government Committee on Industry (Cairo, 1948; in Arabic).

¹⁷ *Ibid.*

and tungsten on the coast of the Red Sea are not being worked because of lack of water and transport facilities.

Iran

The mineral resources of Iran have not been thoroughly surveyed, but present indications are that deposits are small and of low quality, though a large part of the country appears to have favourable land formations. At present six government-owned and government-operated coal mines, situated mainly in the region around Tehran, produce about 120,000 tons of coal per annum;¹⁸ this is supplemented by some small private mines. Equipment is poor and output correspondingly low: under 0.2 ton per man-day.¹⁹

Iron ore deposits in Semnan province amount to about 2 million tons with an iron content varying between 45 per cent and 67 per cent. The mines are not operating at present, but over 300,000 tons mined before the war remain on the dump heaps. In addition, six deposits of hematite, the largest of which contains 780,000 tons, with an iron content of 38 to 63 per cent, have been located in Farus Island, but the high sulphur and phosphorus content have prevented their exploitation. Red iron ore is exported from a large deposit in Hormuz Island.

Copper deposits in Damanghal contain 400,000 tons of low-grade ore; nearby chromite reserves are estimated at 60,000 tons,²⁰ and borax deposits at 22,000 tons.²¹ Other small-scale deposits include lead and sulphur, and there are extensive and easily workable deposits of rock salt on Ghishm Island and in other parts of Iran.

Iraq

Outcrops of iron, copper, sulphur, zinc and chrome and deposits of glass sand have been located in Iraq but, in the absence of detailed surveys, their size and quality remain unknown.²² A large salt dome has been discovered near Basra, but it has not yet been worked, present output of salt being from salines.

Israel

The major mineral resource of Israel is potash, obtained from the Dead Sea by evaporation. During the Second World War and the years immediately following, production ranged between 100,000 and 150,000 tons, with a potassium oxide content of about 50 per cent. Almost all of this was exported, mainly to the United Kingdom and the British Dominions. The potash

¹⁸ United States Department of Commerce, *Foreign Commerce Weekly* (Washington), 5 May 1950.

¹⁹ Overseas Consultants, Inc., *Report on Seven Year Development Plan*, volume IV (New York).

²⁰ Overseas Consultants, Inc., *op. cit.*

²¹ United Kingdom Board of Trade, *Overseas Economic Survey: Iran* (London, 1948).

²² International Bank for Reconstruction and Development, *The Economic Development of Iraq* (Baltimore, Md.), page 278.

plant on the northern side of the Dead Sea was damaged during Arab-Israeli hostilities, and production ceased entirely. Recently, however, a new road from the southern end of the Dead Sea to the Mediterranean was completed, the concessionary company was reorganized and production was scheduled to be resumed at the end of 1952.

During recent years, intensive prospecting of the Negev by a government-owned corporation, Mahtzavei Israel, with a capital of £1 1 million, has resulted in the discovery of marble, feldspar, mica, barites, glass sands, copper, kaolinite, manganese, rock phosphates and gypsum. Of these, phosphate, kaolinite and glass sands are being exploited on a commercial scale. Marble is quarried near Jerusalem and Haifa, and small quantities are exported. Bromine is extracted from the Dead Sea and salt from salines.²³

Jordan

Apart from potash from the Dead Sea, the chief mineral resources of Jordan have consisted of phosphates, which are of high quality and relatively economical to extract. Deposits in the two principal fields are estimated at a minimum of 30 million tons, and an annual production of a million tons is thought possible if adequate transport is made available. Production is on a small scale, amounting to 12,000 tons in 1951 and 20,000 tons during the first nine months of 1952.²⁴ Other minerals include gypsum, quartz sand and marble and building stone. Deposits of high-grade manganese have been discovered. Plans have been made to rehabilitate and utilize the potash works at the northern end of the Dead Sea.

Lebanon

Except for building stone and other building materials, Lebanon is very poor in minerals. Small deposits of lignite exist; during the Second World War annual output ranged between 20,000 and 30,000 tons. Silica sand is quarried, and several thousand tons are normally exported.²⁵ Salt is extracted from salines.

Saudi Arabia

The only minerals being extracted in Saudi Arabia at present are gold and silver. The principal mines, at Mahdel Dahab near Medina, are estimated to contain 670,000 tons of gold ore.²⁶ The concentrates are shipped

²³ J. Bentor "The Mineral Resources of the Negev", *Technion Yearbook* (New York), 1951; *Israel Economic Horizons* (New York), January 1952, May 1952.

²⁴ *Commerce du Levant* (Beirut), 6 December 1952. According to the same source, the rate of production had risen by the end of 1952 to between 60,000 and 70,000 tons per annum.

²⁵ A. Gibb, *Economic Development of Lebanon* (London, 1948).

²⁶ *Al Alam al Arabi* (Cairo), June 1948; Gerald de Gaury, "The End of Arabian Isolationism", *Foreign Affairs* (Lancaster, Pa., 1947).

to the United States for smelting, since only very large plants can separate and recover the various metals in marketable form. Output of silver was 124,000 ounces in 1950 and 110,000 ounces in 1951.²⁷ There are also deposits of barite near Rabigh, which are not at present exploited, and a rock salt deposit in Asir which is mined on a very small scale.²⁸ Deposits of lead and copper have been discovered.

Syria

Deposits of chromite, asbestos and manganese ore exist in the northern part of Syria, but it is not yet known whether their content is sufficiently high to warrant commercial exploitation.²⁹ Building stone is available in large quantities. Asphalt deposits near Latakia are exploited, annual output being around 20,000 tons, and salt is extracted from salines. Gypsum deposits are

worked in connexion with the cement factories. Large deposits of sulphur of variable quality exist near Palmyra, but their distance from the centres of consumption makes their exploitation uneconomical at present.

Yemen

Geological surveys have not been made in Yemen, but there is reason to believe that the country is fairly rich in minerals. Gold, silver, and copper were formerly mined, as was iron until less than a century ago. In addition, deposits of sulphur, lead and coal have been discovered, and mica is also known to exist.³⁰ Rock salt is quarried at Salif near the coast of the Red Sea, and the port of Salif is being improved to increase exports. Agate of several kinds is found near Sana and is cut and polished in that town.³¹

Electric Power Production

As table A-3 shows, the production of electricity has increased substantially, owing to greater private and

industrial demand and, during the war years, to the shortage of coal.

Table A-3. Production of Electricity, 1939, 1943 and 1945 to 1952

(Millions of kilowatt-hours)

Year	Anglo-Egyptian Sudan	Egypt	Iran	Iraq ^a	Israel/Palestine ^b	Lebanon ^c	Syria ^c	Turkey
1939.....	...	288 ^d	...	...	91	39	25	353
1943.....	...	...	...	...	162	43	29	457
1945.....	...	...	...	49	216	58	29	528
1946.....	14	431	...	47	252	61	38	563
1947.....	15	...	...	59	304	73	47 ^e	625
1948.....	17	642	200	69	260	86	56	676
1949.....	19	...	...	82	329	101	69	737
1950.....	20	...	...	117	464	114	81	790
1951.....	...	...	...	...	558	130	86	885
1952.....	...	...	...	...	314 ^f	...	46 ^f	775 ^g

Source: United Nations, *Statistical Yearbook*; Egypt: Chamber of Deputies, *Report of Finance Committee* (Cairo); Institut national de la statistique, *L'Égypte: Memento économique* (Paris, 1950); C. Issawi, *Egypt* (London, 1947); Iran: Overseas Consultants, Inc., *Report on Seven Year Development Plan* (New York); Iraq: *Statistical Abstract* (Baghdad).

^a Consumption.

^b Sales of electricity.

^c Excluding production by industry for its own use.

^d 1938. Output by public utility companies in Cairo and Alexandria rose from 118 million kilowatt-hours in 1939 to 347 million in 1949 and 409 million in 1950. Fédération égyptienne de l'industrie, *Annuaire, 1950-51* (Cairo).

^e Prior to 1947, 3 companies; from 1947 on, 5 companies.

^f Six months.

^g Ten months.

In most countries of the Middle East, electricity is generated by private corporations. A private company in Afghanistan supplies all the country's electricity. In Egypt, the Government produces over half the total supply, and private enterprise the remainder. In Iran, more than half the capacity is owned privately and most of

the rest by municipalities. In Iraq, the city of Baghdad, which consumes half the total, is supplied by a private corporation and the rest of the country by municipalities. In Israel, Lebanon and Syria, electricity is supplied by private corporations. About half of the supply in Turkey is generated by government-owned industries

²⁷ *Middle East Economist and Financial Service* (New York), October 1952.

²⁸ K. S. Twitchell, *Saudi Arabia* (Princeton).

²⁹ A. Gibb, *Economic Development of Syria* (London, 1946).

³⁰ Adnan Tarici, "Yemen" (undated).

³¹ Hugh Scott, *In the High Yemen* (London, 1942).

for their own use, and the other half by municipalities.

Except in Afghanistan, where the bulk of installed capacity is hydroelectric, and in Lebanon, where almost two-thirds is derived from water power, the greater part of electricity is supplied by thermal power, mostly derived from oil. In Syria, 40 per cent of the total is hydroelectric and in Turkey about 4 per cent.³² A hydroelectric station in Palestine which provided about one-sixth of the electric supply ceased operations in 1948.

Table A-4 indicates the broad field of activity in which the supply of electricity is utilized in various countries.

Table A-4. Type of Utilization of Electricity
(Percentage of total supply)

Country and year	Industry	Irrigation or other use
Egypt, 1948 ^a b	33	67
Iran, 1948	70	30
Iraq, 1949	42	58
Israel, c 1951	31	69 ^d
Lebanon, b 1951	37	63
Syria, b 1951	32	68
Turkey, 1949	50	50

Source: *L'Egypte industrielle* (Cairo), April 1951; Overseas Consultants, Inc., *op. cit.* vol. III; Ministry of Economics, *Statistical Abstract of Iraq* (Baghdad); *Statistical Bulletin of Israel* (Jerusalem); International Bank for Reconstruction and Development, *Economy of Turkey* (Washington, D.C.).

^a Estimated.

^b Excluding production by industry for its own use.

^c Sales of Palestine Electric Corporation, representing over nine-tenths of total.

^d Irrigation, 19 per cent; other use, 50 per cent.

Several development projects for enlarging the supply of electricity are expected to increase appreciably the capacity of the countries concerned. In Afghanistan, where present capacity is about 9,000 kilowatts, work is proceeding on two projects, the Arghandab and Helmand schemes, which are expected to add a minimum of 14,000 kilowatts of hydroelectric capacity. The Aswan dam project in Egypt, to be built at an estimated cost of £E 22 million (\$64 million) and with an installed capacity of 344,000 kilowatts, is expected to start production in 1955 and to supply 1,500 million kilowatt-hours of electricity per year by 1957.³³ In the meantime, thermal capacity is being increased: in Cairo, a 100,000 kilowatt station is scheduled for completion in 1954, and some of its units are in operation, while plans for the installation of another 300,000 kilowatts have been drawn up; in the provinces, 11,000 kilowatts are being installed and further expansion has been

³² International Bank for Reconstruction and Development, *Economy of Turkey*, page 141.

³³ Statement of Minister of Public Works, quoted in *L'Egypte industrielle* (Cairo), April 1951.

³⁴ *L'Egypte industrielle* (Cairo), February 1952.

³⁵ *Ibid.*, March 1952.

³⁶ Overseas Consultants, Inc., *op. cit.*

³⁷ *Israel Economist, Annual* (Jerusalem), 1951, page 134.

planned,³⁴ in addition to a 43,000 kilowatt generator for drainage and other purposes at Talkha, in the north of the Delta, which is scheduled for completion early in 1953.³⁵

In Iran, under the seven-year plan, it is proposed to expand capacity threefold, raising it to 217,000 kilowatts.³⁶ A thermic plant of 20,000 kilowatts has been installed in Tehran and several small ones in the provinces. In Israel thermal capacity rose from 66,000 kilowatts in 1948 to 109,000 at the end of 1949 and to 139,000 at the end of 1951; the completion of stations under construction or ordered from abroad was expected to raise capacity to 229,000 kilowatts by 1953. In addition, a hydroelectric station of 18,000 kilowatts on the Jordan was put out of action during the hostilities of 1948.³⁷

In Lebanon, installed hydroelectric capacity increased from 17,000 kilowatts in 1947 to 27,000 kilowatts in 1951, while thermic capacity doubled, rising from 11,000 to 22,000 kilowatts.³⁸ A hydroelectric station with a capacity of 10,000 kilowatts and a thermic station of 15,000 kilowatts are scheduled to operate in 1953. Studies for a large-scale project on the Litani, with a capacity of 129,000 kilowatts, have been completed.

In Syria, there has been an appreciable increase in the capacity of thermic plants producing for both public consumption and the private use of certain factories. Plans have been drawn for expanding the hydroelectric installation near Damascus from 7,000 kilowatts to 35,000 kilowatts.³⁹

Installed capacity in Turkey has grown considerably, from 243,000 kilowatts in 1945 to 382,000 in 1949 and 424,000 in 1951, and the completion of projects under way should raise the figure to over 500,000 kilowatts by 1954. The most important of these is a power grid fed by a steam-generating plant of 60,000 kilowatts at Catalagzi; this was completed in 1949 at a cost of \$11 million and will be connected to an 80,000 kilowatt hydroelectric station at Sariyer, estimated to cost \$57.5 million and scheduled for completion in 1954. The grid will serve north-western Anatolia from Istanbul to Ankara. Smaller projects under way are scheduled to raise municipal plant capacity by 20,000 kilowatts and industrial plant capacity by 35,000 kilowatts by the end of 1952. Work is expected to begin shortly on the Seyhan dam project which, in addition to flood control and irrigation equipment, will contain generators with a capacity of 36,000 kilowatts. The cost of the scheme is estimated at \$67 million and it is hoped to complete it by 1956.⁴⁰

³⁸ *Revue de la Chambre de commerce et d'industrie de Beyrouth*, August 1951; Press release issued by Lebanese Prime Minister in *Commerce du Levant* (Beirut), 9 April 1952.

³⁹ *Le Monde arabe* (Paris, 1952).

⁴⁰ International Bank for Reconstruction and Development, *Economy of Turkey*, pages 142 to 144; Turkish Information Office, *News from Turkey* (New York), 16 October 1952.

Textiles

As in other under-developed countries, textiles have advanced more rapidly than almost any other branch of industry and have come nearest to meeting local requirements. In addition to the general factors making for this growth, seven of the Middle East countries—Afghanistan, Anglo-Egyptian Sudan, Egypt, Iran, Iraq, Syria and Turkey—are cotton producers, and most of them produce low-quality wool. Moreover, in practically all these countries there are skilled spinners and weavers whose work as craftsmen has been unable to withstand foreign competition and who seek employment in the new factories. Consumption of textiles is shown in table A-5. Average consumption in the Middle East is well above that of Asia and Africa (where per capita consumption of all major fibres from 1948 to 1950 averaged 1.6 kilogrammes and 1.5 kilogrammes, respectively), slightly below that of Latin America (3.7 kilogrammes), and far below that of Europe and

North America, where the averages were 6.5 kilogrammes and 16.9 kilogrammes, respectively.

Compared with 1938, per capita consumption of all textile products from 1948 to 1950 showed an increase in Egypt, Israel and Turkey and a decrease in the Anglo-Egyptian Sudan, Iran, Iraq, Lebanon and Syria. The uncertainty surrounding the population statistics used for the computation of per capita figures for the latter group of countries, as well as the probability that some of the 1938 imports were designed for stocks, make it unsafe, however, to conclude that per capita consumption actually declined in some of these countries, particularly in Iraq, Lebanon and Syria. It is also notable that while consumption of cotton fabrics declined in almost every country, that of woollen and rayon goods generally showed an increase and accounted for a larger proportion of total consumption of textiles than in pre-war years.

Table A-5. Estimated Available Per Capita Supply of Major Apparel Fibres, 1938 and 1948 to 1950
(Kilogrammes per person)

Type and year	Anglo-Egyptian Sudan	Egypt	Iran	Iraq	Israel/Palestine	Lebanon and Syria	Turkey
<i>Cotton textiles:</i>							
1938.....	1.3	2.5	2.1	1.7	2.7	4.0	2.7
1948-50.....	1.0	2.5	1.4	1.7	4.1	3.2	2.7
1950.....	0.7	2.4	1.6	1.8	3.0	3.3	2.6
<i>Wool textiles:</i>							
1938.....	—	0.2	0.1	1.3	0.1	0.6	1.0
1948-50.....	—	0.3	0.4	1.2	1.5	0.5	1.2
1950.....	0.01	0.3	0.5	1.2	1.5	0.4	0.9
<i>Rayon textiles:</i>							
1938.....	0.1	0.1	0.1	0.6	0.4	0.9	0.01
1948-50.....	0.1	0.4	0.1	0.1	0.7	0.7	0.05
1950.....	0.1	0.6	0.1	0.2	1.2	0.4	0.1
<i>Total:</i>							
1938	1.4	2.8	2.3	3.6	3.2	5.5	3.7
1948-50	1.1	3.2	1.9	3.0	6.3	4.4	3.9
1950	0.8	3.3	2.2	3.2	5.7	4.1	3.6

Source: Food and Agriculture Organization of the United Nations, *Commodity Series*, Bulletin No. 21 (Rome), January 1952.

COTTON

Of the various branches of the textile industry in the Middle East, cotton is by far the most advanced. Table A-6, which gives available information on the equipment of leading producers, indicates that there are 1.3 million spindles in the Middle East, or twice as many as during the pre-war period. In the region as a whole, there is one spindle for every 75 inhabitants; in 1951, the corresponding figure for Asia was one spindle per 55 inhabitants and that for South America, one per 25 inhabitants.

Over two-fifths of the spindles of the region are concentrated in Egypt, which at present has one spindle per 40 inhabitants. Owing to the recent expansion of the industry, Lebanon is now the most highly equipped country of the Middle East, with one spindle per 25 inhabitants; Israel and Syria are next in order.

In almost all the Middle East countries, cotton-weaving capacity exceeds spinning capacity, necessitating the importation of yarn. This is partly due to the operation of a large number of hand looms, which contribute an appreciable part of the total production of cloth.

Table A-6. Cotton Textile Equipment, Pre-war and 1951
(Thousands)

Country	Spindles		Power looms	Hand looms
	Pre-war	1951		
Afghanistan.....	18.0	18.0 ^a	0.6 ^a	...
Egypt.....	250.0	550.0	15.0	50.0
Iran.....	188.0	224.0 ^a	3.6 ^a	16.5
Iraq.....	—	27.0	0.7	...
Israel/Palestine.....	12.0	46.0	1.7 ^b	...
Lebanon.....	14.0 ^b	54.0	1.0	0.3 ^a
Syria.....	10.0	65.0	3.6	12.0
Turkey.....	189.0	325.0	5.7	40.0
TOTAL	681.0	1,309.0	31.9	...

Source: United Kingdom Board of Trade, *Overseas Economic Survey*; Egypt, Iran, Iraq and Turkey (London); *Al Ahram* (Cairo), 9 September 1951; C. Issawi, *Egypt* (London); John Murray, "Iran Today" (Tehran); International Bank for Reconstruction and Development, *Economic Development of Iraq and Economy of Turkey*; Government of Palestine, *A Survey of Palestine* (Jerusalem); *Israel Economic Bul-*

letin (Jerusalem), March 1952; *Revue de la Chambre de commerce et d'industrie de Beyrouth*, October 1951; Syria: *Monthly Economic Bulletin* (Damascus), August 1951; Bulletin of the Chamber of Commerce of Aleppo (in Arabic).

^a 1949.

^b Approximate.

As table A-7 shows, output of cotton yarn in the Middle East rose by about 50 per cent between 1939 and 1950 and declined a little in 1951 because of foreign competition and, in some countries, the shortage

or the high price of raw cotton. Of the countries not shown in the table, Afghanistan produces 500 to 1,000 tons,⁴¹ and Iran from 10,000 to 12,000 tons.⁴² Iraq's capacity of 2,500 tons is not fully used.⁴³

Table A-7. Production of Cotton Yarn, 1939, 1943 and 1945 to 1952
(Thousands of metric tons)

Year	Egypt ^a	Israel/Palestine	Lebanon	Syria	Turkey
1939.....	24.0	0.5 ^b	1.4 ^c	0.6 ^c	22.8
1943.....	29.9	...	1.5	0.9	25.4
1945.....	32.1	1.45	1.6	1.4	27.9
1946.....	32.9	...	1.8	1.4	27.8
1947.....	32.5	...	1.8	1.6	28.8
1948.....	33.2	...	6.0	2.4	29.3
1949.....	33.7	...	5.0	3.7	29.7
1950.....	31.7	3.0	1.6	5.0	30.2
1951.....	31.3	2.5	2.1	...	29.1
1952.....	8.7 ^d	...	...	...	22.3 ^e

Source: United Nations: *Statistical Yearbook and Monthly Bulletin of Statistics*; Fédération égyptienne de l'industrie, *Annuaire 1950-51* (Cairo); *L'Egypte industrielle* (Cairo); Government of Palestine, *A Survey of Palestine* (Jerusalem); Central Bureau of Statistics, *Statistical Bulletin of Israel* (Jerusalem).

^a Production of large factories only; total output

amounted to 50,000 tons in 1948, 54,000 in 1949, 49,000 in 1950, 53,000 in 1951 and 37,000 tons in the first eight months of 1952.

^b 1938.

^c 1940.

^d Three months.

^e Eight months.

Table A-8 shows the production of cotton fabrics in certain countries; in general, output of cloth has kept pace with that of yarn. Of the countries not listed in the table, the output of Afghanistan is about 6 million square metres⁴⁴ and that of Iran about 50 million to

55 million metres, of which 25 million are supplied by hand looms.⁴⁵ Iraq produces about 2 million metres, its capacity of over 10 million metres not yet being fully utilized.⁴⁶

⁴¹ United Nations Educational, Scientific and Cultural Organization, *Report of the Mission to Afghanistan* (Paris, 1952), page 71.

⁴² John Murray, "Iran Today" (Tehran, 1951; mimeographed).

⁴³ International Bank for Reconstruction and Development, *Economic Development of Iraq* (Baltimore, Md., 1952), page 281.

⁴⁴ United Nations Educational, Scientific and Cultural Organization, *op. cit.*

⁴⁵ Murray, *op. cit.*

⁴⁶ International Bank for Reconstruction and Development, *op. cit.*

Table A-8. Production of Cotton Fabrics, 1939, 1943 and 1945 to 1952

Year	Egypt ^a (millions of square metres)	Israel/Palestine (millions of metres)	Lebanon (millions of square metres)	Syria (millions of metres)	Turkey (millions of square metres)
1939.....	100.4	4.0 ^b	...	...	152.1
1943.....	113.9	14.5 ^b	3.8	8.0 ^c	166.9
1945.....	128.5	...	3.8	9.1	180.5
1946.....	136.5	...	3.2	19.6	192.1
1947.....	142.6	...	2.6	16.6	198.9
1948.....	155.7	...	5.1	14.0	149.0
1949.....	151.7	...	5.3	21.4	160.1
1950.....	157.8	11.5 ^d	4.9	...	165.2
1951.....	173.0	12.6 ^d	...	...	...
1952.....	86.0 ^e	...	...	...	...

Source: United Nations, *Statistical Yearbook and Monthly Bulletin of Statistics*; Central Bureau of Statistics, *Statistical Bulletin of Israel* (Jerusalem); Government of Palestine, *A Survey of Palestine* (Jerusalem).

^a Production of large factories only.

^b Approximate.

^c 1944.

^d Including rayon fabrics.

^e Six months; total output of all factories during the period was 107.4 million square metres.

The post-war years witnessed rapid expansion in the cotton textile industry of most countries of the Middle East. In some, textile capacity now exceeds domestic consumption and this fact, together with the intensification of international competition and, in some cases, low productivity, has placed the industry in a difficult situation. Some countries have sought relief in the exportation of yarn or cloth, but in general production is being curtailed.

Expansion in Afghanistan has been held up by supply difficulties. The Afghanistan Textile Company is planning to establish two additional factories, with 70,000 spindles and 2,000 looms, capable of producing 55 million metres of cloth and 1,100 tons of yarn. This expansion would meet about two-thirds of the country's annual requirements. The cost of the project is estimated at \$25 million and the time required for completion about five years. The Government is helping this project by expanding the cultivation of cotton and by installing new cotton gins. In the Anglo-Egyptian Sudan, a scheme for the settlement of the Zande tribes in the equatorial provinces has included, in addition to other agricultural and industrial development, the growing, spinning and weaving of cotton. The present capacity of the weaving sheds is nearly 3 million metres of cloth per annum.⁴⁷

In Egypt, between 1945 and 1947, "fifteen new limited liability companies for the manufacture of cotton textiles were formed, with a total capital of approximately £E 3,750,000, whilst sixteen of the established textile companies increased their capital by just under £E 2 million",⁴⁸ and there was further expansion in subsequent years. Production of yarn by large factories rose 30 per cent between 1939 and 1951 and that of cloth by 70 per cent; in both cases, total output (in-

cluding smaller factories and hand looms) showed a greater increase. Consumption of cotton yarn is estimated at only 65 per cent of capacity,⁴⁹ and the Government has sought to help the industry by raising customs duties and granting an export subsidy; this made it possible to export 4,700 tons of yarn in 1949, 5,300 tons in 1950 and 9,852 tons in 1951.

The cotton textile industry of Iran, in which war-time and post-war expansion was smaller, also experienced difficulties. Owing to obsolete equipment, power shortages and overstaffing, productivity per head and per spindle or loom is relatively low.⁵⁰ Hence, though the industry, including handicrafts, accounts for less than half of total local consumption, there are indications that the resurgence of foreign competition has severely affected it; many thousands of hand looms are idle, while some factories have shut down. Consequently, expansion plans, which envisaged a trebling of spinning capacity and a sixfold increase in the number of mechanical looms by 1952, were abandoned, but during the past three years about 60,000 spindles were installed, and a factory with 32,000 spindles is under construction.

The textile industry in Iraq is in its infancy. A newly installed factory has recently begun operations but is not yet in full production and its present output meets only a little over one-tenth of total consumer demand in Iraq.

There was a rapid expansion in the cotton textile industry in Palestine both during and after the Second World War; between 1946 and 1948, the equivalent of some \$10 million was invested. Between the establishment of the Investment Centre of the State of Israel, in April 1950, and 31 December 1951, thirty-eight factories in various branches of the textile industry, with

⁴⁷ J. S. R. Duncan, *The Sudan* (Edinburgh, 1952), page 220.

⁴⁸ United Kingdom Board of Trade, *Overseas Economic Survey: Egypt* (London, November 1947).

⁴⁹ Fédération égyptienne de l'industrie, *Annuaire 1950-51* (Cairo), page 38.

⁵⁰ Overseas Consultants, Inc., *op cit.*

a combined capital of £I 2.5 million, were actually completed, while another seven, with a capital of £I 400,000, were under construction. Further investment has been approved.⁵¹ Shortages of raw materials, foreign competition, rationing and labour disputes have, however, combined to keep production well below capacity. The index of man-days of employment in the textile industry (1938/39=100) dropped from 253 in 1947 to 184 in 1948, recovered to 257 and 258 in 1949 and 1950, respectively, and declined to 242 in 1951.⁵² At present, Israel fills about two-thirds of its consumer demand for cotton textiles, estimated at 18 million metres.

The cotton textile industries of Lebanon and Syria showed a greater increase over the pre-war period than those of any other Middle East country; the combined spinning capacity of both countries rose fivefold, while the production of yarn expanded fourfold between 1940 and 1949 and that of fabrics also increased considerably. Until 1950, when the customs union between the two countries was discontinued, their industries were complementary, in that Syria had a greater weaving than spinning capacity, while the reverse was true of Lebanon. As a result of the dissolution of the customs union, however, output of yarn declined sharply in Lebanon and rose in Syria. In both countries there is some excess capacity—more in Lebanon than in Syria. The combined output of both countries meets some two-thirds of their consumer demand.

In Turkey, the textile industry expanded in both the war and the post-war period, the number of spindles

⁵¹ *Israel Economic Bulletin*, March 1952.

⁵² Central Bureau of Statistics, *Statistical Bulletin of Israel* (Jerusalem).

⁵³ United Kingdom Board of Trade, *Turkey, Review of Com-*

rising from 189,000 in 1938 to 249,000⁵³ in 1946 and 325,000⁵⁴ in 1951. Most of this expansion was in government-owned factories, which accounted for 46 per cent of the spindles and looms in the country but produced over half of the output of yarn and cloth, owing to their more modern equipment. Further expansion is taking place, but on a relatively small scale.

Production of cotton yarn rose by 32 per cent between 1939 and 1950 and that of piece-goods by 23 per cent. Although production meets only seven-eighths of consumer demand, Turkey, like other Middle East countries, felt the effects of foreign competition, and in 1951 some unemployment was reported among textile workers.

WOOL

The woollen branch of the textile industry also expanded significantly during the war and post-war years but, as table A-9 shows, it is still a minor industry. In view of low consumption in most of the Middle East countries, however, local production now meets the bulk of requirements, though the proportion so covered varies considerably among the countries. Although the quality of materials has greatly improved, it is still below that of imported products, except for lower-priced grades, and consumers still show a marked preference for foreign cloth. In most countries, native wool is of too low a quality to be used, except for coarse goods or when mixed with foreign wool, and the sharp rise in the price of imported wool after the outbreak of

mercantile Conditions (London), 1945; *Overseas Economic Survey: Turkey, 1950* (London).

⁵⁴ International Bank for Reconstruction and Development, *Economy of Turkey* (Washington, D.C.), pages 94 and 98.

Table A-9. Woollen Textile Equipment and Output, 1950

Country	Spindles (number)	Output of yarn (tons)	Power looms (number)	Output of cloth (thousands of metres)
Afghanistan.....	...	250 ^a	50	300 ^a
Egypt.....	35,000	2,500	700	4,000
Iran.....	30,000	...	500	3,000
Iraq.....	7,600	...	144	600 ^b
Israel.....	10,000 ^c	1,000	235 ^d	1,500
Lebanon.....	...	...	117	213
Syria.....	...	...	...	483 ^e
Turkey.....	68,000	7,400	1,425	14,300 ^f

Source: Statistical Office of the United Nations; *Majalleh Eqtesad* (Kabul); United Nations Educational, Scientific and Cultural Organization, *Report of the Mission to Afghanistan* (Paris, 1952); Fédération égyptienne de l'industrie, *Annuaire 1950-51* (Cairo); John Murray, "Iran Today" (Tehran, 1951); Central Bureau of Statistics, *Statistical Bulletin of Israel* (Jerusalem); *Israel Economic Bulletin*, March 1952 (Jerusalem); *Revue de la Chambre de commerce et d'industrie de Beyrouth*, October 1951; International Bank for Reconstruction and Develop-

ment, *Economic Development of Iraq and Economy of Turkey*; United Kingdom Board of Trade, *Overseas Economic Survey: Iraq and Turkey, 1950* (London); United States Department of Commerce, *Business Information Series, Iraq* (Washington, D.C., 1951).

^a Approximate.

^b 1948.

^c In 1949; 18,000 spindles in 1952.

^d 600 looms in 1952.

^e 1949.

^f Thousands of square metres.

hostilities in Korea, together with the intensification of foreign competition, caused a marked setback in the industry in the entire area.

Thus production in Egypt increased more than twentyfold during the war and a high level was maintained during the post-war period, but output of cloth fell from 3.2 million square metres in 1948 and 5.4 million in 1949 to 4 million in 1950 and 3.2 million square metres in 1951.⁵⁵ Capacity is estimated at 11 million square metres and consumption at 10 million.⁵⁶ Local production of woollen yarn covers over three-quarters of the needs of the weaving industry. In June 1951, duties on imported cloth were raised in an attempt to protect local industry.

In both Iran and Iraq, local production meets the bulk of requirements, only finer qualities of cloth being imported. Local spinning mills provide for almost all the needs of the weaving industry.

In Israel, spinning mills are working well below their capacity of over 2,000 tons because "for various reasons, the quality of the local worsted output is far below the requirements of the weaving mills".⁵⁷ The weaving industry is also working below capacity because of textile rationing and raw material shortages. Present production does not meet all the country's needs, estimated at 3 million metres, but both in 1950 and in 1951 exports of woollen fabrics amounted to over 600,000 metres.

The output of woollen fabrics in Lebanon rose from 135,000 metres in 1947 to 213,000 in 1950, but this represented little over one-third of capacity and one-quarter of consumption. In Syria, output of cloth, which had risen from 50,000 metres in 1940 to a peak of 542,000 in 1948, declined to 483,000 metres in 1949 and there was a further decrease in 1951; production meets the bulk of domestic needs.

The Turkish woollen industry is the most fully developed in the region. Output of yarn rose from 6,528 tons in 1939 to a peak of 7,878 tons in 1949, declining to 7,447 tons in 1950 and 6,180 in 1951, while that of fabrics rose from 11.1 million metres in 1939 to a peak of 20.9 million in 1948, declining to 20.3 million in 1949 and 14.3 million metres in 1950. A little over half the total capacity is owned by the Government.⁵⁸ Present output covers practically the entire domestic consumption of cloth, which is estimated at 16 million metres,⁵⁹ and likewise almost all domestic requirements for yarn.

⁵⁵ Fédération égyptienne de l'industrie, *Annuaire 1950-1951* (Cairo) and *L'Égypte industrielle* (Cairo), March 1952.

⁵⁶ *L'Égypte industrielle*, June 1952.

⁵⁷ *Israel Economic Bulletin*, March 1952.

⁵⁸ International Bank for Reconstruction and Development, *Economy of Turkey* (Washington, D.C.), page 94.

⁵⁹ United Kingdom Board of Trade, *Overseas Economic Survey: Turkey, 1950* (London).

⁶⁰ Fédération égyptienne de l'industrie, *Annuaire 1950-51*, pages 42 to 44.

SILK AND RAYON

The breeding of silk-worms, formerly a flourishing industry in some of the countries of the Middle East, has suffered greatly from the competition of rayon. In much of the area, however, silk weavers have carried on their craft, using imported rayon yarn. Several factories have been built for the weaving of silk or rayon yarn.

In Egypt, consumption of natural silk and rayon products rose threefold between 1930 and 1938, and more than fourfold between 1938 and 1950.⁶⁰ The great part of this increase was provided by local production, using imported yarn and staple until recently. The industry consists of a few large and well equipped factories and many small workshops, with a combined capacity of 5,000 mechanical looms and 1,500 hand looms. Figures for total production are not available, but in 1951 the output of the larger firms, which account for 60 to 65 per cent of total capacity, was 580,000 metres of natural silk cloth and 31.9 million metres of rayon cloth; corresponding figures for 1950 were 487,000 metres and 25.6 million metres, respectively.⁶¹ Local production meets more than three-quarters of rayon consumption requirements but less than one-third of the demand for silk.

Production of rayon yarn, staple fibre and cellophane from imported pulp started in Egypt in 1948. In 1951, output was 2,300 tons of yarn and 2,200 tons of staple fibre; by 1953 the industry is expected to produce 3,600 tons of yarn and 3,000 tons of staple.⁶² Output of cellophane in 1950 was 138 metric tons. The existence of a local source of supply for yarn and staple was of great help to the industry in 1950 and 1951 when, owing to hostilities in Korea, foreign supplies became scarce and more expensive. In Iran, silk reeling and weaving is carried out in two government-owned factories. Shortages of power limited output to 400,000 metres of cloth in 1948/49⁶³ and to 457,000 metres of cloth and 80 tons of yarn in 1949/50. These figures represent only 40 per cent of capacity.⁶⁴

Iraq met only about a quarter of its needs for rayon fabrics and imported about 200 tons of yarn in 1950 for that purpose.⁶⁵

There are 228 rayon-weaving looms in Israel, of which 83 are automatic.⁶⁶ At present the country is entirely dependent on imports of rayon yarn and staple fibre, but a factory with a capacity of 1.5 million kilogrammes of yarn and 1.8 million kilogrammes of staple is under construction. Output of fabrics is a little over 3 million metres.

⁶¹ *L'Égypte industrielle*, May 1951 and May 1952.

⁶² *Textile Organon* (New York), June 1952.

⁶³ Overseas Consultants, Inc., *op. cit.*

⁶⁴ John Murray, "Iran Today" (Tehran), page 154.

⁶⁵ International Bank for Reconstruction and Development, *Economic Development of Iraq*, page 282; Food and Agriculture Organization of the United Nations, *Commodity Series*, Bulletin No. 21.

⁶⁶ *Israel Economic Bulletin*, March 1952.

Silk reeling, a traditional industry in Lebanon, is carried out in small factories. Some 500 to 600 tons of cocoons produced each year yield 180 tons of thread, or about half the country's needs. The 300 looms for weaving silk and rayon have a capacity of 2,500 tons a year. In 1949, output of silk and rayon fabrics was 1,000 tons (about 7 million square metres) or half the country's consumption.⁶⁷

In Syria, the rayon industry has grown rapidly, output of fabrics rising from 10 million metres in 1940 to 14 million in 1947 and 26.7 million metres in 1950.⁶⁸ All the yarn used is imported. Syria has for many years been an exporter of rayon fabrics and has recently been exporting 500 to 1,000 tons (roughly 3.5 million to 7 million metres) a year. Output of silk fabrics, which rose to 100,000 metres during the war, has declined to 60,000 metres in recent years.

In Turkey, there are several private factories which weave silk, and a government-owned plant which produces rayon yarn and staple fibre. Output of yarn rose steadily, from 535 tons in 1949 to 840 tons in 1951; production of staple began in 1950, at a level of 640 tons, and capacity is being increased.⁶⁹

FINISHING PROCESSES; KNITTING AND HOSIERY; HARD FIBRES

In all the countries mentioned, the expansion of bleaching, dyeing and finishing processes has kept pace with that of the weaving industries. Quality was poor at first, but has improved rapidly and certain products are no longer inferior to foreign goods.

The knitting and hosiery industries have also grown substantially and now satisfy the greater part of local requirements. A ready-made clothing industry has de-

veloped recently in several Middle Eastern countries.

Other branches of the textile industry which warrant mention are the jute industry in Egypt and Iran, the sisal and flax industries in Egypt and Israel and the hemp industry in Turkey. All of these still operate on a relatively small scale.

CARPET WEAVING

Carpet weaving, formerly an important domestic industry in Turkey and in most of the Arab countries, is declining rapidly, owing to decreased foreign demand, intensified competition from machine-made rugs, and higher costs for wages. Thus, in Turkey, production fell from 785,000 square metres in 1929 to an annual figure of between 320,000 and 350,000 square metres during the period from 1933 to 1940. Exports fell from 480,000 square metres in 1929 to 30,000 square metres in 1940 and to a negligible amount during the post-war years.⁷⁰

In Iran, the area's leading producer, the industry is carried out in small-scale factories or in homes. It is estimated that there are about 250,000 rug-weaving looms, producing approximately a million square metres each year.⁷¹ Pre-war exports averaged about 3,000 tons a year, representing about 15 per cent of Iran's commercial exports, that is, excluding oil. After a setback during the war years, exports rose to an annual average of 3,600 tons from 1948 to 1951—about 30 per cent of commercial exports.⁷² War-time inflation has, however, raised the cost of production, and has made it increasingly difficult for Persian rugs to compete with foreign machine-made products.

In most of the other countries, production of carpets and rugs meets a large proportion of local needs.

Processing of Food, Beverages and Tobacco

Most food-processing industries received a powerful stimulus from war-time conditions and were expanded several-fold in several countries of the region. New processes, such as dehydration, were introduced, and substantial improvements in methods occurred. Post-war developments were generally unfavourable and production fell off in many branches; it nevertheless remained above that of the pre-war period.

SUGAR

The oldest and largest sugar industry of the region, established about the middle of the nineteenth century,

⁶⁷ Association of Lebanese Industrialists, *Lebanon's Industries, 1949-1950* (Beirut), pages 59, 60.

⁶⁸ Ministry of National Economy, *Recueil de statistiques, 1942-43* (Beirut); *Monthly Economic Bulletin* (Damascus; in Arabic), July 1951.

⁶⁹ *Textile Organon*, June 1952.

is that of Egypt. Production is carried on by a private company which operates four mills and one refinery—the third largest in the world—but prices and profits are subject to government control. Pressing and refining capacity exceeds the country's production of sugar cane, necessitating the importation of raw sugar.

Before the war, output covered local consumption needs and provided an export surplus of about 40,000 tons. During the post-war period, however, sales increased greatly, from 147,000 tons in 1939 and 158,000 in 1946, to 252,000 in 1949, 274,000 in 1950 and 287,000 tons in 1951, necessitating larger imports of

⁷⁰ France: Ministère des affaires économiques, *La documentation française, L'Industrialisation des pays du Moyen-Orient* (Paris), April 1949.

⁷¹ Overseas Consultants, Inc., *op. cit.*

⁷² Ministère des finances, *Statistique annuelle du commerce extérieur de l'Iran, 1950/51* (Tehran).

refined sugar. This increase is attributed to the growth of population, the advance in standards of living, the relatively small rise in the price of sugar, the enlargement of confectionery and other industries using sugar, and contraband exports of sugar and sugar products.⁷³ The capacity of the industry is being expanded substantially.⁷⁴

In Iran, sugar is produced by the Government, which operates ten refineries; two of these were recently completed. Consumption has risen rapidly, from 75,000 tons in 1943 to 135,000 in 1947 and 160,000 tons in 1951;⁷⁵ as in Egypt, growth in population and the relatively small rise in the price of sugar have played their part in increasing consumption. Present output meets two-fifths of the country's needs, but the installation of two mills which have been ordered is expected to raise this proportion to one-half.

The modern sugar industry of Turkey dates from 1926. The Turkish Sugar Refining Company, which owns four refineries, is financed by the government-owned Sümer Bank and Agricultural Bank and the privately owned Ish Bank. The production is based on beet sugar, but attempts are being made to develop the output of cane sugar. Consumption is keeping pace with the rise in production; sales rose from 128,000 tons in 1950 to 150,000 in 1951. A new factory with a capital of £T 10 million is scheduled to start production in 1953 and two others are expected to begin operations

⁷³ Société générale des sucreries et de la raffinerie d'Égypte, *Annual Report for 1950/51* (Cairo).

⁷⁴ *Idem*, *Annual Report for 1949/50*.

⁷⁵ United States Department of Commerce, *Foreign Commerce Weekly*, 2 June 1952.

⁷⁶ *Türk Ekonomisi* (Ankara), June 1952.

⁷⁷ Association of Lebanese Industrialists, *Lebanon's Industries, 1949/50* (Beirut).

in 1954; they will be owned by the above-mentioned company and banks and by the sugar-beet growers.⁷⁶

In Lebanon, a sugar factory installed shortly before the Second World War processes locally grown sugarcane and imported raw sugar. Output in 1949 was 3,100 tons, a figure which is well below capacity and which meets only one-fifth of total consumption requirements; the condition of the equipment, however, renders costs high and limits expansion.⁷⁷

In Afghanistan, a beet sugar refinery installed in 1940⁷⁸ produces up to 4,000 tons a year. This meets less than half the country's needs, and plans to expand it are under way.

In Syria, a sugar refinery started production in 1950. Output in 1951 was estimated at 10,000 tons of refined sugar; it was expected that this figure would be doubled and local consumption needs would be met by the end of 1952.⁷⁹ The factory has been processing imported raw sugar, but the cultivation of beets is being extended to meet requirements for sugar.

In Israel, a sugar factory with a capacity of 2,700 tons of refined sugar began production in 1952; locally-grown beets are being used. The present rate of output meets only 10 per cent of local needs, but plans for the extension of beet acreage and the expansion of the refinery have been drawn up.⁸⁰

Table A-10 shows the output of the three major producers of sugar in the region.

⁷⁸ United Nations Educational, Scientific and Cultural Organization, *Report of the Mission to Afghanistan* (Paris, 1952), page 73.

⁷⁹ Statement by president of sugar company, *Commerce du Levant*, 28 October 1951 (Beirut).

⁸⁰ Jewish Agency for Palestine, *Israel Economic Horizons* (New York), April 1952.

Table A-10. Production of Sugar in Three Countries, 1937/38, 1938/39, 1942/43 and 1944/45 to 1951/52 (Thousands of metric tons)

Crop year	Egypt		Iran	Turkey
	Raw sugar	Refined sugar ^a	Refined sugar	Refined sugar
1937/38.....	160	209	18	57
1938/39.....	162	238	22	47
1942/43.....	190	158	14	64
1944/45.....	172	148	24	100
1945/46.....	180	166	22	100
1946/47.....	191	185	36	107
1947/48.....	223	200	52	106
1948/49.....	191	216	35	118
1949/50.....	175	231	55	137
1950/51.....	180	218	69	186
1951/52.....	200	...	...	...

Source: United Nations, *Statistical Yearbook*; Société générale des sucreries et de la raffinerie d'Égypte, *Annual Reports* (Cairo); Iran, Ministère des finances, *Statistique annuelle du commerce extérieur de l'Iran* (Tehran); Turkey, Ministère de l'économie et du commerce, *Konjonktur* (Ankara),

October to December 1949; *Türk Ekonomisi* (Ankara), June 1952; United States Department of Commerce, *Foreign Commerce Weekly* (Washington, D.C.).

^a Total produced from domestic and imported raw sugar.

BEER AND WINE

The production of alcoholic beverages increased several-fold during the war, but the withdrawal of Allied troops resulted in a sharp decline in production in some countries. Table A-11 gives the output of the principal producers.

In most of the region the liquor industry is privately owned, but in Turkey about half the total production is accounted for by the government monopoly. Wine and araq (brandy) are produced in small factories or village shops, but the beer industry, which is new to the area, is operated by larger and more highly capitalized units.

Table A-11. Output of Alcoholic Beverages, 1939, 1943, 1945 and 1947 to 1951

(Thousands of hectolitres)

Country and item	1939	1943	1945	1947	1948	1949	1950	1951
<i>Cyprus:</i>								
Wine.....	153 ^a	...	137	105	129	170	...	...
<i>Egypt:</i>								
Beer.....	78	336	380	177	151	115	123	116
<i>Iraq:</i>								
Beer.....	—	—	—	—	14	20 ^b	...	...
Araq.....	8 ^b	17 ^b	22	22	15	...	...	...
<i>Israel/Palestine:</i>								
Beer.....	20	116	194	180	37 ^c	89	123	145
Wine.....	34	43	52	75	24 ^c	65	31	75
<i>Lebanon:</i>								
Beer.....	18 ^d	70	70	16	19	20	21	15
Wine.....	10	8	8	1	5	6	...	...
Araq.....	11 ^d	11	11	8	12	12	...	...
<i>Syria:</i>								
Wine.....	2	2	2	1	1	2	2	1
Araq.....	5	11	8	6	11	5	8	4
<i>Turkey:</i>								
Beer.....	57	140	118	201	186	201	195	211
Wine.....	102	127	259	140	156	177	93	...
Araq.....	66	94	33	94	69	82	...	...

Source: United Nations, *Statistical Yearbook*; Iraq, Ministry of Economics, Principal Bureau of Statistics, *Statistical Abstract* (Baghdad); Lebanon, Ministry of National Economy, *Majmuat ihsaat Suria wa Lubnan* (Beirut); Ministry of National Economy, *Al majmuat al ihsaat al ama* (Beirut); Association of Lebanese Industrialists, *Lebanon's Industries* (Beirut); Syria, Ministry of National Economy, *Al majmuat al ihsaat al Suria* (Damascus); *Statistical*

Abstract of Palestine (Jerusalem); Central Bureau of Statistics, *Statistical Bulletin of Israel* (Jerusalem); Turkey, Central Statistical Office, *Istatistik Yilligi* (Ankara).

^a Average of 1934-38.

^b Estimated.

^c Israel only; June to December 1948.

^d 1940.

FOOD PRESERVING

Food-canning industries expanded rapidly during the war. Thus, in Egypt the output of canned fruits and vegetables rose from 550 tons in the pre-war period to 20,000 tons during the war years; a meat-preserving industry, with an output of 6,000 tons, and a dehydrating industry, with a capacity of 2,000 tons, were also established.⁸¹ A similar expansion took place in other countries.

During the post-war period, foreign competition, the high price of local vegetables and, for a time, the difficulty of obtaining sugar and tin, caused a sharp setback. In Syria, for example, output of canned fruit and vegetables, which had more than tripled during the war,

declined from 3,000 tons in 1944 to 700 tons in 1946 and 1,000 tons in 1950.⁸² Similarly in Egypt, canning industries are working well below capacity, producing only 8,000 tons of fruits and vegetables, but onion dehydration, which is carried on at a low cost, has met foreign competition, and small amounts are exported. In Israel, which has a rapidly growing domestic market, output of citrus squashes and juices rose from 7.4 million litres in 1949 to 15.3 million in 1951; output of canned fruits, from 1,345 tons to 3,188 tons; and output of preserved vegetables, from 2,432 tons to 3,411 tons.⁸³

The production of chocolates and confectionery has increased in most countries. In Egypt, purchases of

⁸¹ Fédération égyptienne de l'industrie, *Annuaire 1950-51* (Cairo); *Report of the Egyptian Government Committee on Industry, 1948* (Cairo).

⁸² Ministry of National Economy, *Monthly Economic Bulletin* (Damascus), August 1951.

⁸³ Central Bureau of Statistics, *Statistical Bulletin of Israel* (Jerusalem).

sugar by the confectionery and chocolate industry rose from 25,000 tons in 1939 to 60,000 in 1949 and 85,000 tons in 1951;⁸⁴ output exceeds local requirements. In Israel, production of sweets and chocolates rose from 6,300 tons in 1949 to 7,000 tons in 1950, but fell to 4,500 in 1951⁸⁵ because of rationing; Israel exports a substantial part of its output. In Lebanon, output of sweets and chocolates amounted to 5,900 tons in 1949⁸⁶ and 6,400 tons in 1950;⁸⁷ this represents a decline over previous years, when exports were higher.

An expansion has also taken place in the production of vegetable oils. In Egypt, the output of cotton-seed oil has fluctuated with the size of the cotton crop, averaging some 85,000 tons annually in the post-war period;⁸⁸ this figure is well above the pre-war average of 35,000 to 40,000 tons, when most of the cotton-seed was exported. About one-quarter of the output is used for making soap and the balance is consumed. Sesame, ground-nuts and linseed furnish about 12,000 tons of oil. In Israel, some 12,000 tons of oil are produced,

⁸⁴ National Bank of Egypt, *Economic Bulletin*, vol. III, No. 1, 1950 (Cairo); Société générale des sucreries et de la raffinerie d'Égypte, *Annual Report for 1950/51* (Cairo).

⁸⁵ Central Bureau of Statistics, *Statistical Bulletin of Israel* (Jerusalem).

⁸⁶ Association of Lebanese Industrialists, *Lebanon's Industries, 1949-1950* (Beirut).

⁸⁷ *Commerce du Levant* (Beirut), 30 January 1952.

⁸⁸ *L'Égypte industrielle*, June 1952 (Cairo).

mostly from imported cotton, sesame and sunflower seeds.⁸⁹ Output in Lebanon varies sharply with the size of the olive crop, which provides most of the oil; in 1948 total production amounted to 9,100 tons, in 1949 to 3,200 and in 1950 to 6,900 tons.⁹⁰ Turkish production of oil is estimated at 70,000 to 80,000 tons a year.⁹¹ Appreciable amounts of vegetable oils are also produced from cotton-seed in Afghanistan, the Anglo-Egyptian Sudan and Iran, and from olives in Jordan, Lebanon and Syria.

The production of macaroni, spaghetti and similar products has developed rapidly, particularly in Egypt, Israel and Lebanon, all of which more than fill consumer demand. Output in Israel amounted to 16,000 tons in 1950 and 15,000 tons in 1951;⁹² and in Lebanon to 3,000 tons in 1950.⁹³

TOBACCO

The tobacco industry in some of the countries of the Middle East is one of the old established industries

⁸⁹ Central Bureau of Statistics, *Statistical Bulletin of Israel*.

⁹⁰ Ministry of National Economy, *Recueil des statistiques générales* (Beirut); Association of Lebanese Industrialists, *Lebanon's Industries, 1949-1950* (Beirut).

⁹¹ International Bank for Reconstruction and Development, *Economy of Turkey*, page 96.

⁹² Central Bureau of Statistics, *Statistical Bulletin of Israel*.

⁹³ *Commerce du Levant* (Beirut), 30 January 1952.

Table A-12. Output of Tobacco Products, 1939, 1943, 1945, and 1947 to 1951

(Millions of cigarettes; tobacco in metric tons)

Country and item	1939	1943	1945	1947	1948	1949	1950	1951
<i>Egypt:</i>								
Cigarettes.....	6,000	...	...	...	10,000	9,800	...	...
<i>Iran:</i>								
Cigarettes.....	3,112	2,682	3,097	3,059	4,350	5,513	4,192	...
Manufactured tobacco.....	7,734	4,101	3,198	4,010	5,972	5,797	3,848	...
<i>Iraq:^a</i>								
Tobacco.....	4,100	8,600	11,300	10,000	10,000 ^b	9,000	...	...
<i>Israel/Palestine:</i>								
Cigarettes.....	580	1,835	1,147	1,063	511 ^c	1,031	1,516	2,027
Manufactured tobacco.....	52	120	138	156	7 ^c	28	47	64
<i>Jordan:</i>								
Cigarettes.....	...	...	...	147	143	185	221	...
<i>Lebanon:</i>								
Cigarettes.....	664	1,191	972	807	856	912	829	928
Manufactured tobacco.....	299	61	223	253	375	327	304	...
<i>Syria:</i>								
Cigarettes.....	415	1,225	865	835	960	1,190	1,361	1,449
Manufactured tobacco.....	1,009	709	867	733	972	833	715	690
<i>Turkey:</i>								
Cigarettes.....	10,598	9,927	15,325 ^d	15,666	14,872	18,395	15,565	17,190
Manufactured tobacco.....	4,451	3,572	3,242 ^d	2,541	2,706	3,162	2,303	2,548

Source: United Nations, *Statistical Yearbook*; C. Issawi, *Egypt* (London, 1947); United Kingdom Board of Trade, *Overseas Economic Survey: Egypt* (London); United States Department of Commerce, International Reference Service, *Economic Review of Egypt, 1948, 1949* (Washington, D.C.); Iran, Ministry of Interior, *National Statistical Publication* (Tehran), No. 2, March 1951.

^a Fiscal year; data represent tobacco issued from excise bonded warehouses.

^b Approximate output of cigarettes, 1,300 million; see United Kingdom Board of Trade, *Overseas Economic Surveys: Iraq, 1949*.

^c Israel only; June to December.

^d 1944.

which expanded markedly during the war and post-war years. Except in Egypt, where the growing of tobacco is prohibited, and in Israel, all the countries listed in table A-12 meet their own tobacco requirements; Iran, Syria and Turkey export substantial quantities.

Production of cigarettes in all these countries is suffi-

cient for local requirements, and in Egypt and Turkey there is a small export surplus. In Egypt, Iraq and Israel, the cigarette industry is operated by private enterprises. In Lebanon and Syria, a private monopoly under government supervision, and in Iran and Turkey, government monopolies, control production and distribution.

Chemical Industries

A number of chemical industries were established in the Middle East before or during the war. Most of these have been expanded and now produce in sufficient quantity to meet the greater part of local requirements, but the narrowness of the market has limited their growth. The following account deals with the major branches of the chemical industry.

ALCOHOL

Table A-13 shows the output of alcohol in certain countries of the Middle East. In Egypt, the industry has been established for some decades, but in other countries it is of more recent growth. In Egypt, Iran, Syria and Turkey, molasses, as well as fruits, is used for the production of alcohol.

Table A-13. Production of Alcohol, 1939, 1943, 1945 and 1947 to 1951

(Metric tons)

Country	1939	1943	1945	1947	1948	1949	1950	1951
Egypt.....	4,600	8,900	9,000	10,000	7,500	7,500	11,700	12,500 ^a
Iraq.....	...	...	69	95	104	...	...	...
Israel/Palestine.....	613	468	547	700	219 ^b	624	682	509
Lebanon.....	575 ^c	583	334	468	831	822	550	520
Syria.....	...	110	57	85	56	61	295	363
Turkey.....	5,800	7,300	...	6,900	8,100	8,200	...	...

Source: Ministry of Finance, *Annuaire statistique de poche* (Cairo); Société égyptienne de distillerie, *Annual Report for 1951*; Ministry of Economics, *Statistical Abstract* (Baghdad); Ministry of National Economy, *Majmuat ihsaat Suria wa Lubnan* (Beirut) and *Bulletin statistique trimestriel* (Beirut); *Statistical Abstract of Palestine*; Central Bureau of Statistics, *Statistical*

Bulletin of Israel (Jerusalem); *Nashrat al ihsaat al shahria*; Central Statistical Office, *Annuaire statistique* (Ankara).

^a Production of one factory only, representing about two-thirds of total output.

^b Israel only; June to December 1948.

^c 1940.

MATCHES

The match industry, which is of recent growth, was aided by war-time shortages in the region, but was handicapped by the difficulty of obtaining wood. Production in Egypt increased to 245 million boxes in 1947. In Iran, 227 million boxes were produced in 1948, compared with 104 million in 1938. Output in Lebanon in 1949 was 60 million boxes, compared with 25 million in 1939, but it declined to 39 million boxes in 1951. In Palestine, output increased slightly, from 33 million boxes in 1939 to 33.3 million in 1947; the output of Israel was 42 million boxes in 1950, and 53 million in 1951. Syrian output in 1950 was 28 million boxes, a sharp rise over both the pre-war output and the war-time peak; by 1952, production had increased to 45 million boxes. Production in Turkey has also increased steadily, to 332 million boxes in 1948

and 353 million in 1949, a level about 50 per cent higher than that of the pre-war period.

SOAP

The soap industry is based mainly on locally produced olive oil or cotton-seed oil and is one of the oldest industries in the area. In most producing countries it meets all local requirements, except for some of the higher qualities. Output of soap increased during the war and post-war years; in Egypt, it rose from 45,000 tons in 1938 to 60,000 tons in 1948; in Lebanon, from 2,600 tons in 1940 to 6,500 tons in 1949; and in Syria, from 3,400 tons in 1940 to 5,000 in 1950. Production in Iran rose to 11,000 tons in 1948.⁹⁴ Between 1943 and 1946, yearly output in Palestine amounted to a little over 10,000 tons, leaving a small export surplus; in

⁹⁴ Overseas Consultants, Inc., *op. cit.*

1951, Israel's production was 11,400 tons. This falls short of the country's needs but is supplemented by some 3,000 tons of detergents.⁹⁵ Iraq's annual output is about 3,000 tons, meeting about one-third of consumption requirements.⁹⁶ In the Anglo-Egyptian Sudan, soap making, based on cotton-seed oil, is now "being carried out by several firms on modern lines".⁹⁷

FERTILIZERS

In the post-war period, Egypt's production of superphosphates rose rapidly, to 100,000 tons annually. This compares with an average of 20,000 to 30,000 tons before the war, and meets more than two-thirds of consumer demand. Local phosphate is used, and the cost of production is low. A calcium nitrate plant, with an initial capacity of 200,000 tons, started operation in 1951, and it was planned to use some of the electricity generated from the Aswan dam for the production of an additional 400,000 tons of calcium nitrates a year. In Israel, a superphosphate factory with a capacity of 40,000 tons is to be enlarged to meet local requirements, estimated at 75,000 tons. Most of the phosphate rock is imported for processing.⁹⁸ Turkey produces 15,000 tons of superphosphates, but a new factory under construction will raise output to 100,000 tons;⁹⁹ it is also proposed to expand the present annual production of 6,000 tons of nitrates. The possibility of producing ammonium sulphate from waste gases has been envisaged in Iran and Iraq.

SULPHURIC ACID

The output of sulphuric acid in Egypt increased during the war, amounting to 12,000 tons in 1947; since then the capacity of the industry has been doubled.

Present production in Iran is a little below the industry's capacity of 1,200 tons a year. Annual output of sulphuric acid in Palestine in the post-war period was 9,000 tons. Since that time there has been a further expansion of the industry in Israel. Production of sulphuric acid in Turkey in 1950 was 11,000 tons.

PHARMACEUTICALS

The industry is most fully developed in Israel, where it was started by highly skilled immigrants, and further expansion is under way. In Egypt, there has been a marked increase in the number of articles manufactured and in the quantity produced. In Turkey, a large factory is being built by Turkish and United States capital. The production of insecticides has increased in some countries, and provision is being made for further expansion.

OTHER CHEMICALS

A wide variety of other chemical products is produced on a small scale in Egypt, Israel, Turkey and, to a lesser extent, in Iran. The chief of these are glycerine (250 tons a year in Egypt), caustic soda (4,000 tons in Egypt, 1,200 tons in Turkey), nitric acid (100 tons in Egypt), hydrochloric acid (700 tons in Turkey, 500 tons in Egypt, 120 tons in Iran) and copper sulphate (2,000 tons in Turkey). The seven-year plan of Iran envisages the establishment or extension of sulphuric and nitric acid units, and plants for insecticides, soda ash and caustic soda.¹⁰⁰ The Turkish five-year plan provides for the establishment of plants producing nitric acid, ammonium nitrate, copper sulphate and carbon sulphide.¹⁰¹ The chemical industries are developing rapidly in Israel.

Metallurgical Industries

Domestic utilization of metal products in the Middle East is low, not only in comparison with consumption in highly industrialized countries, but also with that of some under-developed regions, such as Latin America. At present, annual consumption of steel products in the entire region is about one million tons, or 10 kilogrammes per person. This compares with the following per capita figures for 1948: Europe 110.5 kilogrammes, Latin America 24.1, Africa 12.1, and Asia and the Far East 4.6 kilogrammes.¹⁰²

Turkey is the only country of the Middle East which has a full-fledged iron and steel industry, but both Egypt and Israel operate small plants, and similar projects are envisaged under the seven-year plan of Iran.

The Karabuk plant in Turkey, which is owned by the Government and is operated by the Sümer Bank, was completed in 1940, at a cost of £T 42 million (US\$23 million at the then prevailing exchange rate). This figure does not include investment for transport and other facilities.¹⁰³ Table A-14 shows production of iron and

⁹⁵ Government of Palestine, *A Survey of Palestine* (Jerusalem), vol. 1; *Palestine Economist, Annual, 1948* (Jerusalem); Central Bureau of Statistics, *Statistical Bulletin of Israel* (Jerusalem); *Technion Yearbook* (New York), 1951, page 174.

⁹⁶ International Bank for Reconstruction and Development, *Economic Development of Iraq* (Baltimore, Md., 1952), page 284.

⁹⁷ British Information Services, *The Anglo-Egyptian Sudan* (New York), June 1951, page 12.

⁹⁸ M. A. Novomevsky, "Chemicals", *Technion Yearbook*, 1950, page 272.

⁹⁹ *Middle East Economist and Financial Service* (New York), May 1951; Turkish Information Office, *News from Turkey* (New York), 24 July 1952.

¹⁰⁰ Overseas Consultants, Inc., *op. cit.*

¹⁰¹ Thornburg, Spry and Soule, *op. cit.*; United Kingdom Board of Trade, *Overseas Economic Survey: Turkey* (London).

¹⁰² United Nations, *European Steel Trends* (Geneva, 1949).

¹⁰³ Thornburg, Spry and Soule, *op. cit.*

steel in Turkey since 1940; the output of a cast-iron pipe factory with a capacity of 12,000 tons is not included.

Table A-14. Turkey: Production of Iron and Steel, 1940, 1943 and 1946 to 1952

(Thousands of metric tons)

Year	Pig-iron	Steel ingots and castings	Rolled products
1940.....	83	38	30 ^a
1943.....	55	43	41 ^b
1946.....	79	80	57
1947.....	99	90	63
1948.....	100	102	76
1949.....	113	103	73
1950.....	111	91	...
1951.....	155	135	105
1952 ^c	138	109	...

Source: United Nations, *Statistical Yearbook and Monthly Bulletin of Statistics*; United Kingdom Board of Trade, *Overseas Economic Survey: Turkey* (London).

^a 1941.

^b 1944.

^c Nine months.

In addition to the general factors which retard industrial development in Turkey and the other countries of the region, the Karabuk plant is handicapped by two further difficulties: first, high transport costs, since coal has to be carried almost 100 kilometres and iron ore over 1,100 kilometres; and second, a lack of balance which hindered operations until recently. The two blast furnaces of the plant have a capacity of 300,000 tons of pig-iron a year; the steel-furnace capacity is only 150,000 tons; and that of the rolling mill, 110,000 tons.¹⁰⁴ Moreover, the rolling mill is not designed to make the products Turkey needs most, for example, structural shapes and small rods. Hence, though coal is bought below cost and wages are low, costs of production are relatively high: pig-iron, £T 90 (\$32) per metric ton; steel ingots, £T 200 (\$53); rails £T 375 (\$133); and sheets, £T 420 (\$148) per ton.¹⁰⁵

Under the Turkish five-year development plan, announced in 1946, it was planned to raise annual production to 350,000 tons of pig-iron and steel and to 220,000 tons of finished products. The total investment required was estimated at about \$40 million. It was considered that at the higher production level the plants would become self-supporting¹⁰⁶ and would be able to supply the country's requirements. This plan was sub-

¹⁰⁴ International Bank for Reconstruction and Development, *Economy of Turkey* (Washington, D.C.), page 93; until recently the lack of balance was even more marked, since the capacity of the rolling mill was only 60,000 tons; see United Kingdom Board of Trade, *Overseas Economic Survey: Turkey* (London).

¹⁰⁵ Thornburg, Spry and Soule, *op. cit.* The figures are for 1948.

¹⁰⁶ United Kingdom Board of Trade, *Overseas Economic Survey: Turkey* (London).

sequently scaled down and modified, and a total of £T 19 million was allocated for the reorganization and extension of the rolling mill and the installation of new coke ovens and a sintering plant.¹⁰⁷

In Egypt, production of metal products increased markedly following the rise in prices caused by hostilities in Korea. Output of steel ingots rose from 5,000 tons in 1949 to 25,000 in 1950 and about 40,000 in 1951;¹⁰⁸ all this production was based on scrap iron. Costs in the industry have been reduced appreciably by rationalization and standardization, and the rise in the price of imported steel enabled local firms to withstand foreign competition. Output of cast-iron products was 18,000 tons in 1950, compared with 12,000 in 1949; and that of copper and brass, 4,000 tons against 2,500 in 1949.¹⁰⁹ The metal industry is privately owned.

Contracts have been signed for iron and steel mills in upper Egypt; these are to have a capacity of 160,000 tons and are to process pig-iron derived from the Aswan deposits. The present annual requirement of iron and steel products in Egypt ranges from 250,000 to 300,000 tons.

The outbreak of the Second World War interrupted the construction of a government-owned steel plant at Karaj, in Iran, with a capacity of about 100,000 tons per annum. In all, about \$10 million, out of a total estimated cost of \$16 million, was actually spent.¹¹⁰ It is not certain, however, whether the project will be completed. The country's annual requirements of steel products are estimated at almost 100,000 tons.¹¹¹

Israel's metallurgical industry, which employs over 20,000 workers, began, like that of Egypt, with the later stages of production, based on imports of semi-finished materials, and the earlier stages of production are gradually being attained. Thus, there are plans for making steel pipes, with an aggregate annual capacity of over 50,000 tons per shift. The value of the output of industrial machinery and implements in 1950 was over £I 3 million.

Iron foundries with a capacity of 10,000 tons have been set up; in 1950 output reached 5,000 tons and in 1951 about 8,000 tons; additional plants are under construction. Output of copper and copper alloys is about 3,000 tons.

Consumption of metal products is relatively high in Israel; in 1950, 78,000 tons of iron and steel were consumed, and the total has substantially increased since that time. Consumption of copper in 1950 equalled 3,500 tons, aluminum 3,200 tons, zinc 1,500 tons and lead 900 tons.

¹⁰⁷ International Bank for Reconstruction and Development, *op. cit.*, pages 102 to 104.

¹⁰⁸ Fédération égyptienne de l'industrie, *Annuaire 1950-51* (Cairo).

¹⁰⁹ *Ibid.*

¹¹⁰ Overseas Consultants, Inc., *op. cit.*

¹¹¹ United Kingdom Board of Trade, *op. cit.*

Other Industries

CEMENT

The cement industry was established in most countries of the region by the mid-nineteen-thirties. Output generally declined during the war, owing to the difficulty of obtaining spare parts and refractory bricks, but, as table A-15 shows, post-war output has been well

above that of 1938 in most countries. Among the factors stimulating the production of cement, in addition to the high transport costs of imported cement, are the high building rate, arising from the pent-up demand for housing, and the construction of public works; both types of construction slackened markedly during the war.

Table A-15. Production of Cement, 1939, 1943 and 1945 to 1952

(Thousands of metric tons)

Year	Egypt	Iran	Israel/Palestine ^a	Lebanon	Syria	Turkey
1939.....	368	69	112	156	58	284
1943.....	323	42	176	118	33	176
1945.....	432	23	151	148	29	298
1946.....	588	37	255	158	43	325
1947.....	648	42	328	168	48	345
1948.....	768	58	160	209	54	345
1949.....	889	55	241	254	58	375
1950.....	1,022	...	380	263	68	388
1951.....	1,130	...	439	303	39	396
1952.....	788 ^b	...	332 ^c	231 ^b	104 ^c	284 ^d

Source: United Nations, *Statistical Yearbook*; Iran, Overseas Consultants, Inc., *Report on Seven Year Development Plan* (New York) and John Murray, "Iran Today" (Tehran, 1950).

^a Israel only, after 15 May 1948.

^b Ten months.

^c Nine months.

^d Eight months.

In general, the cement industry, which is privately owned except in Iran,¹¹² uses up-to-date equipment and is efficiently managed; in some countries prices compare favourably with those of imported products,¹¹³ and a small amount of cement has been exported from Egypt and Lebanon. Local demand in the region has not, however, been fully met and an expansion in production is taking place. In Egypt, Lebanon and Syria, capacity has doubled in the post-war years. The capacity of the industry in Iran is being raised by about 150,000 tons, and plants have recently been completed in the Anglo-Egyptian Sudan and Iraq; in Jordan and Saudi Arabia, cement plants are under construction. The capacity of the Israeli plants is being increased by 400,000 tons a year. In Turkey the completion of new plants and the extension of existing factories will raise capacity by 400,000 tons by 1954.¹¹⁴

GLASS

Five of the Middle East countries produce glass by modern processes. The pre-war production of 2,000 tons a year in Egypt was increased to 12,000 tons in

1945.¹¹⁵ In the post-war period, output of glass-ware fell off sharply, to 2,300 tons in 1949 and 2,800 tons in 1950. These figures do not include the production of sheet glass which started in 1950 with an output of 3,100 tons.¹¹⁶

The Iranian output of glass, which had expanded during the war, decreased sharply after 1947 owing to foreign competition, and several glass factories have been closed. A factory in Tehran, with a capacity of about 3,500 tons of glass-ware, installed machinery in 1949 for the annual production of 1.2 million square metres of sheet glass; so far production has been held up by technical difficulties.

In Israel about 200,000 square metres of sheet glass and 30 million pieces of glass-ware are produced annually. A factory at present under construction will raise the country's capacity to 2.5 million square metres of sheet glass and 100 million containers.¹¹⁷

A Syrian factory with a capacity of 7,000 tons of window glass and roller glass and 7,500 tons of lamps, bottles and table-ware started operation in 1950.¹¹⁸

¹¹² In Turkey, 72 per cent of the industry is privately owned; the balance is operated by the Sümer Bank.

¹¹³ National Bank of Egypt, *Economic Bulletin* (Cairo), vol. III, No. 4, 1950.

¹¹⁴ Turkish Information Office, *Progress Report from Turkey, 1952* (New York).

¹¹⁵ United Kingdom Department of Overseas Trade, *Egypt: Review of Commercial Conditions* (London, 1945).

¹¹⁶ Fédération égyptienne de l'industrie, *Annuaire 1950-51* (Cairo).

¹¹⁷ Israeli Information Office, *Israel Digest* (New York), 19 October 1951.

¹¹⁸ *Commerce du Levant* (Beirut), 5 July 1952.

Turkish production of glass-ware more than doubled between 1938 and 1949, rising from 5,000 tons to 10,500 tons, but output fell off to 7,600 tons in 1951.¹¹⁹

PAPER

Most countries of the region (Egypt, Iran, Israel, Lebanon, Syria and Turkey) produce paper in small mills which use waste paper and make cardboard. Modern factories were established before the war in Egypt and Turkey. During the war, output doubled in the region as a whole, and there has been further expansion since that time.

In Egypt, the annual output of paper and cardboard increased from 12,000 tons before the war to 30,000 in 1945 and about 35,000 tons in 1947. Most of this represents the output of a large well equipped factory using rice straw.

Output of cardboard in Palestine reached almost 2,000 tons in 1944; since that time there appears to have been a decline in production in Israel.¹²⁰ A factory with a capacity of 12,000 tons of paper, scheduled to start operations in the summer of 1953, will meet 60 per cent of domestic needs.¹²¹

The paper industry of Turkey is entirely government-owned and is operated by Sümer Bank. Output increased from 9,000 tons in 1938 to 15,000 tons in 1948, but operations attained full capacity only towards the end of 1949; in 1951, output exceeded 23,000 tons.¹²² The cellulose plants connected with the paper industry produced 9,000 tons in 1951.¹²³

A factory with an annual capacity of 4,000 tons of cardboard is under construction in Iran. In Syria, a factory with a capacity of 4 million square metres of corrugated paper and cardboard boxes has recently started production.

LEATHER GOODS

The industry is still largely in the handicraft stage, but some types of production of leather goods have been modernized, and there has been a marked improvement in quality.

Egypt is practically self-sufficient with respect to the production of leather goods. Output of sole leather increased from 3,500 tons in 1939 to 4,000 tons in 1946

¹¹⁹ Turkey, Ministère de l'économie et du commerce, *Konjonktur* (Ankara). Production by small factories is not included.

¹²⁰ Government of Palestine, *A Survey of Palestine* (Jerusalem); Central Bureau of Statistics, *Statistical Bulletin of Israel* (Jerusalem).

¹²¹ Jewish Agency for Palestine, *Israel Economic Horizons* (New York), October 1952.

¹²² Turkey, Ministère de l'économie et du commerce, *Konjonktur* (Ankara).

¹²³ Turkish Information Office, *News from Turkey*, 16 October 1952 (New York).

and 5,000 tons in 1950, and other kinds of leather also show a rise. In 1947, between 4 million and 5 million pairs of shoes were produced, and capacity has since been increased by the opening, early in 1951, of a government-owned factory with an annual capacity of 600,000 pairs; these were designed to be sold to the poor at about one-third of their cost.¹²⁴

Output of leather goods in Palestine rose substantially during the war, but there was a sharp decline in the post-war period. In 1951, Israel's production amounted to 700 tons of sole leather, 1.4 million square feet of upper leather and 1,688,000 pairs of footwear.¹²⁵

In Lebanon, the output of leather, which increased during the war, has returned to the pre-war level; in 1951, 2,000 tons of sole leather and 2.3 million square feet of upper leather were produced.¹²⁶ Production in Syria has recently been estimated at 750 tons of sole leather and 1.5 million square feet of upper leather.¹²⁷

Turkey imports a few thousand tons of hides, but produces about 15,000 tons of leather goods annually and is practically self-sufficient with respect to these items. Footwear is produced by one large government-owned plant with a capacity of over 800,000 pairs a year, and also by craftsmen.

ENGINEERING

Until recently there was little engineering industry apart from railway and shipping repair shops and yards; the shipyard at Suez is the largest in the Mediterranean area. In Egypt, a Ford motor vehicle assembly plant was completed in 1949. The plant can handle about 2,500 vehicles a year.

In Israel, a Kaiser-Frazer plant capable of producing 6,000 cars annually started operations in June 1951, and a precision tool and die plant was opened in June 1952. A refrigerator factory produces 7,000 units a year. A radio factory is under construction. An aeroplane engine factory which has been built in Turkey has not yet started large-scale production.

CONSTRUCTION

In all the countries of the Middle East, the building industry is one of the most important, employing a relatively large number of workers. Building was severely restricted during the war, but it expanded rapidly after the cessation of hostilities. Table A-16 indicates the extent of new building in some of the countries. In the absence of uniform statistics no comparison between countries has been attempted.

¹²⁴ *Al Ahram*, 3 January 1950 (Cairo).

¹²⁵ Central Bureau of Statistics, *Statistical Bulletin of Israel* (Jerusalem).

¹²⁶ Ministry of National Economy, *Bulletin statistique trimestriel* (Beirut).

¹²⁷ *Commerce du Levant* (Beirut), 22 October 1952.

Table A-16. Building Permits Issued, 1938, 1943 and 1945 to 1952

Country and unit	1938	1943	1945	1946	1947	1948	1949	1950	1951	1952
<i>Egypt (3 principal towns):</i>										
Number of residential permits	1,052	988	1,520	2,306	3,085	4,934	4,573	4,809	3,928	1,614 ^a
<i>Iraq:</i>										
Number of permits.....	...	2,641 ^b	3,409	3,491	4,406	3,016	3,347	2,900	...	...
<i>Lebanon (Beirut):</i>										
Thousands of square metres of floor space authorized..	...	...	107	177	149	258	254	269	234	291 ^c
<i>Palestine (4 principal towns):</i>										
Thousands of square metres completed (floor space)...	342	25	286	719	898	...	...	...	...	...
<i>Israel (excluding certain villages):</i>										
Thousands of square metres completed (ground area) ..	...	...	...	...	...	179 ^d	360	639	1,038	564 ^a
<i>Syria (Damascus):</i>										
Thousands of square metres authorized (floor area)....	60 ^e	35	56	90	143	165	166	200	149	118 ^f
<i>Turkey (Istanbul):</i>										
Number of buildings com- pleted.....	720	155	409	634	1,577	1,677	g	g	g	g

Source: United Nations, *Statistical Yearbook; Statistical Abstract of Palestine.*

^a Six months.

^b 1944.

^c Eleven months.

^d June to December.

^e 1939.

^f Eight months.

^g Investment in residential building in Turkey amounted to £T 63 million in 1948, £T 71.3 million in 1949, £T 80 million in 1950, £T 100 million in 1951 and £T 120 million in 1952 (information from Ministry of Public Works).

Appendix B

TECHNICAL ASSISTANCE IN THE REGION

TECHNICAL ASSISTANCE IN THE REGION

During recent years most countries of the Middle East have received technical assistance supplied by the United Nations and its specialized agencies under the technical assistance programmes of the United Nations. France, the United Kingdom and the United States, in addition to their contributions to these programmes, have provided technical assistance directly to certain countries of the region under bilateral agreements.

A short description is given here of the principal projects which have been carried out or are in progress under the various programmes, those of the United Nations and the specialized agencies being treated in somewhat greater detail. Projects which are under consideration in the different countries but on which no action has been taken or funds authorized have been omitted.

Technical Assistance by the United Nations and the Specialized Agencies

The Middle East has received increasing aid under the technical assistance programmes of the United Nations and its specialized agencies.¹ Of the 1,118 experts in the field in different parts of the world on 1 December 1952, 273 were in the Middle East, mainly in Iran, Afghanistan, Iraq, Israel, Syria, Lebanon, Turkey, Saudi Arabia and Jordan. In addition, individuals from countries in the region held 307 fellowships of the total of 1,180 in effect on the same date (see table B-1). Total expenses for technical assistance projects in the Middle East amounted to over one million dollars by the end of 1951, and the expansion of the programmes led to assignment of technical assistance resident representatives to Afghanistan, Iran, Israel and Turkey, as well as a liaison officer in Beirut to cover activities in Iraq, Jordan, Lebanon and Syria. The role of these representatives is to facilitate the extension of technical assistance in each country and to assist the government concerned, as well as organizations participating in the expanded programme, in the co-ordination and integration of these activities.

Afghanistan

Following two preparatory missions in 1950, the Government of Afghanistan requested and received technical assistance in several major fields, including economic planning and budget control, development of underground water and oil resources, control of rinderpest and other animal diseases, improvement of the karakul sheep industry, introduction of improved farm implements and better methods of cotton cultivation,

¹ Detailed information on technical assistance programmes of the United Nations and the specialized agencies may be found in reports of the Technical Assistance Board, from which passages in this section have been drawn. Individual fellowship and scholarship awards are not described in this appendix. Under the technical assistance programme, the United Nations and its specialized agencies have awarded fellowships and scholarships in a wide range of fields related to economic development, cov-

measures for advancing the educational system at both the general and the technical level, and preparation of programmes of economic development.

In order to develop Afghan water resources—a matter with broad implications for general economic development in Afghanistan—the Government asked the United Nations for the services of a number of experts and for necessary equipment. A geologist-hydrologist and a drilling expert have been recruited by the United Nations, and equipment has been supplied to the value of \$30,000. In addition, the services of the *Compagnie générale de géophysique* have been retained for the purpose of finding water by geophysical methods. Afghan personnel are to be trained in all phases of the project.

The United Nations supplied the services of an oil expert with whose assistance six potential oil basins were located. The services of an expert in oil drilling were also supplied in May 1951, to assist the Government in its drilling programme.

In the field of communications, two United Nations experts advised the Government, in 1951 and 1952, on economically feasible methods of establishing an international radio-telephone system to link Afghanistan's telephones with those of the rest of the world, and on possible improvements in the existing international radio-telegraph service, as well as in domestic telephone and telegraph services. Under the technical assistance programme, a road engineer began work in 1952 on engineering and administrative problems involved in building and maintaining a primary road system to replace present inadequate roads.

ering such subjects as the exploitation of oil resources; hydraulic and thermal power resource appraisal; inland water transport; rail operations; public finance and public administration; agricultural development, soil conservation, forestry, plant breeding and home economics; the organization and development of handicraft industries; co-operatives; weather forecasting; air traffic control and seismology.

Table B-1. Number of Experts and Fellowships provided by the United Nations and Specialized Agencies, 1 December 1952

Country	United Nations	TAB	ILO	FAO	UNESCO	WHO	ICAO	Total
<i>Afghanistan:</i>								
Experts	11	1	-	11	4	10	1	38
Fellowships	11	-	-	3	6	-	-	20
<i>Cyprus:</i>								
Experts	-	-	-	-	-	-	-	-
Fellowships	-	-	-	3	-	-	-	3
<i>Egypt:</i>								
Experts	1	-	-	-	-	8	3	12
Fellowships	41	-	-	-	-	3	-	44
<i>Iran:</i>								
Experts	21	1	2	28	4	6	9	71
Fellowships	33	-	2	15	14	12	1	77
<i>Iraq:</i>								
Experts	1	-	2	20	7	5	3	38
Fellowships	9	-	-	3	11	2	-	25
<i>Israel:</i>								
Experts	7	1	2	13	-	2	3	28
Fellowships	29	-	3	11	4	4	1	52
<i>Jordan:</i>								
Experts	4	-	-	1	-	2	-	7
Fellowships	10	-	-	-	-	1	-	11
<i>Lebanon:</i>								
Experts	1	-	1	-	3	8	3	16
Fellowships	-	-	8	-	3	4	2	17
<i>Saudi Arabia:</i>								
Experts	-	-	-	10	-	5	-	15
Fellowships	-	-	-	-	-	-	-	-
<i>Syria:</i>								
Experts	-	-	-	8	6	9	-	23
Fellowships	13	-	-	12	8	3	-	36
<i>Turkey:</i>								
Experts	1	1	1	-	5	5	-	13
Fellowships	15	-	-	-	4	3	-	22
TOTAL MIDDLE EAST:								
Experts	47	4	8	91	29	60	22	273 ^a
Fellowships	161	-	13	47	50	32	4	307

Source: Data supplied by United Nations Technical Assistance Administration. The following abbreviations have been used: TAB, Technical Assistance Board of the United Nations; ILO, International Labour Organisation; FAO, Food and Agriculture Organization of the United Nations; UNESCO, United

Nations Educational, Scientific and Cultural Organization; WHO, World Health Organization; ICAO, International Civil Aviation Organization.

^a Including twelve experts engaged in regional projects.

The Government also asked the United Nations for the services of experts in economic planning, public finance administration, and banking and monetary policy, to act as advisers in the development of an integrated economic programme. Work was begun in January 1952 by an expert in public finance administration, to furnish advice to the Ministry of Finance on budgetary organization, tax administration and government accounting. It was expected that the two additional experts would also be appointed.

A statistician was sent to Afghanistan by the United Nations in 1951 on an assignment from which he returned in December 1952. His work, to advise the Government on a system of compiling minimum sta-

tistics essential for the country's administrative needs and development plans, was to be carried on by another statistician.

The Food and Agriculture Organization of the United Nations (FAO) has assisted the Afghan Government in the pastoral industry, in cotton cultivation and in introduction of new farm implements. With the aid of an FAO veterinary team, a carefully planned campaign for the eradication of rinderpest was carried out during 1951; more than a million cattle were inoculated. A drying machine was purchased by FAO for the manufacture in Afghanistan of goat vaccine for rinderpest, and also for the production of vaccines for other animal diseases. The services of an FAO expert were supplied

to assist the karakul sheep industry, Afghanistan's most important source of foreign exchange; the industry has declined in recent years owing to uncertain feed supplies, water shortages, disease and parasites. It is planned to establish pilot demonstration projects on use of cotton-seed cake, sugar-pulp and hay as fodder. An FAO cotton specialist assisted the Government in improving methods of cotton growing and increasing yield. In addition, an FAO farm implement expert, accompanied by two assistants, demonstrated the uses of scythes, hoes, forks and hay rakes, all of which were unknown in Afghanistan. It is intended to expand this work, and it is estimated that productivity per man can be increased from two to five times the present rate by the use of such implements, most of which can be made locally.

In the social field, Afghanistan has benefited from the assistance of the United Nations Educational, Scientific and Cultural Organization (UNESCO), the World Health Organization (WHO) and the United Nations International Children's Emergency Fund (UNICEF). In 1949, UNESCO sent an education mission, which made a comprehensive survey of education and prepared a report with recommendations for development in this field. This was complementary to the development plan drawn up by the United Nations-FAO mission. Late in 1951 an education adviser was assigned to Afghanistan, to continue to aid in its educational development. The Afghan Institute of Technology was created in 1951 for the training of greatly needed technical workers; UNESCO supplied experts in construction engineering and in automotive shop training to organize courses and provide training in automotive technology, electricity, general mechanical work and construction work.

A public health adviser was provided by WHO to help the Government survey its medical and public health needs and to determine how to organize a more adequate public health service. A malaria control team was also organized by WHO; since May 1950 this team has been demonstrating methods of malaria control and training local personnel. The team has also helped the Government conduct an anti-typhus programme in Kabul and Kandahar, where typhus epidemics occur every year. With help from WHO and UNICEF, which provided a team of three experts, the Government in 1950 inaugurated a pilot project to promote maternal and child health, and to control venereal disease. The project was greatly expanded in 1951 and 1952.

Cyprus

Cyprus received the services of an FAO range management expert, who has conducted surveys and experimental work, including experiments with fertilizers and selected pasture plants to indicate whether materials other than phosphorus or nitrogen are required

for Cyprus soils and whether certain pasture plant species will thrive in the environment. It is hoped to find species suited to soil conservation and to use in crop rotation.

Egypt

Technical assistance provided by the United Nations and its specialized agencies to Egypt was concerned primarily with social welfare, public health and control of plant pests. Agreements have also been reached to provide assistance in economic development, statistics, rural welfare, agricultural improvement, vocational training, civil aviation, public health and social welfare.

During 1951, FAO provided technical assistance to control the cotton-leaf worm, which causes immense damage each year to cotton and to other crops. The Government and FAO also worked out a plan to establish a demonstration project in rural improvement.

The United Nations Relief and Works Agency for Palestine Refugees (UNRWAPR), as part of its programme for assisting in the rehabilitation of refugees, aided Egypt in a survey of the water potentialities of the north-east Sinai peninsula, in the operation of a handicraft programme for vocational training in Gaza, and in a training course in Gaza during the summer of 1951 for teachers participating in the educational programme for refugees.

In 1951 WHO made preparations for a health demonstration area in the Qalyub district, and in 1952 started a tuberculosis demonstration and training centre in Cairo, as well as a project for research in trachoma. Since 1949 the Government of Egypt has been conducting an anti-tuberculosis campaign for which it has received assistance from UNICEF and from WHO. Plans were prepared by a WHO expert for establishing a plant to produce DDT, and the Executive Board of UNICEF approved a grant of \$250,000 for necessary equipment for this project.

The United Nations and WHO jointly assisted in a project for a rehabilitation institute for the blind to serve Egypt and neighbouring countries. A United Nations social welfare expert visited Egypt during 1951 to advise on the establishment of such a centre. In 1951, also, a United Nations expert made a social welfare survey. The International Labour Organisation (ILO) also co-operated in the vocational training and placement aspects of this project. During 1952, the United Nations provided the services of an expert on youth recreational activity.

In the field of economic statistics, the United Nations agreed to recruit an expert on national income statistics to advise and assist, for an initial period of one year, in the organization and operation of a statistical centre for the training of professional Egyptian statisticians.

Iran

Important aspects of technical assistance in Iran include developing local textile industries, improving transport and communications, raising agricultural production, conserving the country's forests, producing charcoal, improving technical schools, extending the co-operative movement and strengthening public health administration and teacher-training institutions.

In order that the Iranian Oil Company within the frame work of the seven-year plan may be fully informed regarding its project and statistics, an expert in warehousing and stores book-keeping has been made available by the United Nations, and an expert in accounting practices and business administration is being recruited. The United Nations has also supplied the services of a textile expert who, since June 1951, has advised the Government on various aspects of the textile industry. On the basis of his recommendations, a number of textile experts have been appointed for silk dyeing and weaving, jute mill operation and industrial accounting; others are being recruited to advise the Government with regard to spinning, finishing, printing, knitwork and silk printing and design. In the field of electric power development, an expert began a study of electric networks in April 1952, and two experts are to study existing plans for construction of thermoelectric stations and the extent to which these plans meet the requirements of various areas. A fourth expert will advise on the planning and execution of a long-term programme for developing hydroelectric power. A team of four experts, recruited in 1951 by the United Nations, studied the condition of postal services and telecommunication in Iran. In implementation of the team's recommendations, the United Nations has agreed to provide the services of seven specialists in this field. In connexion with development projects for the port of Khorramshahr, the United Nations has made available the services of three experts—in port administration, traffic movement and coastal navigation. Four railway experts were appointed in the spring of 1952 to advise on railway operation and maintenance. To improve the supply of drinking water in some sixty to seventy cities, the Government asked the United Nations for the services of twelve specialists in the development of underground water resources; a preliminary survey is being undertaken by two experts.

The Government has asked the United Nations to make available the services of a draftsman and a topographic surveyor in connexion with the geological survey of Iran. The latter expert was appointed in October 1952. A team of three experts in public administration, public finance and social welfare spent four months in Iran at the end of 1950. Their recommendations included the establishment of a school of social work, the reorganization of the administrative structure of government departments, the adoption of a fellowship sys-

tem for studies in Iran and abroad, amendments to tax legislation and the development of statistical services. In a more recent request, the Iranian Government asked the United Nations for a team of economic and financial specialists to advise the Prime Minister on economic and financial problems. As a result, a mission headed by the former managing director of the International Monetary Fund was assigned to Iran.

By December 1952, twenty-eight FAO experts had been assigned to Iran in connexion with agricultural development, forest resources, rural credit, sugar-cane production and chemical fertilizers. An FAO irrigation engineer conducted a brief preliminary survey in August 1951 and, on the basis of this, an irrigation engineer, a ground water geologist and two drilling technicians were sent to Iran. Another FAO expert assisted the Government in the formulation of its forest policy and in reorganization of the forest service to enforce control of grazing and exploitation; he also conducted a survey of charcoal making and recommended improvement in kilns, as well as the introduction of better saws, hammers and wedges. A wood technologist conducted a survey of forest products and organized training classes in wood technology for local technicians. An expert in forest management, studying forest protection, will assist in establishing experimental areas where modern principles of range management can be demonstrated to local groups. A specialist in range management is also giving advice on improving natural ranges by seeding indigenous and non-indigenous forage crops. Testing of field crops, such as cotton and cereals, in different environments, as well as improvement of yield, is also being aided by FAO experts. An FAO expert in rural credit is studying the organization of the Agricultural Bank in order to make recommendations on financing agricultural co-operative societies and on drafting regulations governing them. A farm demonstration expert was provided to give advice on methods of improving farm practices. An agricultural statistician is helping the Ministry of Agriculture to improve its statistical services. Another expert surveyed the slaughter houses and advised the authorities on plans for improving them.

In January 1951, the International Civil Aviation Organization agreed to send a team of nine experts to Iran to help Iranian Airways improve its organization and service, and to aid the Department of Civil Aviation in training personnel to operate ground facilities and services. Of these, seven experts were in the field in September 1952.

A technical mission from the International Monetary Fund visited Iran in January 1951 to advise the Government on exchange problems. In 1951 two ILO experts on co-operatives helped draft a law, drew up model rules for such societies and assisted the Government in founding some model co-operatives. They

also investigated the possibility of establishing consumer co-operatives in urban centres and of transforming local agencies of the Agricultural Bank into rural credit co-operatives. Another ILO expert was in Tehran at the end of 1951 for the purpose of advising the Government on the organization of labour inspections.

Early in 1951 the Government of Iran requested UNESCO to assist in reorganizing its technical schools, in arranging a repair and maintenance service for scientific instruments in universities, in organizing libraries and documentation services and in staffing medical faculties. In pursuance of agreements signed with the Government, UNESCO sent five experts to Iran to start four projects in the above fields.

The most important project of WHO in Iran was a medical teaching mission under the joint auspices of WHO and the Unitarian Service Committee; this mission, consisting of eight experts in different fields, visited the country in October 1951 and conducted a three-week demonstration seminar at the University of Tehran. Iran was also aided by WHO in a nation-wide campaign for malaria control, and the services of two advisers on public health administration were supplied to the Government. Supplies were provided and WHO personnel paid for by UNICEF in connexion with an anti-tuberculosis vaccination campaign. In November 1951, UNICEF approved assistance to Iran totalling \$300,000 for a milk conservation programme.

Iraq

The Government of Iraq has received technical assistance in the fields of fisheries, agricultural research, plant diseases, irrigation, nutrition, statistics, fundamental education (in the Dujaila area), malaria control, rural health, civil aviation and social welfare. The International Bank for Reconstruction and Development, with the help of FAO, WHO and UNESCO, organized a mission in 1951, which submitted a comprehensive general economic survey to the Government in February 1952. Following this survey, FAO experts were assigned to assist the Government in measures for soil conservation and land use, in establishing agricultural co-operatives, improving livestock, cultivating eucalyptus and poplar trees and operating fisheries. The team included an agricultural statistician and a nutrition officer who undertook an examination of nutrition problems in Iraq. In addition, specialists were provided in irrigation, drainage, agricultural research, agricultural demonstration work and ground water geology.

Since 1945, the Government of Iraq has been engaged in a national land use and development scheme, to open for settlement large areas of hitherto uncultivated land. In connexion with this programme, UNESCO is assisting in the establishment of a sound and broad fundamental education programme at

Dujaila; ILO is co-operating in advancing education in handicrafts, as well as in organizing co-operatives and teaching co-operative methods; and WHO is furnishing aid in developing health education. The services of a specialist in aeronautical meteorology and an expert in air traffic control were provided by ICAO.

In the field of social welfare, an expert provided by the United Nations in 1950/51 initiated training plans for teaching basic principles of social welfare as adapted to local conditions. Another expert was provided to establish a course of training in social welfare, beginning September 1952. A community development specialist completed a short-term exploratory mission in July 1951.

The Government of Iraq was assisted by UNESCO in strengthening university instruction in biology, industrial chemistry and physics, as well as in building up its technical education and training facilities. In addition, the Government was aided by two advisers in a survey of the potentialities of vocational education.

The Government also was aided by WHO and UNICEF in setting up a project for control of bejel, a form of venereal disease. To control malaria, which constitutes another major health problem in Iraq, a preliminary survey was completed in July 1951 and a team of three experts from WHO began their training and control programme in 1952. Moreover, a WHO consultant carried out a rural health survey during the latter half of 1951 for the establishment of a rural centre to provide basic health services and training for local personnel.

Israel

The United Nations has furnished Israel with expert advice covering widely diverse fields. Experts were supplied to advise the Government on fiscal and budget matters; soil mechanics; the development of water resources; production statistics; chemical analysis; non-ferrous metal casting, and metal finishing; oil storage problems; underground water; peat processing; photo-gravure printing; social welfare policy and administration; and mental hygiene.

Experts in the following fields were under recruitment late in 1952 by the United Nations for service in Israel: processing wood for pulp; use of cereal straw for producing cellulose; planning a building research centre; developing a central technical research institute; expanding the plastics industry; housing and town and country planning; exploration for petroleum; meteorology; and problems of the mentally retarded.

Technical assistance has been provided also by FAO in several fields. A number of soil conservation experts have been working in Israel as advisers to the Soil Conservation Department, and soil surveys have been carried out. FAO experts in range management have

assisted in experimental seeding of indigenous and non-indigenous species to provide forage in large untilled areas and to lay down a vegetation cover against further erosion. For the citrus industry, an FAO expert was consulted on fertilizers and on improvement of irrigation practices in citrus orchards. An expert in olive culture made a survey of the production and processing of olive oil. For the development of dairy farming, FAO agreed to supply a team of experts, consisting of two veterinarians, a dairy breeding expert and a specialist on milk use, to advise the Government on the use of dried milk powder and on necessary installations. For expansion of sea fisheries, FAO agreed to furnish experts in the field, and also awarded two fellowships for a course of study in fish culture techniques in Indonesia. The Central Research Institute for Agriculture has also received technical assistance from FAO.

In the field of civil aviation, an expert supplied by ICAO made recommendations for improving Lydda airport and other airports in the country. A specialist in aircraft certification studied the current means of overhauling, repairing and maintaining civil aircraft in Israel, in order to recommend improvements and to assist in establishing a government airworthiness authority. A training expert was sent to assist the Israel Department of Civil Aviation in establishing standards for licences to aviation personnel, and to aid the national airline, El-Al, in organizing training courses for various classes of technical personnel.

Israel was also assisted by ILO with respect to certain labour problems. An employment service expert sent by ILO conducted a survey of employment exchanges in Israel and submitted a comprehensive report containing recommendations regarding their administration and financial and technical organization. A specialist conducted a master course on training for supervision in industry; it was expected that the persons so trained would become instructors in similar courses for a broad cross-section of industry in Israel. An expert was also provided for further instruction, particularly regarding job relations and job methods. An ILO expert in productivity was sent to Israel in February 1952 as a consultant in the Productivity Institute.

A medical teaching mission sponsored by WHO and the Unitarian Service Committee visited Israel in September 1951. This mission consisted of specialists in basic medical sciences, in clinical medical sciences, in medical education and in various problems of public health. Experts were also assigned to the Government to advise on venereal disease control and on the establishment of laboratories for diagnosis and for the preparation of vaccines and serums. A tuberculosis control programme was undertaken with the co-operation of UNICEF and WHO. In November 1951, UNICEF approved \$40,000 for assistance to Israel for

equipment, supplies and transport for maternal and child welfare services.

Projects in seismological and wind power research have been undertaken in Israel by UNESCO. In the summer of 1951, UNESCO sent a scientific expert in seismology who recommended the establishment of two seismic stations. For utilization of wind power, UNESCO also provided expert advice on measuring average wind velocity in various parts of the country and on sites for pilot projects which would apply wind power.

Jordan

The technical assistance provided to Jordan has been connected largely with the integration of refugees into its social and economic life. In the provision of such assistance, the United Nations Relief and Works Agency for Palestine Refugees (UNRWAPR) has played a major role (see chapter 8).

An economist advised the Government on general economic planning, and a construction engineer was a consultant on public works and building construction. A geophysical survey was carried out south-east of the Dead Sea, while a soil chemist analysed the types of soil in this and other areas where agricultural development is planned. To assist in financing proposed development schemes, a Development Bank was organized by UNRWAPR, which contributed 80 per cent of the Bank's capital of \$1.4 million.

In meeting the medical needs of nearly 500,000 refugees in Jordan, the health division of UNRWAPR, in co-operation with WHO, extended a considerable amount of technical aid to the Jordan Government; furthermore, a medical training programme has been inaugurated which will train twenty-six persons for periods ranging from six months to three years in nursing, midwifery, and X-ray and laboratory techniques. As part of its programme of vocational training, the Education Division of UNRWAPR is providing about 750 refugees with instruction in carpentry, shoemaking, bookbinding, tinsmithing, basket-making, weaving, agriculture, dressmaking, sewing and embroidery.

An industrial economist who was sent by the United Nations to Jordan in 1951 to advise on the development of small industries, with special reference to Palestine refugees, was followed by a chemical engineer who is advising the Government on technical, economic and marketing aspects of chemical industries that may be established. Beginning in May 1952, an expert has helped establish repair shops to handle all types of heavy machinery and has instructed local mechanics in the operation and maintenance of equipment. In addition, the United Nations appointed an economist in June 1952 to assist the Government of Jordan in estab-

lishing an integrated programme of general economic development. For the development of Aqaba port, which would result in foreign exchange savings of about \$3.5 million annually, a port construction engineer was appointed in March 1952 to make recommendations on installations and equipment. Also, an expert in public administration was assigned to the office of the Prime Minister.

In the formulation of agricultural development plans, FAO has also assisted Jordan by providing an agricultural economist to work with the Ministry of Development and Reconstruction.

Early in 1951 an ICAO expert in airport construction visited Jordan, conducted a preliminary study and submitted his findings; as a result an aeronautical meteorologist was provided to assist the Government of Jordan.

Lebanon

Technical assistance to Lebanon from the United Nations and specialized agencies has included assistance in low cost housing and slum clearance; malaria control, public health administration and health education; a preliminary survey of education needs; and development of the international airport at Beirut.

The United Nations has furnished Lebanon the services of a statistician, and of an expert in low cost housing. The latter has assisted the Lebanese authorities in making a survey of housing and living conditions in Beirut. He is working in consultation with housing specialists appointed under the United States bilateral programme.

A technical mission from the Fund during 1950 advised the Government of Lebanon on exchange problems. In co-operation with the American University of Beirut, UNRWAPR since September 1950 has been conducting a study of the national income. The training programme of UNRWAPR has included a course in elementary statistics and the practical application of statistical theory; training in vocational education; and instruction in education methods and practices. In November 1951, under the auspices of the American University of Beirut, UNRWAPR also sponsored its second Middle East medical symposium.

Two experts were sent to Lebanon by ICAO in November 1951 to study the technical and administrative organization of the Department of Civil Aviation and its operation of the international airport at Beirut; as a result, a revised plan of organization was prepared. In addition, ICAO trained local personnel to man the airport, and instructions were given in air traffic control, meteorology and communications.

In the latter half of 1951, a WHO team started a demonstration project for control of malaria by surveying the Akkar plain, several parts of the Bekaa, the littoral

and the area around Tyre; three experts are continuing the work. Six other WHO specialists in Lebanon were engaged in September 1952 in public health administration, public health nursing, establishment of a demonstration and training centre in maternal and child health and lecturing in preventive medicine and hygiene at St. Joseph University, Beirut.

Aid by UNESCO to Lebanon has consisted in providing the services of a general educational adviser and of experts for the revision of textbooks and the creation of a document and educational centre.

Saudi Arabia

Technical assistance to Saudi Arabia has included exploration of the possibilities for a programme of water conservation and improvement of the country's main crop, dates; building a quarantine station for pilgrims at Jidda, through which heavy pilgrim traffic passes annually; and malaria control. An FAO mission to Saudi Arabia conducted a survey of available water in order to assess possibilities for development; this work is to be expanded by a further mission consisting of nine experts. Irrigation and reclamation engineers from FAO examined the possibility of controlling, by means of dams and other water-spreading devices, flood waters caused by irregular rainfall, and explored sites for seasonal storage dams. A soil specialist conducted surveys and chemical analyses to determine the suitability of soils for cultivation and irrigation in relation to the available water supply.

An agricultural institute is to be established by the Government, with sub-stations located throughout the country. FAO has undertaken to provide twelve specialists to assist in establishing this institute and is to take part in the training programme, which includes studies of the adaptability of various species of plants; agricultural techniques; and improvement in livestock and in grazing practices.

In September 1951, the Government started work on the quarantine station for pilgrims at Jidda, mentioned above. This project, assisted by WHO, includes a general hospital, a school for training nurses and auxiliary personnel, a hospital and isolation camp for persons suffering from infectious diseases, and a laboratory. During 1951 a WHO malariologist made a preliminary survey of malaria control in Saudi Arabia, and a malaria control demonstration programme was agreed upon by the Government and WHO; three experts were furnished by the latter.

Syria

The Government of Syria has received technical assistance in a comprehensive programme for developing its agriculture, including aid in range management, utilization of underground water resources, agricultural

research and control of insect pests; in expanding its facilities for fundamental, technical and scientific education; in training in home economics; in reorganizing its libraries; in improving its nursing facilities; and in perfecting its statistics.

An FAO mission is studying the development of water resources, soil types and uses, improvement of pastures, control of plant diseases and similar agricultural needs. In connexion with the Government's projects for extending irrigation, FAO supplied the services of a ground-water geologist to conduct a general survey of underground water resources and their possible use in irrigation. A specialist in soils was assigned to classify the soils of Syria and to assess their suitability for irrigation schemes and the introduction of new crops. In preparing for proposed legislation on plant protection for a programme of insect control, the Government obtained the services of an FAO plant pathologist, who is studying chemical control of cotton pests. An expert in the production, marketing and classification of cotton carried out a short advisory assignment late in 1951. An expert in range management examined existing pastures with a view to increasing their capacity and supplying supplementary feed during rainless periods of the year; the expert selected test and demonstration plots for forage crops. The Ministry of Agriculture was assisted by a statistician who helped in organizing its statistical services. The services of a forestry expert were supplied, and another expert is making aerial photographs of Syria to aid in agricultural development. A specialist gave basic training in home economics in 1951.

The United Nations supplied Syria with the services of a statistician for a period of two months, to advise on various statistical problems. Under the training programme of UNRWAPR, instruction is being given in carpentry and in pharmacology, radiology and bacteriology, for training laboratory and pharmacy attendants and tuberculosis orderlies.

Expert advice has been provided to the Syrian Government by WHO in nursing; plans have been approved for assistance in controlling bejel and syphilis; and a maternal and child health centre is being established. A WHO consultant surveyed the incidence of bilharzia in the area. Progress has also been made in a proposed joint WHO/FAO project to increase food production and improve health standards.

Five technical assistance projects have been undertaken by UNESCO in the fields of fundamental education, rural teacher training, professional and vocational education, library services and science teaching.

Turkey

Turkey received technical assistance in developing its social insurance system, setting up seismological services, establishing an institute of hydrology, planning a

national bibliographic centre and furthering a post-graduate training school for nurses. Moreover, in 1950 the International Bank for Reconstruction and Development sent a mission to Turkey to make a comprehensive economic survey; the report was transmitted to the Government in May 1951 (see chapter 7).

A special representative was assigned to work out an integrated plan of technical assistance for economic development with the Turkish Government, taking into account the assistance the country was expected to receive under bilateral agreements. In October 1951, the Government submitted to the United Nations and specialized agencies a comprehensive request for the services of over 100 experts, for 172 fellowships, and for equipment in unspecified quantities for development projects in various economic and social fields. Accordingly, an integrated programme of technical assistance for Turkey was approved in the light of the report of the Bank mission and of the experience of the special representative.

In 1951 the United Nations provided the services of a meteorologist, and during 1952 took steps to recruit experts in the following fields: exploitation of mineral and natural resources; organization and administration of state monopolies; marketing problems; statistics; town planning; public administration; and telecommunication (in co-operation with the International Telecommunication Union). The United Nations is also assisting the Government in the establishment of a demonstration centre for rehabilitation and vocational training of the blind.

By June 1952, the United Nations had approved the assignment of twenty-nine experts — six in the field of national planning, six in public administration, two in cost accounting and one expert in each of the following: transport co-ordination, railway organization, industrial management, management consultation, petroleum geology, mining geology, housing and town planning, internal marketing, marketing of exports, petroleum products, mining, standardization of industrial products, general statistics, national income statistics and trade statistics. A telecommunication expert was recruited in co-operation with the International Telecommunication Union, to advise in reorganizing and extending toll telephone and telegraph services and also in co-ordinating national and international networks, especially those of Mediterranean countries.

The International Monetary Fund held discussions with the Turkish Government on its system of foreign exchange and provided assistance in the preparation of statements on the balance of payments.

An ILO mission was sent to Turkey to assist the Ministry of Labour and the Workers' Insurance Institute in the organization of internal social insurance services and also to help the Government in organizing medical care under its insurance system. In close co-operation

with Turkish specialists, several changes were made in the external services of the Workers' Insurance Institute and its regional agencies, and several modifications of a legislative character were suggested to meet the most urgent needs of protected persons. The medical adviser helped the Government to organize medical care under the social insurance scheme and to co-ordinate it with other health services. An actuarial expert attached to this mission furnished advice on the retirement pension fund for government officials.

The Government was provided by WHO with the services of a consultant in venereal disease, two experts in the training of nurses and two experts in public health administration and sanitation. A WHO expert in the chemotherapy of tuberculosis was supplied in 1951; he co-ordinated his work with that of a tuberculosis centre set up under the regular programme of WHO. In November 1951, UNICEF approved \$105,000 for assistance to Turkey in an anti-tuberculosis vaccination campaign.

Because of the destruction caused in large areas by earthquakes, the Turkish Government asked for technical assistance in creating an institute of seismology, to make a survey and to develop a long-term programme of scientific research. In July 1951, an adviser in seismology was sent by UNESCO to advise the Government in the establishment of an institute and new seismological stations. Two experts in seismology and tectonics are following up this work, helping the Turkish Government establish the institute and organizing courses of training and research programmes. A seismic and tectonic map of Turkey has been published in co-operation with the Ministry of Public Works. To assist the Government in the establishment of a central hydrogeological institute, in 1951 UNESCO sent a team of four specialists in hydrogeology, geophysics and mineralogy. These experts compose a teaching and research faculty working in their special fields. The services of a specialist in bibliography for creating a bibliographic centre at the National Library of Ankara were also provided by UNESCO.

Regional seminars and training centres

Two United Nations social welfare seminars have been held for the Arab countries of the Middle East. The first took place in 1949 in Beirut, Lebanon, at the invitation of the Lebanese Government. The second was held in Cairo, from 22 November to 7 December 1950, at the invitation of the Egyptian Government. The Governments of Egypt, Iraq, Jordan, Lebanon, Saudi Arabia, Syria and Yemen sent delegations; the Arab League was also represented. The Cairo seminar of 1950 was devoted to rural welfare: problems of basic education; village planning; economic, agricultural and industrial aspects of rural development; administration and training in rural areas; social aspects of rural welfare; rural hygiene; and co-operation in rural

areas. These subjects and the basic relationships of economic and social factors in rural welfare were discussed in specialized groups. Experts from the region and from FAO, WHO, UNESCO and ILO participated with national representatives in formulating integrated and comprehensive plans for improving rural standards.

The second social welfare seminar for the Arab States of the Middle East was followed by a third, which took place in Damascus in December 1952 at the invitation of the Government of Syria. Its general objective was to continue and supplement the work already accomplished by the two earlier seminars, by assisting and stimulating the participating governments in their efforts to improve economic and social conditions, and by helping the governments to make a co-ordinated approach to the planning and administration of social services. The seminar was organized by the United Nations and the Government of Syria, in co-operation with the League of Arab States. It was attended by representatives of the governments of the following countries: Egypt, Iraq, Jordan, Lebanon, Libya, Saudi Arabia, Syria and Yemen.

The Mediterranean training centre on the formulation and economic appraisal of agricultural and allied projects was held in Ankara, Turkey, from 1 October to 31 December 1951, under the joint sponsorship of the United Nations, the Government of Turkey, FAO and the International Bank for Reconstruction and Development. It was attended by about fifty-five participants from Cyprus, Israel, Malta, Portugal, Tunisia, Turkey and Yugoslavia. It was patterned on the earlier Asian Training Centre. The course of training was designed to help officials in the formulation and economic appraisal of agricultural and allied types of development projects, including schemes for over-all development of resources. Both formal courses and field investigations were used in training participants in preparing projects and assessing their feasibility. Special attention was also given to the organization and administration of projects, including their financial aspects, farm and community organization and services, and requirements for demonstrations in various types of areas.

A training centre on vital health statistics for the eastern Mediterranean was held in Cairo, Egypt, from 8 October 1951 to 6 December 1951, under the joint sponsorship of the United Nations, the Government of Egypt and WHO. Forty-four individuals attended from Cyprus, Egypt, Ethiopia, Iran, Jordan, Lebanon, Libya, Syria and Turkey. The major purposes of the meetings were to train government employees concerned with vital and health statistics, to provide for exchange of ideas among statisticians of the eastern Mediterranean countries and to familiarize them with the aims and working programmes of international agencies, to present international recommendations in the field of vital statistics and to study the best ways of putting these

recommendations into effect. Major courses were devoted to biostatistical analysis, public health statistics, statistical methods, mathematics and the international statistical classification of diseases, injuries and causes of death. In addition, nine lecturers discussed specialized statistical subjects. Participants in the training centre made field visits to numerous offices and projects in Egypt, and conducted a population and sanitary survey of a typical Egyptian village as a demonstration project. A statistical library was assembled for the centre, and calculating machines and other statistical machinery were demonstrated.

The United Nations, in co-operation with FAO, organized a seminar on price and production statistics in June 1952 in Beirut at the invitation of the Lebanese Government. The purpose of the meeting was to enable statistical experts from countries in the Middle East to discuss price and production statistics required in the area and the most appropriate methods of obtaining such statistics. The meeting was attended by statisticians from Cyprus, Egypt, Eritrea, Ethiopia, Greece, Iran,

Iraq, Jordan, Libya, Saudi Arabia, British Somaliland, French Somaliland, Syria, Turkey and Yemen.

At the request of the Turkish Government, a seminar for the study of social security problems was held in Istanbul from 3 to 22 September 1951. It was designed for the benefit of higher officials of social security institutions and of labour and public health ministries of Middle East countries in which social security schemes have not been established. Its aim was to give participants a general outline of social security problems and of the manner in which they might be solved in the region. There were twenty-eight participants in the seminar, of whom sixteen were sent by Turkey and the remainder by Greece, Iran and Israel. Lectures were given by ILO officials as well as by members of the International Social Security Association. The United Nations and WHO also sent speakers. The lectures covered subjects such as principles of social insurance, social insurance projects, preventive and curative measures against tuberculosis, and other social welfare services.

Technical Assistance furnished by France, the United Kingdom and the United States under Bilateral Agreements

TECHNICAL ASSISTANCE BY FRANCE

Besides the aid provided through international organizations, technical assistance was given by the Government of France to Middle East governments through a representative of the French Government² in charge of "French co-operation in technical assistance in the Near East". By the end of 1952, forty-nine missions of experts had been sent to different countries of the region; fields covered by them included agriculture, hydro-electric projects, mining, health and public works. In addition, forty-four fellowships had been awarded to internes from the Near East.

In Lebanon, an agricultural centre was established at the beginning of 1952, operated jointly by the French and Lebanese Governments.

The aid traditionally provided by France in the field of education was maintained at a high level. In 1951 and 1952, 238 scholarships were awarded to students from the region.

TECHNICAL ASSISTANCE BY THE UNITED KINGDOM

In addition to the aid provided through international agencies, technical and financial assistance was supplied by the United Kingdom directly to various countries of the region. Such areas as the Anglo-Egyptian Sudan, Aden and Cyprus are not fully dealt with in

this appendix. In some of these areas, assistance has been provided on a large scale by the Government of the United Kingdom.

Direct financial assistance has been given to two Middle East countries, Egypt and Jordan. In 1947 the Government of the United Kingdom agreed to contribute £2 million from the profits of the Anglo-Egyptian cotton buying commissions of 1940 and 1941 to the cost of projects drawn up by the Egyptian Government for the benefit of Egyptian cultivators, on condition that the Egyptian Government contribute an equal sum to these schemes. The money has been allocated to projects connected with the programme of the Egyptian Government for the improvement of village water supplies. Some £1.1 million was paid out in 1950/51, and it was estimated that £800,000 would be spent in 1951/52.

Jordan received its first development loan of £1 million in 1949. Over half of this loan was used for construction of roads and the purchase of machinery for agriculture, irrigation and public works. The remainder was spent on agricultural research, afforestation and two housing projects for Arab refugees. A second development loan of £1.5 million was granted at the end of 1951. In May 1952, legislation was adopted to establish a development board to plan and supervise the expenditure of this sum and to co-ordinate development efforts with the projects financed by other agencies. The second loan was allocated to road construction, devel-

² Representative of France on the Advisory Commission of the United Nations Relief and Works Agency for Palestine Refugees.

opment of the port of Aqaba, improvement of the Jerusalem airport and of the Hejaz railway, development of co-operatives, assistance to small irrigation schemes, part of the cost of surveys for a major irrigation project on the Yarmuk River and projects for the rehabilitation of western Jordan and of Jerusalem.

Technical assistance has also been rendered to most Middle East countries through the Development Division of the British Middle East Office, which took over the work of the Middle East Supply Centre at the end of the Second World War. The field of activity of the British Middle East Office includes all the countries covered in this report, with the exception of Afghanistan and Turkey. Until March 1952, the Development Division was located in Cairo; at that date, however, it was transferred to Beirut, a fact which has facilitated co-operation with the regional office of the United States Technical Cooperation Administration, the United Nations Relief and Works Agency for Palestine Refugees and the United Nations technical assistance liaison officer. The staff of the Development Division includes an economist and advisers on agriculture, forestry, animal husbandry, statistics, entomology, labour and health. In 1951 and 1952, members of the staff made 113 visits to different Middle Eastern countries, and produced nearly sixty reports. Their work was largely concentrated in Jordan, Iraq, Lebanon and Syria. In most countries, the work of the Development Division was advisory, but the advisers were generally able, in addition, to offer practical assistance—for example, to the Jordan Government in carrying out projects financed by United Kingdom development loans. Among the purposes of visits of members of the Development Division to Cyprus were assistance to the Government of Cyprus in its development problems and, in some cases, study of developments there in co-operation, forestry and malaria control, which might serve as examples for other Middle Eastern countries. Advisers in statistical organization, forestry and animal husbandry were assigned to Iran for varying periods; in 1951, however, the Iranian Government decided to dispense with the services of British advisers.

Locust control furnishes an interesting example of the type of work fostered by the Government of the United Kingdom in the Middle East. The Desert Locust Survey and the Desert Locust Control Organization, which operate from Nairobi under the auspices of the East African High Commission, have since 1948 carried out extensive control and research operations with a view to controlling and ultimately eliminating the desert locust plague. These operations have been conducted mainly in Ethiopia, the East African Horn and Arabia, where the desert locust breeds. During the season from October 1950 to September 1951, a total of £1,222,000 was spent on this work; during the following season, ending in September 1952, the cost rose to £1,354,000. Funds for these expenditures were pro-

vided by contributions from the United Kingdom, the British East African colonies, the Sudan and the British administrations in Tripolitania and Eritrea. Partly owing to the work undertaken by the Desert Locust Control Organization, the locust invasion which occurred in the spring of 1952 and which was of unexpected gravity, affecting the entire Middle East from Iran to Egypt and as far north as Syria and Israel, did virtually no damage to crops.

Another measure with wide influence was the establishment of the Cyprus Forestry College. This college, opened in September 1951, provides training for forest guards and foresters; it was designed to accommodate students from Middle East countries as well as from Cyprus. Twelve students from Jordan, Iraq, Syria and Tripolitania attended the first year's course, seven with United Nations scholarships; and at least this number registered for the 1952/53 course.

Another way in which the Government of the United Kingdom assists Middle East governments in their development programmes is by providing British experts for employment on direct contracts. The majority of such requests have come from Iraq, where there are at present eighty-five British experts, including twenty-four engineers, twenty-two doctors and nurses, and twenty-five teachers in schools and colleges, in addition to British employees of the Basra Port Directorate and Iraqi State Railways. There are also about sixty posts outstanding in Iraq; some of these are expected to be filled from the United Kingdom. British experts appointed to Iraq during the past two years have included a public health adviser, a labour adviser, the Director-General of Irrigation and the Secretary-General of the Iraq Development Board. A small number of senior British experts have also been recruited for Jordan, Lebanon, Saudi Arabia and Syria. In Egypt, however, some 200 British nationals, mostly instructors, were dismissed in 1951, leaving only a handful of nurses.

In the Anglo-Egyptian Sudan, recruitment of British experts, mostly engineers, was on a larger scale; the number recruited rose from 92 in 1950 to 120 in 1951 and 132 in 1952.

Finally, the British Council has continued its efforts to promote cultural interchange between the United Kingdom and the Middle East. It awarded twenty-six scholarships to Middle East nationals in 1951/52, and fifteen scholarships for 1952/53; these figures do not include Turkey. The scholarships cover a wide range of subjects, including engineering, medicine, mathematics, history and economics, and are tenable for one to two years. In addition, six bursaries for 1951/52 and seventeen for 1952/53 have been awarded for shorter periods of study to Middle East nationals drawn from varied occupations. Special assistance for studying particular aspects of contemporary British life and

thought was given to some sixty Middle East visitors for 1951/52, and will be given to a further forty-five visitors for 1952/53. Under their lecture programme, which is often also of an advisory and consultative nature, the British Council sent out some half-dozen lecturers a year to the Middle East, on both technical and "arts" subjects.

In addition, during 1951 and 1952 the British Council awarded seven scholarships and five bursaries to Turkish nationals for study in the United Kingdom. Also, twenty-five Turkish visitors in numerous specialized subjects were brought to the United Kingdom, and five lecture tours by British lecturers in Turkey were arranged.

TECHNICAL ASSISTANCE BY THE UNITED STATES

In addition to United States contributions to the United Nations programme of technical assistance, similar assistance is provided under the United States Point Four programme, through its Technical Coopera-

tion Administration (TCA), with the co-operation of the following Middle East countries: Afghanistan, Egypt, Iran, Iraq, Israel, Jordan, Lebanon and Saudi Arabia. Turkey, a member of the Organisation for European Economic Co-operation, has received United States aid through that channel. Expenditure in these countries—exclusive of Turkey—during the fiscal year 1950/51 and the first half of 1951/52 was over \$6 million,³ but in most countries the programmes got under way only at the end of 1951 and since then expenditure has been on a much larger scale. Table B-2 shows the distribution of United States personnel in Middle East countries, as well as United States and local contributions to the financing of the programmes. The figures do not include nationals of the given countries who were employed by the technical missions. In some, such employment was considerable, totalling about 100 in Lebanon and 1,076 in Iran. Brief descriptions of technical assistance provided in different Middle East countries by the United States are given in the following sections.

Table B-2. United States Personnel on Duty in the Middle East and Contributions under United States Point Four Programme

Country	Persons on duty		Posts authorized 1952/53	United States contribution ^a (thousands of dollars)	Local contributions ^a
	30 September 1951	30 September 1952			
Afghanistan.....	3	6	14	949	5,750
Egypt.....	2	27	51	3,425	4,252
Iran.....	23	139	285	47,740	16,170
Iraq.....	1	40	82	2,056	16,621
Israel.....	0	29	43	3,728	1,211
Jordan.....	3	22	63	6,456	531
Lebanon.....	4	67	87	6,515	799
Saudi Arabia.....	4	15	38	1,776	1,750
Regional.....	0	5	9	...	—
TOTAL	40	350	672	72,643	47,084

Source: United States Department of State, Technical Cooperation Administration.
^a 1951 to end of 1952/53 fiscal year.

Afghanistan

During the period from January 1951 to December 1952, the Point Four programme provided specialists in the following fields to the Government of Afghanistan: mineral resources, three; soil reclamation (including agriculture), three; vocational agriculture, one (short-term specialist); vocational education, five. In addition, the Point Four programme made subsidies available for salaries of six instructors in basic education at the secondary school level.

Two of the three specialists in mineral resources were working with the Afghans at two coal mines north-west of Kabul, in an attempt to raise the level of output and improve efficiency in the mines. The third

technician had completed his assignment during 1951.

In land reclamation the three technicians were the advance party of a larger team of technicians to work on Afghan land settlement and development problems in the Helmand Valley. Two large storage dams, as well as major irrigation canals in the valley, were nearing completion. Eventually, 750,000 acres of valley land will be made available for cultivation through irrigation. The Point Four team was to assist the Afghan Government in settling nomadic tribesmen on these new lands, introducing new agricultural techniques, meeting the problems of village health and sanitation, and the general problems of long-range river valley development. Of the three technicians, one was a specialist in irrigation engineering, experienced in land reclamation and settlement; the second an agricultural extension expert; and the third a stream flow analyst.

³ *The Mutual Security Program, First Report to Congress* (Washington, D.C.), 31 December 1951, page 25.

A short-term specialist was assigned to study the scope and problems of a school of agriculture in Kabul; in January 1953, he was succeeded by a specialist in vocational agriculture, to head the school and supervise its reorganization. Additional instructors are to be made available for this school, this assistance to vocational agriculture being provided under contract with the University of Wyoming. A number of graduates of the school are to receive further training at the University of Wyoming.

Five instructors in vocational education have been assigned to the Afghan Institute of Technology, a new vocational school in Kabul. In basic education, instructors have been attached to Habibia College, a secondary school. Funds were also made available for subsidizing two additional teachers at Habibia, not hired during the period in question. In addition to the specialists just mentioned, TCA made available a limited amount of basic supplies and equipment, including books, laboratory supplies, visual aids, and other teaching and demonstration equipment, for each of the projects.

During this period, in addition to the technicians mentioned, TCA assigned to Kabul a United States director of technical co-operation for Afghanistan, with two secretaries. Additional members of his staff were to arrive in Afghanistan early in 1953.

The following fellowships for study in the United States were awarded: in education, two; in public health, four; in natural resources, three; in mining, three; in agriculture, five; in engineering, six; in industry and trade, one. In addition, three fellowships have been awarded in engineering at Robert College, Istanbul, and three fellowships in public health at the American University of Beirut.

There has been progress in each of the co-operative programmes, although somewhat slow progress; it has been difficult to recruit the personnel required, in the Helmand Valley programme in particular, because of absence of housing facilities. There has been some improvement in output from the coal mines and in training a few key individuals connected with that operation. In the Helmand Valley there has been great progress in the establishment of an Afghan Helmand Valley Authority, the acceptance of an interim organizational plan, and drafting of a proposed law. Technicians in the field, although limited in number, have taken an active part in laying the groundwork for settling as many Afghans as possible and as rapidly as possible on the new land.

The vocational agriculture programme started in December 1952; hence, no assessment of progress can be made. Progress in both vocational education and basic education has, however, been encouraging. It has also been possible to increase the number of students from the Afghan Institute of Technology sent for training in the United States.

Egypt

During the period from January 1952 to December 1952, the Point Four programme in Egypt provided technical experts to assist the Egyptian Government in the following fields: housing, two; agriculture, seven; natural resources, two; health, one; social welfare, three; industrial development, one. In addition, four short-term specialists in agriculture and one in natural resources were provided.

Projects have been undertaken in the fields of social welfare, agriculture, health and sanitation, rural housing and industrial resources. The work in agriculture included demonstration and training, a desert grazing project, livestock and poultry improvement, insect control, fisheries investigations, and introduction of hybrid corn. Under the natural resources programme ground water surveys were made and a well-drilling project undertaken in the Qena area, designed to extend the irrigated area. Assistance was given in construction of storehouses for grain, to replace the method of storing in the open, a method leading to losses estimated at 10 per cent of the crop. Point Four experts have also cooperated in the work of the Government's rural social centres, each of which serves a population of 10,000, making available the services of a physician, an agricultural and social welfare specialist, and a nurse who has received training in social work. At present there are about 150 such centres. Among their activities are provision of pure drinking water, libraries, child care clinics, plots for agricultural demonstrations and promotion of cottage industries.

More than fifty awards for study in the United States were made during 1952, divided among the following fields: transportation, one; housing, two; labour, six; social welfare, seventeen; agriculture, ten; education, four; public health, ten; and public administration, one.

Although the programme began slowly, closer relationships with the Egyptian Government have now made possible an extension of the work.

Iran

The Point Four staff in Iran is the largest in the region. In September 1952, it comprised 139 members: sixty providing over-all programme direction; thirty-three experts in public health; fifteen agriculturists; five specialists in natural resources; twenty-one engaged in education projects; three in industry; two in labour relations.

Fifty-three awards were made for the training of Iranian technicians and leaders in the United States, in the fields of agriculture, irrigation, public health, education, housing, transportation, natural resources, agricultural statistics, industrial accounting and commercial banking. In November 1952 thirty-eight students

on fellowships were in attendance at the American University at Beirut, Lebanon, studying agriculture, engineering, public health and public administration.

The activities of the Point Four staff in Iran were concentrated chiefly on agriculture, health and education, but some work was done also on natural resources, industry and trade, transport and communications, public works, public administration and land redistribution. Work in the field of agriculture included: demonstration and training, plant breeding, development and control, insect control, livestock improvement and animal husbandry, irrigation, land development and reclamation, forestry and conservation, and fisheries development. Some progress was effected in the development of Karaj College of Agriculture, including its experiment station and teaching facilities. Many American varieties of sugar-beets, cereals, cotton, forage crops and vegetables were for the first time introduced to Iran; in demonstration crops these were superior in quality and output to native varieties. Considerable success attended efforts to improve livestock and animal husbandry through introduction of superior breeds of cattle, donkeys, sheep, goats and poultry, as well as hatching eggs from the United States and other countries, and through extensive veterinary work resulting in protective treatment of more than 125,000 cattle and sheep. Thousands of acres of crops were saved by training in locust extermination and by control operations. Several thousand farmers and their families in north-west Iran were saved from threatened starvation or exodus from their communities by distribution of seed for new planting. Under technical direction thousands of seedling trees were planted by villagers to start village woodlots which might offset the scarcity of wood for fuel and the destruction of forest reserves.

In health and sanitation, emphasis was laid on development of public health facilities and operations (including health centres, mobile health units, laboratories, the training of public health technicians and nurses, and provision of medical literature to medical schools); endemic disease control (including malaria control, and training and studies in incidence of tuberculosis); and environmental sanitation (including development of potable water supplies). Some progress was made in the establishment of health centres and mobile health units, and in the training of Iranians in the locality as public health technicians and nurses. An outstanding achievement in malaria control was made with DDT spraying of over 12,500 villages, protecting more than four million Iranians from malaria. Additions were made to drinking water supplies through drilling and placing in operation some twenty-two deep wells. Large numbers of sanitary latrines and bath-houses were constructed in many villages. Useful instruction in health and sanitation practices was provided to thousands of villagers through distribution of pamphlets and the showing of films.

Aid to Iran in the field of education centred on development of education facilities, including construction, repair and equipping of elementary schools, especially rural schools, and establishment of demonstration classes, improvement of school curricula and methods, and training of rural elementary, agricultural and vocational teachers. Many rural schools were constructed or repaired and equipped. Hundreds of rural teachers were trained in modern educational methods and put new practices into operation in their schools. Better school attendance by students was another result.

In addition to the fields mentioned, surveys of mineral resources and river basins were undertaken, as well as development of highways, railways, ports, airways and telecommunication. In industry, experts have co-operated in carrying out surveys for potential and proposed developments, and have given assistance in mining and manufacturing. Aid was given in low cost housing projects and community centres, while municipal electric power facilities have also been improved. In the programme for distribution of Crown lands, the Point Four staff has co-operated in training supervisors, establishing consumer co-operatives for farmers and developing institutions to provide agricultural credit.

Iraq

During the period January 1951 to December 1952, specialists assigned to duties in Iraq comprised the following: agriculture, sixteen; natural resources, eleven; education, six; transport, communications and public works, three; industry, two; health and sanitation, two; public administration, one. Forty-two trainees from Iraq were sent to the United States: fifteen to study agriculture; twelve health and sanitation; four education; four natural resources; four industry; two transport, communications and public works; one public administration.

As a basic step in getting the programme underway, the services of an American engineer were made available to the Iraq Development Board; he has acted as a full member of this Board, which is charged with the use of increased revenues from petroleum for planning and developing the economy of Iraq.

Establishment of an agricultural extension service for Iraq has been a primary goal, and steps leading to it were taken when the Technical Cooperation Administration and the Food and Agriculture Organization of the United Nations jointly sponsored an extension training school. The same two agencies inaugurated also the first of a series of training schools in operation, maintenance and repair of agricultural machinery. A TCA marketing specialist during this period made a comprehensive analysis of Iraq's date marketing problems. Other projects which were started had as their objectives improving Iraq's vast range pasture area,

introducing improved cotton varieties, and improving tobacco and livestock.

Four instructors have been made available to the Agricultural College at Abu Ghraib to assist in broadening its curriculum. Projects have also been undertaken in agricultural education, home economics, and technical and rural education. The Iraqi Government during this period received advice on irrigation and drainage, and on underground water supply problems; TCA also provided equipment for a laboratory for soil and water research. A mineral resources survey proved of value, and a highway engineering team advised on aspects of highway location and construction, equipment and maintenance.

Since September 1951 a specialist has been advising the Ministry of Health on the establishment and development of a programme of maternal and child health care.

Israel

During the year from 1 January to 31 December 1952, the Technical Cooperation Administration sent seven specialists to Israel. Five of these, a sanitation engineer, a vocational training expert, an industry specialist, a transportation expert, and a fisheries expert, functioned primarily as staff advisors to the TCA director, doing survey work and assisting in programme development. The findings which resulted from these surveys and studies were made available to the Israel Government. Two other specialists have been engaged in providing assistance under project agreements signed by the United States and Israel. One of these specialists, a drilling expert, has been engaged on an irrigation project; the other, a mining engineer, served as consultant to the Israel mining industries in exploration for metallic and non-metallic ores and their exploitation.

Twenty courses of study were completed during the year by leaders and trainees under Point Four grants. In addition, thirteen trainees were still in training at the end of the year under grants awarded in 1952. Grants made during the year included: four in hospital administration; three in industrial training; four in potash mining and use of limestone; two in soil testing; one in marine engine maintenance; one in national income studies; one in agriculture; two in citrus packing.

Implementation of the Point Four programme in Israel has been hindered by delays and difficulties in recruitment. On projects to which technicians have been assigned, it is still too early to be able to appraise the results.

Jordan

Between May and December 1952, twenty-four Point Four technical experts arrived in Jordan: five in the

field of health; three in education; six in agriculture; six in water resources development; one in census studies; one in range management; one in industrial development; and one in the field of communication. In addition, several technicians have been on temporary assignment in such fields as range management, mining, cistern cleaning and industrial development. Nineteen training grants have been made to Jordanians for study in the United States in agriculture, census studies, education, economic planning, trade promotion, industrial development and irrigation engineering. Point Four experts in Jordan have given technical advice for development of basic agriculture, education and health services, industry and water resources. Emphasis in these fields has been on basic preliminary techniques for the development of the country's resources. For example, techniques have been presented that individual farmers may use to increase their production. Demonstration projects included cleaning and grading of seed grain, livestock development and improvement, horticultural improvement, farming methods, raising food for home use, and soil conservation. These projects were selected in co-operation with the Jordan ministries, at their request.

In co-operation with international agencies, such as the World Health Organization, some major programmes in control of diseases have been begun, particularly tuberculosis control, and child and maternal health care.

In education, teacher training has been emphasized.

In water resources development, attention has been directed towards conservation and development of available water resources in Jordan, with additional projects such as demonstrating water spreading techniques in range areas.

Lebanon

In 1951 and 1952 the following Point Four experts were assigned to Lebanon: twenty-three public works technicians; twelve in agriculture; six in education; five in health and sanitation (including two in vital statistics); three housing specialists, one fisheries adviser and one industry adviser. In addition to this group, ten technicians were in Lebanon from March until June 1951 employed in the initial phase of the Litani River survey. Two regional specialists, one for shipping and one for travel development, were in Beirut.

Fellowships have been granted to fifty-five Lebanese to study the following subjects in the United States: twenty-five agriculture; eight education; seven health and sanitation; six civil aeronautics; four government administration; two transportation; one industry and trade; one public works; and one tourist trade.

Point Four work was begun in Lebanon in March

1951 when technicians surveyed the Litani River basin to determine the feasibility of projects for irrigation and for hydroelectric power. On 26 June 1952, Lebanon and the United States agreed upon a co-operative programme in water and natural resources development, public works, industry, agriculture, social affairs, education and public health. The second phase of the Litani River survey, the preconstruction and design survey, begun in 1952, was scheduled to continue until May 1954. It calls for an integrated programme in agriculture, sanitation and health, as well as improvement and extension of educational facilities for the Litani basin and the district to be irrigated by the Litani. Under the 26 June agreement, projects were begun to extend health and medical services to villages in the Bekaa Valley, to establish a demonstration urban health centre in Beirut under the Lebanese Public Health Association, a demonstration elementary school in Beirut in co-operation with the National University, a slum clearance and low-income housing development in Beirut, and an agricultural experiment station at Turbol in the Bekaa Valley.

The programme in Lebanon has been delayed by slowness in obtaining a bilateral agreement for each project undertaken, and by lack of government funds required for local expenses. Some progress, nevertheless, has been made in agriculture, education and health. The advantages of hybrid corn and of new forage crops were demonstrated to farmers, and seed distributed for planting in 1952; the value of careful harvesting, grading and packing of fruit for market was also demonstrated, and a programme of artificial insemination started to improve Lebanese cattle and dairy production. Through introduction of controlled water supplies, several villages are now learning the value of safe water. Elementary teachers are studying techniques for teaching and developing educational materials suitable for use in their schools.

Lebanon is also the seat of the regional office of the Technical Cooperation Administration. The American University of Beirut, which is nearly a century old, has been chosen as a secondary training centre for Africa and the Near East. The faculty has been expanded, with Point Four aid, and more than 100 scholarships have been provided for students from various countries of the region to receive training in public health, public administration, economics, agriculture and engineering.

Saudi Arabia

Point Four aid provided, during 1952, the following specialists to the Government of Saudi Arabia: in agriculture, three; in health and sanitation, one; in natural resources, five; in education, two; in public administration and government services, four; in transportation and communications, one. Out of a total of thirteen requests for training grants, by December 1952 two

awards had been made and seven were in process. One trainee had begun work under the direction of the Bureau of the Budget in the field of public administration.

The end of 1952 saw the completion of two important projects, as well as progress in other major enterprises initiated during the year. One of the completed projects was the establishment, by royal decree, of the Saudi Arabian Monetary Agency, charged with stabilizing the currency, controlling government revenue and expenditure, and drawing up financial and commercial policy. This project, part of the public administration and government services programme, was carried out with the help of a Point Four specialist.

Under the education programme two schools—one commercial and one industrial—were opened in the fall of 1952. An education specialist was assigned to this project, which will be expanded and improved.

The natural resources programme had notable success in locating water, drilling wells and surveying for new water sources around which to build agricultural centres and communities. Under another Point Four agreement a railway survey was made, as part of a plan by the Saudi Arabian Government to extend its railroad between Damman on the Persian Gulf and Riyadh, the capital, to the Red Sea.

Turkey

The United States technical assistance programme in Turkey has supported the investment and defence programme undertaken by the Mutual Security Agency. Since Turkey is primarily an agricultural country, much effort has been expended to increase agricultural productivity. During the past three and a half years, the introduction of agricultural equipment, and of modern agricultural methods and techniques, has helped Turkey to increase its production of grain by more than 50 per cent or three million tons annually, making one million tons of grain available for export to European markets.

This increase was achieved in a number of ways. Practical farm methods of treating wheat and barley seed for smut control were demonstrated, and the treatment resulted in an increased yield of 77,200 tons of wheat and barley, worth about \$6,177,000; the cost of the disinfectants for the seed was about \$80,000. Furthermore, a simple seed drill was designed by a Mutual Security Agency consultant, and produced on a trial basis in Turkey. These drills permit seeding with an average of one bushel per acre against three bushels required in hand seeding. The production of 10,000 drills is expected to be sufficient for one million acres, with a resultant large saving to the farmers.

Similarly, technical assistance has helped the Turks to increase the efficiency of their transportation facilities and to extend the lines. One problem of the rail system

was the disproportionately large number of locomotives which were idle awaiting repairs. Through the services of a consultant from the New York Central Railroad, the number of locomotives available for use was increased by 108; the number of stored locomotives on a stand-by basis available for service rose from none in April of 1951 to 95 by the first of 1952. In addition, technical assistance for the railroads lengthened the time of service for locomotives between repair and overhaul jobs and improved the control of assignments. Two production engineers assisted in the establishment of a Production Engineers' Department for the Turkish railways. Several changes in techniques resulted in a 50 per cent increase in the productivity of the passenger car repair shop, with a direct saving of \$40,000.

Through use of technical assistance and financial aid from the United States, more than 3,500 miles of roads, many of them previously wagon tracks usable only in the dry season, have been built into two-lane all-weather highways. Fifteen highway maintenance shops have been set up and five more will be made available through a \$3 million grant by the Mutual Security Agency for equipment and services in this field.

The Turkish airlines have shown steady development and growth since the start of technical assistance in this field. At Ankara civilian airport, nineteen overhaul departments were organized during 1952, which provide a modern airplane overhaul system with specialized departments. Because of better servicing and repair methods, the flying time for an engine has increased on an average from 800 hours to 950 hours. A network of navigational and communication facilities has also been established for the Turkish airlines, with markers and definite air routes laid out by means of low-powered radio beacons. Nine key radio ranges and a series of beacons were scheduled to be located in strategic places. With technical assistance new and more adequate airports were constructed at Izmir, Adana and Ankara. The one at Izmir will have facilities to handle international air traffic.

In addition to these major accomplishments in agriculture and transportation, assistance has been given in projects in the following fields: explosives, mechanical and chemical industries, seaways, government administration, and communications, particularly telecommunication.

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Printed in U. S. A.
4417—March 1953—4,850

Price: \$U.S. 1.75; 12/6 stg.; Sw. fr. 7.00
(or equivalent in other currencies)

United Nations publication
Sales No.: 1953.II.C.1