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**LONG-TERM PROSPECTS  
OF  
INDUSTRIAL  
DEVELOPMENT  
IN JORDAN**

by  
Wasif Azar

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## Chapter I

### THE JORDAN ECONOMY

#### Introduction

1. Jordan is a small country with a total area of 97,500 square kilometers, of which about 6,000 square kilometers lying on the West Bank of Jordan River, have been under Israeli occupation since June 1967. The Hashemite Kingdom of Jordan is a creation of recent political events. After the 1948-1949 Arab-Israeli war, which resulted in the partition of Palestine and unification of the West Bank with Trans-Jordan, the Hashemite Kingdom of Jordan came into existence.

2. The economic setting in which Jordan operated since 1948 has been affected by the vast problems arising out of the 1948-1949 war. Within a few months, Jordan's population increased almost three-fold without a corresponding increase in resources, and the country was faced with the necessity of completely rerouting its trade and lines of communication. Previously these had been directed westward to the Mediterranean coast. After 1948, however, Jordan no longer had access to the transport and communication facilities that existed there. It became necessary for Jordan to develop new trade routes and lines of communication.

3. At its birth, Jordan inherited very little manufacturing industry. Transjordan's manufacturing activity was almost non-existent and that of Palestine had mainly been located in areas that have become part of Israel.

#### Economic development, 1949-1976

4. With its small population (about 1.2 million persons in 1950) and low per capita GNP (around 36 Jordan Dinars in the same year) Jordan offered very limited market for domestically produced goods,

thus handicapping the establishment of industries operating under economies of scale. The high cost of power, the lack of discovered and/or produced industrial raw materials and the shortage in technical know-how hindered the process of industrialization.

5. Jordan's natural resource endowment was meager, limited principally to substantial high-grade phosphate deposits in a large area in the East bank and to mineral salts in the Dead Sea. Water resources were poor. Only in the northern hills of the East and West Banks did average annual rainfall exceed 500 mm. The cultivable area is very limited (about ) per cent of the total area of the two banks and about 6 per cent of the area of the East Bank) and more than 60 per cent of it depends on rainfall .

6. In this situation Jordan had to rely heavily on the imports<sup>1</sup> of consumer, intermediate and capital goods, and, thus, the balance of trade has been weighted heavily against Jordan.

7. In 1950 Jordan's economic prospects were regarded almost universally as dismal. The World Bank mission that visited Jordan in 1955 estimated that GDP in current prices had grown at an average annual rate of about 10 per cent from 1952 to 1954, but the mission did not believe that such a high rate could be sustained in the future. The IBRD mission set 4 per cent as an attainable annual growth rate for GNP but suggested that the achievement of such a rate would not be an easy task.

1/ Total Value of Imports (CIF) and Exports (FOB) for selected years in JD million

Year	Imports	Exports	Per Capita	Imports	Exports
1950	10.8	1.5	9.0		1.3
1960	42.9	4.0	25.8		2.4
1965	65.1	9.9	33.3		5.1
1967	55.0	11.3	27.3		5.5
1970	65.9	12.2	39.5		7.3
1973	108.2	19.0	59.1		10.4
1975	234.0	48.9	119.9		25.1
1976*	275.0	50.0	136.3		24.8

\* Provisional figures

8. The performance of the Jordan economy ran completely counter to such pessimistic expectations. In assessing the performance of the economy for the period 1954-1966, the Three Year Plan for Economic Development, 1972-1975, considered that Jordan's economy is a dynamic one capable of achieving a rate of growth similar to or even higher than that achieved in the period 1952-1954.

9. According to official and non-official estimates the growth rate of GNP at current prices averaged over 11 per cent per year between 1954 and 1966 (see Table I-1 below). While no reasonably acceptable estimates of GDP at constant prices were available, most observers consider that growth in GNP took place within the framework of relative price stability (not exceeding one per cent per annum according to the Three-Year Plan, 1972-1975) and that it must have grown at an average annual rate of over 9 per cent.

10. Gross capital formation registered an increase of 447 per cent, whereby it rose from JD 5.9 million in 1954 to JD 26.4 million in 1966 and its proportion to gross national product rose from about 11 per cent to over 14 per cent during the same period.

Table I-1. GROSS NATIONAL PRODUCTS AND ITS COMPONENTS (AT CURRENT PRICES)  
(JD million; per cent)

	1954	1966	Growth 1954-1966	
			Total	Annual
1) Consumption Expenditure	59.1	188.8	219	10.8
a) Private	(45.4)	(143.6)	(236)	(10.4)
b) Public	(13.7)	(39.2)	(186)	(9.2)
2) Gross Capital Formation	5.9	26.4	347	13.3
3) Exports of goods and services	6.1	32.1	426	14.8
4) Imports of goods and services	19.8	76.6	287	11.9
5) Net factor income from abroad	1.1	15.1	1273	24.4
6) Gross National Product	52.4	185.8	254	11.1

11. While exports of goods and services increased by 426 per cent as against 287 per cent in imports of goods and services, the ratio of the former to the latter rose from 30.8 per cent in 1954 to 41.9 per cent in 1966. Having risen from JD 1.1 million to JD 15.1 million, the net factor income from abroad multiplied almost fourteen times in the years 1954-1966, and its contribution to GNP rose from just under 2.1 per cent to over 8.1 per cent during the same period. This is largely due to the fact that Jordan has been an exporter of manpower to the neighbouring Arab countries and their remittances exceeded JD 12 million in 1966.<sup>1/</sup>

12. After 1966, however, the spur of economic development was abated as a result of the 1967 war and the occupation of the West Bank of Jordan. The complete integration of the two Banks of Jordan was disrupted. The average annual growth rate of GNP decreased significantly in the period 1967-1972, to only 3.8 per cent or to a growth rate of 5 per cent in GDP at current prices and this rate was accompanied by an equivalent increase in the general level of prices. As a result, real GDP failed to rise and per capita income actually declined because of the increase in population. Gross capital formation (excluding changes in stocks) registered a significant decline in both absolute and relative terms. There was hardly any economic development or an economic development policy during the five-year period, 1968-1972, that followed the June war of 1967. Government economic policies were largely ad hoc reactions to events and the orientation was short run, designed more toward relief than to economic development. Jordan was faced with a political catastrophe and uncertainty about its future status, and with problems arising out of the arrival of more than 400,000 new refugees, continuing conflict with Israel, huge amounts of aid to the West Bank and the civil war of 1970.

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<sup>1/</sup> H. Odeh, Economic Development, publications of the Ministry of Culture and Information, Amman, p. 6 - 8.



13. The introduction of the Three-Year Development Plan, 1973-1975, aimed at revitalizing economic activity in the Kingdom and reactivating the development process which was disrupted by the 1967 June war and its aftermath. Available data indicate that during the Plan period, GDI at current prices for the East Bank rose at an average annual rate of growth of 17.5 per cent, but the cost of living rose markedly during this period. The average rate of increase in the general price level was estimated at about 11 per cent and, therefore, the growth rate in real GDP stood at an average of 5.9 per cent per annum.

14. Taking the period 1954-1975 as a whole, we can see that the resource use pattern displayed marked relative changes which generally signify the channelling of more resources to economic and social development. Table II-2 gives the relative change in the composition of total economic resources and their uses. Two years' averages were used to reduce the effect of fluctuations in agricultural production and income on the level of economic activity. It will be seen from this table that the contribution of gross national product to total economic resources rose from nearly 69 per cent in the two years 1954/1955 to over 72 per cent in the two years 1965/1966, but dropped down to about 63 per cent in the two years 1973/1974 and further down to about 57 per cent in the two years of 1975/1976. Consequently, the share of imports of goods and services fluctuated in an opposite direction, falling from 31 per cent to about 28 per cent, then rising to about 36 and 43 per cent in the four periods indicated above. On the uses side, the share of gross capital formation reflected an upward trend, rising from 7.4 per cent in the two years 1954/1955 to about 17 per cent in the two years 1975/1976.

Table I-2 TOTAL ECONOMIC RESOURCES AND THEIR USE (AT CURRENT MARKET PRICES)<sup>1/</sup>  
(JD million; per cent)

	1954/55		1965/66		1973/74		1975/76	
	Value	Share	Value	Share	Value	Share	Value	Share
<b>1. RESOURCES</b>								
a) Gross National Product	51.1	68.7	183.1	72.3	277.3	62.5	443.1	57.1
b) Imports of Goods and Services	<u>23.3</u>	<u>31.3</u>	<u>70.1</u>	<u>27.7</u>	<u>106.2</u>	<u>37.5</u>	<u>337.0</u>	<u>42.2</u>
c) Total Resources	74.4	100.0	253.2	100.0	443.5	100.0	786.1	100.0
<b>2. USES</b>								
a) Consumption	60.4	81.2	181.8	71.8	281.1	63.6	423.1	83.8
b) Gross Capital Formation	5.5	7.4	27.0	10.7	76.5	15.2	134.0	17.0
c) Exports of Goods and Services	6.7	9.0	30.3	12.0	68.6	15.5	135.0	17.2
d) Net Factor Income from Abroad	1.8	2.4	14.1	5.5	25.3	5.7	94.0	12.0

<sup>1/</sup> The figures shown in this table represent two-year averages

15. A similar structural shift could be observed with respect to the relative importance of the different sectors of the economy (see tables 9 and 10 in the statistical appendix). The share of agriculture in gross domestic product had dropped from 22.4 per cent in the two years 1954/55 to an average of 20.0 per cent in the two years 1965/66 and to an average of 11.2 per cent in the two years 1975/76. The contribution of mining, manufacturing and electricity supply in gross domestic product, however, rose from 10.4 per cent to 12.4 and to 17.0 per cent in the same periods. The contribution of the services sectors<sup>1/</sup> continued to have a larger share of GDP, amounting to more than 40 per cent of GDP (53.1, 52.3, 54.7 per cent for the periods 1954/1955, 1965/1966 and 1975/1976, respectively).

16. The extent to which foreign grants and loans have been supplementing the domestic resources of Jordan to sustain a high rate of economic growth is shown in Table I-3. It will be noted that the external sector plays a strategic role in the Jordan economy. This appears vividly when analyzing the relationship between expenditure on total consumption and on gross domestic capital formation, and gross national product at current market prices. The former continued to exceed the latter throughout the period 1950-1976, and the ratio between these two magnitudes showed substantial fluctuations. Before the War of 1967, this relationship reflected the progress made in reducing Jordan's dependence on foreign aid<sup>2/</sup>, but the figures for subsequent years indicate a reversal of that trend. More reliance on foreign aid was experienced throughout the period 1967-1976.

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<sup>1/</sup> Including trade, finance, public administration, social and personal services.

<sup>2/</sup> Hanna Odeh: Economic Development of Jordan 1954-1971, Ministry of Culture and Information, p. 11.

Table I-3 RELATIONSHIP BETWEEN DOMESTIC AND FOREIGN RESOURCES  
(JD million)

	Two year average		
	1954/55	1965/66	1975/76
1. Expenditure on consumption and gross domestic capital formation	65.9	208.0	568.0
2. Surplus on balance of goods and services but net factor income payments	-14.8	-25.8	-122.0
3. GNP at market prices	51.1	183.1	446.0
4. Ratio of (1) to (3)	129.0	114.1	127.4

17. The above aggregate economic indicators signify the basic development trends in the Jordan economy for the period 1948-1976, which may be categorized into four distinct time-phases; namely 1948-1961, 1962-1966, 1967-1972 and 1973 to the present.

18. The first two phases were characterized by high rate of growth. The second phase, however, witnessed a change in development approach and a tendency towards comprehensive development, which resulted in the formulation of a Five-Year Plan for Economic Development, 1962-1967.<sup>1/</sup> The third phase, which followed the 1967 June war, was characterized by a decline in economic growth, and the fourth phase signified recovery of economic activity, implementation of the Three-Year Development Plan 1973-1975 and introduction of the Five-Year Plan, 1976-1980.

<sup>1/</sup> This Five Year Plan was subsequently modified because of an unexpected reduction in foreign financial assistance to the general budget, thus rendering it imperative to introduce major changes into the priorities and objectives of the plan. In 1963, a Seven Year Programme for Economic Development, 1964-1970, was prepared.

## Chapter II

### HUMAN RESOURCES

#### Population

19. The 1952 Census of Housing enumerated 1.329 million Jordanians (East and West Banks), of whom roughly 590 thousands were residents of the East Bank. The 1961 first population census enumerated 1.761 million Jordanians, of whom about 64,000 were residents abroad. The East Bank population in 1961 was given at 781,000. Accordingly the rate of population growth was 2.9 per cent annually. This rate has accelerated during the sixties and early seventies. The crude birth rate has been estimated at 46 to 47 per thousand while the death rate was estimated at 16 per thousand in the early sixties and at 9 to 11 per thousand in the early seventies. This gives a natural growth rate of population of 3.0 to 3.1 per cent during the early sixties and of 3.4 to 3.6 per cent during the early seventies.

20. The 1961 population of the East Bank of Jordan was relatively urbanized compared to other developing countries. In 1961 47.0 per cent of the population inhabited localities over 10,000 persons. In 1976 this percentage increased to 67.7 of total population.

21. The pattern of settlement in Jordan is characterized by a dominant metropolitan center, the Amman Region<sup>1/</sup>, a few medium sized towns and many small towns, villages and hamlets.

22. The climatic and topographic factors shape the pattern of population distribution of the East Bank of Jordan through the agricultural pattern they impose. The East Bank can be divided into three regions: the desert (about 84 million dunums or 91 per cent of total area), the uplands (about 7 million dunums or 7.6 per cent of the total area) and the Jordan Valley and Wadi Araba depression (about 1 million dunums or about 1.4 per cent of total area).

<sup>1/</sup> The region covers an area of 545 square kilometers and consists of 13 municipalities.

23. The majority of the population are living in the uplands while both the desert and the Jordan Valley depression are sparsely populated. This pattern of population distribution, i.e., more than 90 per cent of the population located in about 7 per cent of the total area, is a very important factor affecting the population position of Jordan and, at the same time, making the impact of the present high rate of population growth very noticeable on the few urban centers in the country.

24. During the period 1965-1976, the annual rate of population growth has exceeded 11 per cent for the Amman region. This is indeed a very high rate of growth that cannot be attributed solely to normal population growth or to rural migration. A sizeable portion of this growth (and the growth in the population of other urban centers) can be attributed to the influx of displaced persons from the West Bank due to the 1967 war, coupled with the attractive job opportunities and the clustering of business, government and investment enterprises in the Amman region.

#### Labour force and employment

25. According to the 1961 population census, only 22.9 per cent of the total population (of the two Banks of Jordan) was economically active. This rate is very low by any standard. This percentage is even lower for the East Bank which, in 1972 and 1975, was estimated at 19.9 per cent. The basic causes for this low rate of participation in active labour are:

- a) The large proportion of children in population (47.8 per cent of the 1961 population comprised children 15 years of age or less, and the percentage of this age group increased to 54.5 in 1975). This high rate of children in total population makes the total potential manpower<sup>1/</sup> rise to only 37.5 per cent of total population in 1975.

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<sup>1/</sup> The potential manpower is calculated on the basis that every Jordanian 15-64 years of age, excluding students and the physically handicapped, join the labour force.

- b) The very low participation rates among children.<sup>1/</sup>
- c) The very low participation rates among women (about 10 per cent of total labour force).
- d) The relatively high school enrolment among males and females over 15 years of age.
- e) The early retirement of both male and female workers.

26. The 1961 population census reported an unemployment rate of 7 per cent. It has been suggested that recognition of unemployment concealed in the low participation rates would raise the unemployment rate to around 14 to 15 per cent. This rate did, however, decrease to a 2 to 3 per cent level during the early and mid years of the seventies.

27. In the early sixties the existence of wide spread part time employment in agriculture may be taken as evidence of disguised unemployment in agriculture. This sector absorbed, at that time, over one third of the total labour force, but declined to about 18 per cent in the early seventies.

The Multipurpose Household Survey of 1972 gave the following information on participation rates in labour force among different age groups:

Age group	Percentage to Population in the Age Group		
	Total	Male	Female
All age groups	19.9	35.7	3.5
7-11	0.1	0.2	-
12-14	2.6	4.5	0.5
15-19	17.4	30.5	3.2
20-24	47.9	79.4	20.8
25-29	51.5	97.2	12.3
30-34	50.0	98.5	6.5
35-39	49.3	97.7	3.3
40-44	49.0	94.3	2.8
45-49	49.0	94.0	2.6
50-54	45.2	84.2	2.3
55-59	41.0	78.1	1.1
60-64	34.6	62.4	0.5
65 and over	21.0	31.8	0.2

### Chapter III

#### SECTORAL DEVELOPMENT

28. Economic growth over the period 1960-1975 witnessed high rates of growth in some sectors, while others were characterised by low rates of development.

29. Table III-1 shows the relative importance of sectoral shares in GDP at 1970 prices. The agricultural sector shows fluctuating rates during the period 1960-1975, due to the fact that agricultural production in Jordan depends, to a large extent, on rainfall. The volume of agricultural production is still short of satisfying domestic demand. Agricultural exports are still confined to some crops of vegetables and fruits in certain seasons of the year. The contribution of the agricultural sector ranged during the period 1960 - 1975 between 9.3 and 25.2 per cent.

30. Industrial growth has been marked by its concentration in a few industries that produce import-substituting commodities which enjoy a domestic market. Most of these industries have been given a chance to grow under government protection and to face negligible internal competition. The industrial sector still suffers from lack of a stable policy and comprehensive regulation necessary for the erection of a solid industrial base. The mining sector is at an embryonic stage. So far, the discovered and actually exploited natural resources are limited, and the magnitude of available resources have not been firmly determined. The contribution of the manufacturing and mining sector ranged between 7.4 and 15.8 per cent.

31. The construction sector showed steady improvements except for a decline in the two years 1967 and 1970, due to the June war and the civil disturbances. During the Five-Year Plan, a large share of investment in construction has been devoted to dwellings. The contribution of this sector ranged between 3.9 and 8.1 per cent.



32. Table III-1 also reveals the continuing dominant contribution of the services sector to gross domestic product at factor cost. This contribution ranged during the past 16 years, 1960 - 1975, between 60.2 and 70.2 per cent. Its dominance can be explained by the sizeable public expenditure on public administration and defence and by the relative importance of foreign trade, together with the complementary and auxiliary services which this trade requires, to the national economy of Jordan.

#### A. Agriculture

33. Agriculture constitutes one of the major sectors in the Jordanian economy. It has been characterized over the past ten years by low and stagnant yields of cereals and high imports of some food commodities, leading to a food production - consumption gap. Jordan is neither endowed with large areas of fertile land nor with abundant rainfall. The Three-Year Plan, 1973-1975, accomplishes little in terms of increased production as most of its objectives remain unfulfilled due to successive droughts.

#### Land Use

34. The land area of the East Bank of Jordan is about 47.0 million dunums, which can be divided into four climatic regions:

Region	Average Rainfall (mm)	Area (Mill.dunums)	Percent
1. Dry (Desert)	less than 200	34.2	71.4
2. Marginal	200 - 300	5.3	5.7
3. Semi-arid	300 - 500	1.7	1.8
4. Semi-humid	500 - 800	1.0	1.1



36. Of the cultivable area of about 5 million dunums, or 5.7 per cent of the total area, 4.9 million dunums, or 93 per cent, are rain-fed and 7.0 per cent, or about 386,000 dunums, are completely or partially irrigated. Land use in the East Bank of Jordan is as follows:

Table III-2 LAND USE IN THE EAST BANK OF JORDAN

Land Use	Area (thousand dunums)	Per cent
a) Agricultural crops:		
Rain-fed	4,897	5.3
Irrigated	386	0.4
Total	5,283	5.7
b) Forests	400	0.4
c) Arid lands <sup>1/</sup>	75,000	81.0
d) Uncultivable	11,896	12.9

Economic self-sufficiency

37. Agricultural production has lagged behind consumption in the past few years, and is unlikely to catch up in the near future. It will be virtually impossible for Jordan to cover the cost of imported agricultural products with agricultural exports, without radical increases in crop production.

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<sup>1/</sup> Partially exploitable for grazing purposes.

Table III-3 VALUE OF TRADE IN AGRICULTURAL PRODUCTS  
(JD 000's)

Item	1971	1972	1973	1974	1975
Imports (CIF)	20,920	28,392	32,327	43,893	50,675
Exports (FOB)	4,003	5,070	4,774	10,039	10,612
Trade Deficit	16,917	23,322	27,553	33,854	40,063
Ratio of Exports to Imports	19	18	15	23	21

Source: Department of Statistics, Jordan

Note: 1971 and 1973 were affected by civil disturbance and war.  
1973 and 1975 were years of severe droughts; only 1974 was  
considered an excellent crop year.

#### Rural population and land ownership

38. Rural population account for about 32 per cent of total population, while farm workers accounted for 38 per cent during the sixties, and 18 per cent during the seventies. Not all farmers and workers reside in rural areas; some live in the large towns and cities. However, almost three-quarters of the 50,791 farms (agricultural holdings) included in the 1975 census were reported as owned or "ownerlike" possessed by operators. The remainder were operated under various rent, share-cropping and partnership arrangements.

#### Labour

39. At present, there is evidence of wage pressures and shortages of specific types of labour, which could have serious implications for future development. This shortage manifests itself in various

ways. Daylabourers are available in the Jordan Valley, but at wages which are about three times as high as those which prevailed a year or two ago. In the highlands it is now difficult to find labour for the olive harvest, and most of this work is performed by women and children. The Forest Service has difficulty in finding men to plant trees. Qualified tractor drivers, farm machinery operators, and mechanics are in short supply. Most Government agencies are experiencing difficulty in finding technically-trained staff. Booming economic conditions in the neighbouring Arab Gulf States as well as in Amman city, are attracting labour away from agriculture. In the long run, the recent shortage of day labourers may be salutary, signaling the transition of agriculture from subsistence to a more productive type, and thereby releasing excess labour for other sectors, while labour productivity and rural wages rise. However, although this may benefit agriculture, it is unlikely to do so without facing social consequences in urban areas, which may have difficulty in absorbing the low-cost rural labour.

#### Agricultural Income

40. Jordan's agriculture is highly unstable because a large proportion of total agricultural output is derived from dry farming in areas subject to frequent droughts, low productivity of land and labour, soil erosion, over-grazing of range lands, lack of planned land-use pattern, marketing problems, lack of adequate long-term capital and awareness by most farmers of modern techniques of production. Due to these handicaps in agriculture and their impact on the level of economic activity, primary emphasis has been given in recent years to irrigation schemes, soil and water conservation programmes, and promotion of drought-resistant crops in areas where irrigation possibilities do not exist.

41. As a result of these measures, this sector showed slight improvement and growth. The value of agricultural income rose from an annual average of JD 10.2 million in the two years 1954 - 1955 to an annual average of JD 20 million in the two years 1960 - 1961 and to JD 30.9 million in the two years 1965 - 1966. These figures

apply to the East and West Banks of Jordan. Agricultural income in the East Bank alone rose from JD 21 million in 1970 to JD 28 million in 1975. (See Table 3, statistical appendix).

42. Agriculture contributed 16.4 per cent to GDP in 1960, 22.6 per cent in 1965, 13.8 per cent in 1970 and 9.6 per cent in 1975.

43. In Table III-4 production figures of principal crops and areas are given for the years 1968-1975 for the East Bank only. It will be noted that production of wheat and barley displayed sharp annual fluctuations. This oscillatory characteristic, which also applies to other less important field crops is attributable to the fact that these crops are almost wholly derived from dry farming in areas that are heavily dependent on rainfall. Wheat is considered one of the principal agricultural crops in Jordan, since it is the staple food of the population and its cultivation occupies an area of about 2 million dunums. While the average annual wheat production emanated to about 132 thousand tons between 1968 and 1975, the average annual consumption was estimated at about 3000 thousand tons per year. This means that the average annual deficit amounted to over 165 thousand tons during this period. The Five Year Plan aimed at introducing modern agricultural practices with a view to increasing total wheat production from its 1972-1974 average of about 162 thousand tons to about 220 thousand tons in 1980.

44. Production of vegetables, on the other hand, witnessed steady expansion before 1967, and the area under vegetables increased. Total production of vegetables rose from annual average of 196 thousand tons in the two years 1954 - 1955 to an annual average of 497 thousand tons in the two years 1965 - 1966. After the 1967 June war production of vegetables decreased and displayed sharp annual fluctuations, i.e. total production (East Bank) averaged 218 thousand tons per year in the two-year period 1970 - 1971, and 212 thousand tons per year in the two-year period 1974 - 1975.

Table III-4 AREA UNDER CULTIVATION AND PRODUCTION OF SOME CROPS IN THE EAST BANK  
(Area in thousand dunums, production in thousand tons)

	Wheat	Barley	Tomato	Egg-plant	Cucum-ber	Melons	Cabbages a. Cauli- flowers	Olives	Bana- nas	Citrus fruits	Grapes
1968 P A	95 2184	19 714	127 150	27 17	- -	36 90	11 10	13 129	6 5	15 10	8 0
1969 P A	159 1610	43 570	150 208	30 27	- -	53 71	14 10	24 147	19 13	24 17	12 41
1970 P A	82 2228	6 408	137 131	23 22	13 -	22 55	10 11	3 200	8 10	4 2	0 56
1971 P A	168 2439	26 526	137 125	45 27	10 13	27 63	6 9	14 278	4 5	9 15	19 35
1972 P A	211 2237	34 606	153 138	32 22	19 25	63 81	8 21	35 397	7 5	21 14	18 30
1973 P A	50 -	6 -	83	15	10	56	10	5 324	2 5	15 18	22 37
1974 P A	244 2462	40 649	133 138	32 41	16 15	46 92	16 12	40 321	4 4	34 33	18 43
1975 P A	50 118	12 529	145 104	40 22	18 14	51 52	7 10	5 234	0 4	13 21	11 65

Source: Statistics Department, Several Statistical Yearbooks

45. A similar situation is discernible with respect to fruits. The area planted with fruit trees covers about 403 thousand dunums in the East Bank including the Jordan Valley. Of these, 53 per cent comprise olive trees, about 27 per cent vines and about 20 per cent citrus, banana, and other of fruit trees. In spite of the expansion in fruit planting in the last few years, Jordan continues to depend on imports to cover most of its fruit needs.

46. The Five Year Plan (1976-1980) aims at enlarging the present area planted with fruit trees by about 255,000 dunums through the provision of financial assistance and contributions in kind to farmers and the supplying of farmers with seedlings and extension services on the use of modern methods.

#### Livestock

47. Jordan's principal livestock asset is the national flock of sheep and goats, numbering about 1.2 million heads. Cattle are much less important with only 47 thousand heads. The camel population is 16 thousand. Though livestock numbers vary from year to year, production of meat and milk appears to be stagnant. The country imports over 7 thousand tons of dairy products and about 100 million eggs annually at a cost of about JD 4 million (1974). In 1975, imports of dairy products (JD 4.8 million) and of live animals (JD 3.2 million) amounted to around 16 per cent of total agricultural imports. The main limiting factor for livestock production is lack of feed.

48. There has been a rapid increase in egg and broiler production, which is almost entirely in private hands. All the baby chicks are produced locally, and some are exported to neighbouring countries. The poultry meat market (about 20,000 tons) is almost entirely supplied by domestic production. Egg production is expected to satisfy demand by the end of 1977.



### Credit

49. Although credit does not appear to be a limiting factor, it, nevertheless, has a great impact on farm income. Most of the short-term production credit is provided by private commission agents against certain price privileges. The Agricultural Credit Corporation (ACC), and the Jordanian Cooperative Organization (JCO), provide short and medium-term loans. Interest rates vary from 6 per cent on long-term loans to 8 per cent on production credit.

### Marketing

50. Wheat is marketed partly through the network of buyers and warehouses of the Ministry of Supply and partly by farmers directly. Vegetables are marketed through a system of private commission agents, wholesalers, and retailers. Both of the Agricultural Marketing Organization (AMO) and the Jordanian Cooperative Organization (JCO) attempted on occasions to displace these agents. However, all attempts failed, since the agents have a complete grip on the market. The AMO has tried adding services (grading and packing) and new crops (potatoes for local consumption and peppers for export) and has succeeded in these endeavors. Future efforts will be restricted to activities which do not directly compete with private agents, yet enable farmers to derive higher returns for their produce.

### Performance during Three Year Plan, 1973-1975

51. During the Three Year Plan period, 1973-1975, 40 agricultural and irrigation projects were to be completed. Nine of these projects are almost completed, and progress has been made in implementing seven more projects, but 24 were never started, mainly because of the uncertainty that resulted from the war of 1973. Failure to obtain financing, shortage of technical personnel, inflation and inability to mobilize resources were other factors involved.

52. Though many of the objectives of the Three Year Plan remain unfulfilled, other accomplishments put Jordanian agriculture in a better position than before. The cooperative structure and leadership have improved as a farmer participation. There has been a better understanding of marketing problems. Investment by private interests in agriculture has risen, and there is now a greater appreciation of the potential profit in food production. Perhaps most important, farmers and farm workers have gained more experience with new technology, particularly in vegetable and poultry production. The use of insecticides, fungicides, fertilizer, plastic green houses, and machinery has spread along with irrigation. A livestock feed industry is pacing the rapid development of more modern chicken and egg production.

#### Investment under the Five Year Plan, 1976 - 1980

53. The plan calls for a total investment of about JD 40 million. Of this, JD 22 million or 55 per cent will be invested by the private sector. The remainder, JD 18 million, will come from the Government budget, loans, and technical assistance. About JD 11 million out of the total of public investment allocations will be invested in agriculture for the development of rainfed and irrigated agriculture and for improvement in the production of dairy and cattle.

#### Development of irrigation schemes

54. To further develop and stabilize agricultural production, particularly through reducing its heavy dependence upon rainfall, primary emphasis has been given to irrigation and soil and water conservation programmes. Foremost among these ranks the Major Yarmouk Scheme which calls for the harnessing of existing and potential waters to fully utilize the Jordan Valley. Endowed with favourable soil, water and climatological conditions, the Jordan Valley constitutes the main and largest area amenable to intensive development.

55. The main features of the Major Yarmouk Scheme comprise the construction of major storage facilities on the Yarmouk and Zarka rivers, small dams on the side Wadis, a network of main canals that convey the water into a large system of distribution canals and irrigation laterals, and the improvement of land and construction of flood protection and drainage systems. Its total cost, including the hydro-electric features, is estimated at JD 160 million. When completed, this project would put about 550,000 dunums under irrigation and would add over JD 24 million to total agricultural production at 1975 prices.

56. Construction of the East Ghor Canal which represents the first stage of the above scheme was started in 1958. It involved the diversion of the Yarmouk waters by gravity flow through an intake structure leading into a one kilometer tunnel, then into a lined main canal 69 kms. long feeding irrigation and drainage systems amounting to 600 kms. in total length and covering 3500 farm units having a total area of 120,000 dunums originally the capacity of the main canal was 10-20 m<sup>3</sup>/second. In addition, this project comprised the construction of flood protection facilities and a network of maintenance roads, and the installation of a telephone system to provide rapid contact for operation and maintenance purposes. This project was completed in 1967.<sup>1/</sup>

57. To augment the supply of water to the East Ghor project area, the Sharhabil Bin Hasna (Ziglab) dam with a storage capacity of 4.3 million cubic meters and an average gross yield of 10.8 million m<sup>3</sup> annually, was completed in 1967 with a total cost of JD 8.3 million.

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<sup>1/</sup> Work on the extension of the main canal southward by 8 kms was completed in 1970 to provide irrigation water for 13,178 dunums.

58. The construction of the Zafrain and Shueib dams, which form part of the Valley's overall development, were started in 1966 and completed in 1968; with a storage capacity of 4.3 and 2.3 million m<sup>3</sup> and a gross yield of 9.4 and 9.7 million m<sup>3</sup> per year, respectively. Their waters are utilized to irrigate about 13,000 dunums. The contractual construction cost of the two dams is JD 1.2 million.

59. Design of the Khalid Ibn Al-Walid dam, with a storage capacity of 200 million m<sup>3</sup> and a gross annual yield capable of irrigating an additional area of 200,000 dunums in the Jordan Valley. Work on the dam commenced in 1967 but was stopped as a result of 1967 June war.

60. Another new dam, Makaren Dam, will be constructed on the Yarmouk River, with a storage capacity of 300 million cubic meters. Its water will be utilized to irrigate 150 thousand dunums extended from Ghor Rabed to the Dead Sea. This project is expected to be completed in 1982.

61. The average volume of surface water available for irrigation in the East Bank, excepting the Jordan River waters, is estimated at about 850 million cubic meters per year, of which 75 per cent is available in the Eastern part of the Jordan Valley. Water resources available in the Jordan Valley are sufficient for intensive irrigation of 325,000 dunums, out of a total cultivable area of 500,000 dunums. The area under permanent or partial irrigation in the Jordan Valley is 208 thousand dunums, and that in the southern ghors and uplands about 173,000 dunums.

62. Due to the insufficiency and uneven distribution of rainfall, agricultural development and diversification can only be achieved through utilizing underground water resources for expansion of irrigated areas in the highlands and desert regions.

63. The government has already completed several pilot irrigation projects in the areas of Qatranah, Wadi Dhuleil, Wadi Abyad, Tal Burma, Arga Ghuweir, Qa'a Disi-Qweira and Karak-Nasa.

64. This project aims at expanding the irrigated area, establishing new pilot projects and implementing projects which have been proved economically feasible. Most important among these are:

<u>Project</u>	<u>Irrigable Area (Dunum)</u>
1. Abu-Lassan	1,170
2. Waheida	1,710
3. Abu-Makhtoub	2,100
4. Uthruh (pilot)	1,500
5. Qarein	1,400
6. Suweqa	2,700
7. Qatranah (expansion)	6,500
8. Sultani	2,700
9. Wadi Abyad (expansion)	4,500
10. Tal Burma (expansion)	3,000
11. Ghuweir/Idar (pilot)	2,000

#### Production, exports and imports

65. Total agricultural production is likely to increase by about 20 per cent during the Five Year Plan, 1976-1980. Considerable increases may be expected in vegetable, fruit, egg and poultry production. However, milk and meat production are unlikely to increase at all. Possibilities for further increases beyond 1980 depend greatly on completion of the Magarin Dam. If completed, production could increase by more than 20 per cent. Exports are increasing, but so is domestic food consumption. Between 1975 and 1980, exports can be expected to increase by 10 per cent and by a further 20 per cent if the Magarin Dam is completed by 1985. Between 1971 and 1974, imports of agricultural products increased by 110 per cent (see Table

III-3). Though this pace is unlikely to continue, there is at present strong pressure on demand for almost all agricultural products. It seems likely that a further increase of 50 per cent in imports will occur during the 1976-1980 period.

#### B. Mining

66. Mining activity is a recent feature of the Jordan economy. Until very recently, few mineral resources were discovered and exploited. The list include phosphate rocks, building stones, marble, gypsum and limestone. Phosphates is the only mineral resource that is being exploited on a relatively substantial scale.

67. The mining and manufacturing census of 1974 showed that the total number of establishments operating in this sector was 72. One of these is the Jordan Phosphate Mining Co, the largest, while all others are stone crushers.

68. Income generated from phosphate mining accounted for more than 85 per cent of total income generated in the mining and quarrying industry in 1974. This share was less significant in the years preceding 1973 but maintained its 1974 level in the years 1975 and 1976. This is, mainly, due to the increase in phosphate prices.<sup>1/</sup>

<sup>1/</sup> The phosphate production in the period 1961-1976 was as follows  
(in thousand tons)

1952	24	1965	850	1971	523
1955	164	1966	1,012	1972	700
1961	444	1967	1,254	1973	1,128
1962	682	1968	1,611	1974	1,607
1963	627	1969	1,099	1975	1,377
1964	614	1970	891	1976	1,702

Source: Annual reports of the Jordan Phosphates Mining Co.

Table III-5 MAIN INDICATORS OF MINING AND QUARRYING ACTIVITY  
(EAST BANK OF JORDAN)<sup>1/</sup>

Year	Total No. of Estab-lishments*	No. of Workers	Output at Factor Cost 000 JD	Value Added 000 JD
1965	93	2,241	1,900	1,383
1967	79	2,495	2,700	2,086
1968	119	3,129	3,623	2,757
1974	72	2,405	13,344	11,203 <sup>*/</sup>

Source: Industrial survey reports, Department of Statistics, Jordan

\*/ The fluctuation in the number of establishments was due to fluctuation in the number of operating stone crushers

69. The contribution of the mining sector to GDP (at factor cost) increased substantially during the last 15 years. It has risen from about one per cent in 1960 to about 5.3 per cent in 1974 and maintained the 1974 level for the years 1975 and 1976.

70. Phosphate rocks are mined in Jordan in two main locations: Huseifa and Al-Massa. The product is considered of high quality (62-76 per cent concentration TCP). The discovered reserves of phosphate rocks exceed 1,000 million metric tons (of 50 - 75 per cent TCP).

<sup>1/</sup> The 1974 industrial survey indicated the following facts about phosphate mining in Jordan in 1974.

	(Thousand JD)		(Thousand JD)
Total output	20,313	Net value added	10,846
Total sales	20,199	(Indirect taxes)	7,601
Wages and salaries	1,286	(Gross) value added	18,447
Gross profits	9,560	No. of workers	
		(persons)	1,906

Moreover, the actual amount of indirect taxes (which are in fact royalties on mining) amounted to only JD 4.1 million. Therefore, the 1974 contribution of mining to GDP was underestimated.

71. Several other minerals were discovered, but have not yet been exploited. These include lead sulphide and copper, tin, granite, pyrite, molybdenum, decorative marble rock, iron ore, gypsum, clay, potash, bromide, manganese, magnesium, glass-sand, feldspar, tripoli and building stones.<sup>1/</sup>

72. Two other factories are in the process of being operated: The ceramics project and the glass-sheet project. Both projects will utilize domestic raw materials (clay and glass sand).

73. The potash extraction project is now under implementation. The project will utilize two natural resources, the vast brine reserves of the Dead Sea and the solar evaporation area provided by the south end of the Dead Sea, to produce one million metric tons per year of potash (K<sub>2</sub>O). Production will be expandable to a potential capacity of 1.7 million metric tons per year of potash as brine levels of the salt pan are raised. Bromine, magnesium and other chemicals contained in the Dead Sea brine will be produced in the future. The production of potash will start on a commercial scale in the early eighties.

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<sup>1/</sup> The Jordan Natural Resource Authority estimated the total reserves of some of minerals indicated above as follows:

1. Phosphates (of 50-70 % P <sub>2</sub> O <sub>5</sub> )	100 million tons (M/T)
2. Copper ore (of 1.34 % copper)	100 (M/T)
3. Manganese (of 36 %)	1.5 (M/T)
4. Clay (high quality)	5 (M/T)
5. Glass-sand (99 % silica)	Unlimited quantities
6. Tripoli (91 % silica)	" "
7. Feldspar	1.5 (M/T)
8. Gypsum	50 (M/T)
9. Oil shale	10.000 (M/T)



74. The expansion of phosphate production project aims at increasing the production and exports of phosphate rocks from its 1975 level of 1.5 million metric tons to about 6 million tons in 1980 and to over 10 million tons annually after the mid eighties.

#### C. Manufacturing

75. Industrialization is a recent feature of the Jordan economy. Only few industries existed in the late forties and early fifties, and their place in national economic and social life was very limited. Old industries were reinvigorated and new ones established along modern lines. Consequently, the value of the industrial total output increased by more than seven-fold in the years 1954-1966 rising from about JD 5.5 million in 1954 to over JD 42 million in 1966. However, and in spite of this extremely rapid growth, the manufacturing sector remained quite underdeveloped even for a country at Jordan's low level of per capita income. In 1966 only 9.5 per cent of GDI at factor cost and current prices originated in the manufacturing sector.

76. Although most manufacturing firms were very small (over 90 per cent of the total number of establishments in 1966 employed fewer than 10 persons), few firms, mainly of recent origin dominated the sector in terms of production and value added. In 1966, two firms producing almost solely for the domestic market, the Petroleum Refinery and the Cement Factory, jointly accounted for 26 per cent of value added in manufacturing. Between 1959 and 1966, these two industries accounted for about one third of Jordan's rapid growth in manufacturing value added. The rapid growth of manufacturing industry in Jordan during the period 1948-1966 took place despite the existence of three major obstacles which continue to handicap industrial development in Jordan, namely, the scarcity of local raw materials, the smallness of the market and the weak linkages with other economic activities in the country.

27. Most of Jordan's manufacturing output (64.4 per cent in 1966) was for final consumption. Only 31.1 per cent were destined for intermediate uses, mostly outside the manufacturing sector. Jordan's interindustrial relationships were few and of the most elementary kind, such as the sale of leather to the shoe industry. Neither production for investment nor production for exports was important in manufacturing.

28. Most of the industries that existed before the war of June 1967 were small-scale and did not involve technologically complex processes nor much capital equipment.

Table III-6 PERCENTAGE SHARE OF MANUFACTURING SUB-SECTORS IN MANUFACTURING VALUE ADDED<sup>1/</sup>

Industrial Activity	1959	1966	1968	1972	1974
Food and beverages	22.7	18.5	14.6	14.4	18.5
Tobacco	5.3	5.8	5.6	3.2	6.0
Textiles	4.2	5.2	5.9	4.5	9.5
Clothing and footwear	19.3	9.5	7.1	5.1	5.8
Wood and products	11.4	9.2	4.9	5.1	3.4
Paper and products	0.4	0.7	0.7	0.2	1.0
Printing and publishing	2.7	2.2	3.7	2.5	1.7
Leather and products	0.4	1.7	1.8	1.4	2.8
Rubber and products	1.0	0.3	0.2	0.2	-
Chemicals and products	1.3	5.5	6.1	6.0	6.8
Petroleum refinery	-	14.0	19.2	18.6	15.1
Non-metallic minerals	16.6	14.7	19.4	21.9	10.2
Basic metal products	5.7	6.7	7.2	11.4	15.2
Machinery	1.3	1.5	1.3	1.1	2.2
Transport equipment	3.2	2.9	1.6	3.0	1.8
Miscellaneous	5.5	1.6	1.7	1.3	1.0
Total	100.0	100.0	100.0	100.0	100.0

<sup>1/</sup>The figures for 1959 and 1966 pertain to the East and West Banks of Jordan, while those for 1968, 1972 and 1974 pertain to only the East Bank.

79. Income originating in the manufacturing sector rose by 379 per cent, from JD 3.4 million in 1954 to JD 16.3 million in 1966. The rapid growth of manufacturing value added during this period was the consequence both of increasing domestic demand and of import substitution, but not, to any meaningful degree, of an increase in exports.

80. The majority of the industrial establishments are owned by the private sector, while the participation of the public sector is comparatively confined to large-scale industries. The aim of Government participation in such establishments is to create and strengthen public confidence in industry and to encourage private investors.

81. Generally speaking, Jordan's industry is not abreast of development in similar industries elsewhere. This precludes them from acquaintance with modern technological developments, basically because they are dependent on the domestic market and generally relied on protective tariffs.

82. Table III-7 and Table III-8 show total output and value added in manufacturing industry for selected years during the period 1960 - 1976 and trend of main exported manufactured goods.

Table III-7 MANUFACTURING INDUSTRY OUTPUT AT FACTOR COST AND VALUE ADDED<sup>1/</sup>  
(In JD million)

Year	Output	Value added
1960	13.2	5.9
1962	15.5	6.7
1964	28.4	10.8
1965	34.8	13.6
1968	40.2	16.7
1970	28.4	11.7
1972	37.7	16.6
1974	61.3	31.9
1975	70.2	36.7
1976	83.5	44.0

Source: All information for the years 1960, 1962, 1964, 1965, 1968, 1974 are from sources of the Department of Statistics. Those for 1970, 1972, 1975 and 1976 are estimates based on data collected either directly from primary sources or from the Department of Statistics.

Table III-8 EXPORTS OF MAJOR MANUFACTURED PRODUCTS  
(In JD thousand)

Commodity	1969	1970	1971	1972	1973	1974	1975	1976
Cigarettes	563	519	368	398	546	711	751	809
Liquid batteries	191	196	58	433	409	495	88	40
Textiles	137	176	379	143	429	990	634	872
Sole and upper leather	153	169	238	383	260	272	184	231
Paper	143	143	103	227	327	436	513	234
Cement	483	320	471	922	1,296	4,078	1,655	-
Medical and pharm. products	-	-	-	255	549	901	1,251	2,906

Source: Jordan Department of Statistics, External Trade Yearbook, several volumes

<sup>1/</sup> Information for 1960-1968 pertain to East and West Banks of Jordan while those for 1970-1976 are for East Bank alone.

MANUFACTURING INDUSTRY SUB-SECTORS

1. Food

83. Although Jordan has always been known as basically an agricultural country, agricultural yields especially those of staple crops such as wheat and barley were never sufficient to meet the ever increasing domestic consumption. For this reason, no large industry based on agricultural production, with the exception of a medium size plant for tomato paste, was established. Whatever agricultural products are produced are either directly consumed or exported in the form of fresh fruits and vegetables; besides, the prices of these products are too high for processing and canning purposes. Consequently, the activity in this sub-sector has been limited to mainly grain milling, olive oil production, baking, confectionary and animal feed production. Though the number of production units is high (over 1000 in the seventies and 1161 in 1974) few large establishments are dominant (i.e. four grain mills, one confectionary plant, one bakery, one vegetable oil plant, three animal feed plants and one new vegetable canning factory). And even then the confectionary, vegetable oil and animal feed industries use imported raw materials. This food manufacturing sub-sector in Jordan does not include sugar production, meat canning or large scale dairy production.

84. The industrial census of 1974 indicated that the food manufacturing sub-sector consisted of 1,161 establishments employing a total of 3,463 workers as shown in Table III-9 below.

85. Between 1959 and 1965, the number of establishments had increased by 149 per cent with an average annual rate of growth of 7 per cent and by 157 per cent between 1965 and 1974 with an annual rate of growth of 4.5 per cent. This brings the total increase in number of the establishments up to 234 per cent during the period 1959-1974. Likewise, the number of workers had increased by 136 percent between 1959 and 1965 and by 142 per cent between 1965 and 1974, with an average annual growth rate of 5.5 and 3.5 per cent, respectively.

Table III-9 NUMBER OF ESTABLISHMENTS AND WORKERS IN FOOD MANUFACTURING

ISIC Code	Economic Activity	No. of Establishments			No. of workers		
		1959 <sup>1/</sup>	1965	1974	1959 <sup>2/</sup>	1965 <sup>2/</sup>	1974
311	Slaughtering and preparing animals meat	N.A.	N.A.	2	N.A.	N.A.	65
3112	Dairy products	N.A.	N.A.	64	N.A.	N.A.	412
3113	Canned and preserved fruits and vegetables		2	24		29	131
3115	Vegetable oil (olive presses)	81	46	43	405	173	134
3116	Grain milling	166	183	156	416	550	525
3117	Bakery products	239	361	743	977	1322	1688
3119	Chocolate and confectionary	1	59	68	15	145	387
3121	Coffee milling and others	N.A.	76	38	N.A.	138	70
3122	Animal feed	-	-	2	-	-	71
Total		487	727	1140	1813	2457	3483

1/ for 1959, no. of establishments of the codes 311, 3112, 3113, 3115, 3121 and 3122 are combined together.

2/ for 1965, no. of establishments of the codes 311, 3112, 3121 and 3122 are combined together.

3/ No. of workers are subjected to notes 1/ and 2/

Table III-10 GROSS PRODUCTION AND VALUE ADDED IN THE  
FOOD MANUFACTURING SUB-SECTOR  
(In JD million)

ISIC Code	Economic Activity	Gross Production		Value Added	
		1965 <sup>1/</sup>	1974	1965 <sup>1/</sup>	1974
311	Slaughtering and preparing animal meat		42		37
3112	Dairy products		2511		1121
3113	Canned and preserved fruits and vegetables	25	212	6	7
3115	Vegetable oil (olive presses)	65	546	19	299
3116	Grain milling	1598	5149	228	3055
3117	Bakery products	967	2279	310	705
3119	Chocolate and confectionary	497	686	131	202
3121	Coffee milling and others	1418	215	388	83
3122	Animal feed	-	3020	-	329
Total		4570	14667	1082	5838

<sup>1/</sup> for 1965, production and value added of the ISIC codes 311, 3112, 3121 and 3122 are combined together.

86. Between 1965 and 1974, the value of production had increased by 321 per cent with an average annual rate of growth of 12.5 per cent. Value added had increased by 540 per cent during the same period with an average annual rate of growth of 18.5 per cent.

87. In 1974, food manufacturing contributed 17.1 per cent of total value added originated in the manufacturing sector. Out of that, 52.3 per cent originated in grain milling, 10.2 per cent in dairy production and 12.1 per cent in baking. The total value added originating from these three activities amounted to 83.6 per cent.

88. Since future plans aim at expanding the area under permanent irrigation by 96 thousand dunums in the Jordan Valley, 62 thousand dunums in the Southern Ghors and 29 thousand dunums in the upland, it is expected that, within the coming three years, a number of small food processing plants will be implemented with the hope that these would grow as agricultural production rises.

## 2. Beverages

89. The beverage industry in Jordan consists of:

- a) Distilling of spirits (ISIC Code 3131)
- b) Breweries and manufacturing of malt (" " 3133)
- c) Soft drinks and carbonated water (" " 3134)

90. Intermediate and raw materials for the industry are mostly imported. Local production is mainly for local consumption and partly for export. Moreover, the breweries and soft drinks industries are franchised.

Table III-11 NUMBER OF ESTABLISHMENTS, PRODUCTION AND VALUE ADDED OF BEVERAGE INDUSTRIES

Year	No. of Establishments	thousand JD	
		Value of Production	Value Added
1965	10	399	179
1974	9	1148	946



1. Although the number of establishments in 1974 was less than in 1965, the value of production has increased in 1974 by 288 per cent over 1965. The value added also increased by 528 per cent during the same period, with the average annual rate of growth amounting to 11 and 18 per cent for production and value added, respectively.

2. The distilling and brewing industry contributed 54 per cent of total value added in the beverages industry in 1974, while the softdrink industry contributed the remaining 46 per cent.

Table III-12 PRODUCTION OF ALCOHOLIC BEVERAGES DURING  
1971-1975  
(Thousand Litres)

	1975	1974	1973	1972	1971
Brandy	478	444	332	301	265
Arak	211	189	166	148	161
Wine	126	134	98	89	72
Beer	4436	2544	2156	1753	1735

Source: Department of Statistics, 1975 Statistical Yearbook

### 3. Tobacco

3. The major source of tobacco in Jordan is the local produce of that plant, but, since agricultural production is fluctuating from year to year because of climatical changes, the cigarette and tobacco companies are permitted to import between 30 and 40 per cent of the local production to satisfy local market needs and to export to neighbouring countries.

14. The value of production rose from JD 2,468 thousand in 1965 to JD 5,911 thousand in 1974, or by 242 per cent; the average rate of growth amounted to 9.3 per cent annually. The value added generated in this industry rose from JD 748 thousand in 1965 to JD 1,928 thousand in 1974, or by 258 per cent; the average rate of growth amounted to 10 per cent annually. The tobacco industry contributes 6 per cent to total value added originating in the manufacturing sector.

15. The following table shows the development in tobacco production during the period 1970-1975.

Table III-13 TOBACCO PRODUCTION, 1970-1975  
(In Metric Ton)

	1975	1974	1973	1972	1971	1970
Production	1,928	1,972	2,160	1,511	1,533	1,610
Export	390	403	334	246	226	333

Source: Department of Statistics, Jordan Statistical Yearbooks,  
External Trade Statistics

16. Local consumption of cigarettes was estimated to about 1,650 million cigarettes during 1974.

#### 4. Textiles

17. The textiles industry showed remarkable progress over the period 1965-1974, due to the increase in domestic consumption and exports. Textiles production realized an increase of 262 per cent in 1974 over 1965 with an average rate of growth amounting to 10.3 per cent. Value added also increased by 618 per cent in 1974 over 1965 with an average rate of growth of 20 per cent. The number of establishments operating in the industry trebled and the number of workers increased by 132 per cent during the same period.

98. The textiles industry contributes 8.5 per cent to total value added generated in the manufacturing sector. But this industry still depends heavily on imported intermediate and raw materials, owing to lack of domestic materials.

Table III-11 NUMBER OF ESTABLISHMENTS AND WORKERS, PRODUCTION AND VALUE ADDED IN THE TEXTILE INDUSTRY

	1965	1974
No. of Establishments	38	114
No. of Workers	1150	1516
Value of Production (Thousand JD)	1526	4009
Value Added (Thousand JD)	440	2718

Source: Publications of the Jordan Department of Statistics

5. Wearing Apparel and ready-made clothing

99. The clothing manufacturing is considered to be one of the relatively important industries in terms of the number of establishments. It contains about 41 per cent of total establishments operating in the manufacturing sector, but contributes only 5.1 per cent of total value added to manufacturing.

100. Out of a total of 3,098 establishments existing within this branch of industry, there are only 52 establishments engaging five or more persons; mostly producing ready-made clothes. The others are small-scale industries, dealing mainly with tailoring.

101. Gross output and value added increased steadily since 1968, with value added increasing by 313 per cent or at an annual rate of growth amounting to 21 per cent. Output increased by 216 per cent over the period 1968-1974, or by 14 per cent annually. The contribution of establishments engaging five or more persons amounted to 14 per cent of total employment in this branch of industry, 36 per cent of total value added and 45 per cent of total output.

6. Tanning and leather products

102. The only shareholding company dealing with tanning and leather products in Jordan was established in 1961. The Government of Jordan owns 25 per cent of its share capital and the rest is owned by the private sector. The total number of workers in this firm is around 200. The main source of raw materials (skins) are the abattoirs, in addition to the skins of slaughtered animals in rural areas, which form around 25 per cent of the total animals slaughtered in the official abattoirs.

Table III-15 NUMBER OF ANIMALS SLAUGHTERED IN THE ABATTOIRS DURING 1970 - 1975  
(Thousand Heads)

	1975	1974	1973	1972	1971	1970
Sheep	144.2	147.0	407.0	325.5	348.5	282.6
Goats	192.8	139.0	269.8	208.5	218.5	187.8
Cattle	18.0	7.0	9.7	7.5	10.5	10.7
Camels	4.9	4.0	7.2	7.7	6.2	4.4

103. The local abattoirs provide most of the leather needed to produce the upper leather and chevreau (from sheep and goats skins); domestic

skins provide only 20 - 30 per cent of sole leather and the remainder is usually imported from African markets such as Sudan, Ethiopia, Kenya and Tanzania.

Table III-16 DEVELOPMENT OF JORDAN TANNING CO. PRODUCTION

	1975	1974	1973	1972	1971	1970
Sole (Tons)	376	415	151	478	318	182
Lining leather (thousandft <sup>2</sup> )	237	327	398	551	443	285
Upper leather ( " )	1,992	1,867	899	1,593	1,447	1,024
Chevreau skin scrapings (Tons)	103	96	133	130	50	74
Sheep skin rugs (pieces)	210	688	878	736	572	397

104. Beside the Jordan Tanning Company, there are about 26 small scale establishments engaging in leather production, their main function is to produce certain types of sheep fur for use as overcoats. The number of workers in these small industries is around 80 persons.

Table III-17 NUMBER OF ESTABLISHMENTS, PRODUCTION AND VALUE ADDED IN LEATHER PRODUCTS INDUSTRY

	1965	1974
No. of Establishments	19	27
Value of Production (thousand JD)	657	1,037
Value Added (thousand JD)	162	880

Source: Department of Statistics, Statistical Yearbook, Jordan.

105. The above table indicates that the value of production has risen between 1965 and 1974 by 158 per cent or at an average rate of growth amounting to 4.5 per cent annually. At the same time, value added realized 543 per cent increase and an average annual rate of growth of 18.5 per cent. In 1974 the leather production activity contributed 3 per cent to total value added originated in the manufacturing sector.

7. Footwear

106. The results of the 1974 census of manufacturing showed that about 166 establishments were engaged in the production of leather footwear, of which about 10 large establishments, employing 5 or more persons, produced about 330 thousand pairs of different types of shoes; the remaining establishments are small-scale industries, mostly engaging their own proprietors in production.

107. Domestic production of footwear does not satisfy the local needs as yet; the following table shows the imports of footwear during 1970-1975.

108. In 1974, the number of persons engaged in the manufacturing of leather footwear were around (506) persons, the value of production amounted to (JD thousand 622) and the value added was (JD thousand 226).

8. Wood furniture and fixture

109. In terms of the number of the operating establishments, this industry is relatively one of the largest industries in the country. In terms of size, individual establishments are still considerably small, with an average of 2.3 workers per establishment, and depend, to a large extent, upon imported intermediates and raw materials.

Table III-12

IMPORTED FOOTWEAR, 1970 - 1975  
(Quantity in tons, value in thousand JD)

	1975	1974	1973	1972	1971	1970
Footwear showing signs of appreciable wear						
Quantity	455.0	481.0	230.0	127.0	274.0	255.0
Value	81.5	71.3	34.1	15.2	30.1	25.0
Footwear with outer soles and uppers of rubber or plastic						
Quantity	108.0	77.0	35.0	82.0	-	-
Value	178.3	38.4	22.0	29.5	-	-
Footwear with uppers of plastic and outer soles of rubber						
Quantity	177.0	81.0	146.0	109.0	151.0	-
Value	493.8	49.9	75.0	55.3	45.4	-
Other kinds of footwear						
Quantity	133.0	106.0	50.0	266.0	212.0	256.0
Value	336.9	109.9	45.6	199.7	142.5	186.9

Source: Department of Statistics, Jordan External Trade Statistics, 1970-1975.

The following table shows the development of this industry in the East Bank of Jordan.

Table III-19 THE DEVELOPMENT OF THE WOOD FURNITURE AND FIXTURE INDUSTRY  
(The East Bank of Jordan)

	1959	1965	1974
No. of establishments	332	371	873
No. of workers	1,227	1,761	2,032
Value of production (thousand JD)	N.A.	1,719	2,494
Value added ( " " )	N.A.	738	1,361

Source: Department of Statistics, Jordan Industrial reports.

110. The rise in the number of workers employed in this branch amounted to 144 and 115 per cent over the two period 1959 - 1965 and 1965 to 1974, respectively. Production has increased by 145 per cent over the period 1965 - 1975, with the average rate of growth amounting to 4 per cent annually. Over the same period, value added increased by 184 per cent, or at an average rate of growth of 6.5 per cent per year. The furniture industry contributed 3.4 per cent to total value added originating in the manufacturing sector in 1974.

9. Paper products

111. This industry is still in its early stages of development and could be divided into three categories according to the type of goods produced:

- a) Wrapping papers, card board and chip board papers. Production of these types of paper depends mainly on the remains of agricultural products, such as, hay and waste paper collected locally and imported from neighbouring countries. The industry is still facing technical problems, and the Government has



acquired about 17 per cent of the share capital of the paper company operating in this field. Recently a new corrugated line has been added to the production of this company which might have some impact on the efficiency and soundness of the project.

- b) Sanitary tissues, paper towels, napkins and facial tissues. So far, the paper tissues industry is still limited to cutting and packing of imported rolls. Up to 1976 there was one company dealing with this type of production; it usually imported suitable sizes and weights of finished paper tissue rolls to avoid waste in raw materials. No further processing was required. Another company was established in 1974 and began production in early 1977.
- c) Carton containers: There are about ten establishments producing containers for the packing of soap, detergents, confectionary, clothes, footwear and other products. These establishments usually print the carton sheets, and re-shape them to suit demand requirements.

112. In general , this industry consists of establishments employing about 341 workers, with production and value added in 1974 amounting to one million, and 638 thousand Jordanian dinars, respectively.

113. In comparing available data in 1965 with that of 1974, one would conclude the following: the value of production increased by 371 per cent over the period 1965 - 1974 or at an average annual rate of growth of 14 per cent. Value added also realized an increase of 419 per cent over the same period and the average rate of growth amounted to 15.5 per cent per year.

10. Printing and publishing

114. This industry experienced remarkable growth during the period 1965 - 1974, when the value of production rose by 394 per cent and value added rose by 365 per cent. The average annual rates of growth were 14.5 and 14 per cent for the value of production and value added, respectively. The printing and publishing industry contributed 1.7 per cent to total value added in the manufacturing sector in 1974.

11. Chemicals

115. The chemical industry is composed of the following branches:

- a) Pharmaceuticals
- b) Plastics
- c) Paints
- d) Other chemicals

a) Pharmaceuticals

116. There is one establishment in Jordan which manufactures human medicaments. It was established in 1964 with 16.5 per cent of capital shares owned by the Government. The quantum production was as follows during 1974.

	Unit	Productive Capacity	Production
Tablets	Million	448	142
Capsols	Million	27	14
Ointments	Kg.	11,200	3,800
Lotions	Thousand Litre	336	203
Dispensaries	Thousand	8,960	2,224

117. The medicament industry achieved rapid growth over the period 1967 - 1974, amounting to 1,317 per cent from JD thousand 90 in 1967 to JD 1,175 thousand in 1974. Meanwhile, exports rose from JD 5 thousand in 1967 to JD 843 thousand in 1974. Percentage-wise the increase amounted to 1,698. Total exports in 1974 amounted to 71.0 per cent of total pharmaceutical production, mainly directed to Arab countries and to some African countries. Employment also increased rapidly, by 196 per cent over the period 1970 - 1974.

b) Plastics

118. The basic prerequisites for developing plastic industry is the availability of domestic raw materials, or petrochemicals or both; Jordan has neither. This, however, did not refrain Jordan from establishing and expanding this industry, particularly since neighbouring Arab countries are contemplating the construction of petrochemical complexes. The simplicity and variation of production and the availability of quick marketing has given incentives to local investors to create such industries.

119. The 1974 census of manufacturing showed that there were 15 establishments producing a variety of plastic products, two of which are sponge and 8 are plastic footwear, including plastic heels. Other plastic production include articles of injection, blowmoulding, extrusion and plastic pipes. All intermediate and raw materials used in plastic production are imported.

120. Because of Jordan's location, the opportunities of exporting plastic products are quite good in particular to Saudi Arabia and the Arabian Gulf States (see following table).

	1969	1970	1971	1972	1973
Production (Ton)	1,760	2,352	3,287	1,782	2,207
Exports (Ton)	36	193	435	128	148
Ratio of exports to production	2	8	13	7	7

Source: Department of Statistics, Jordan, 1974 Census of Manufacturing Report.

121. Production of plastic footwear is sufficient for satisfying the domestic needs; surplus production is being exported. In 1974 the quantity produced amounted to 2,640 thousand pairs while existing production capacity amounted to 6,000 thousand pairs of different kinds and sizes.

c) Paints

122. Development of the paints industry has strong linkages to industrial development and construction activities. In the case of Jordan, construction has grown up very rapid during the last few years. At present, there are seven establishments engaged in the production of paints, mainly, primer paints, emulsions, gloss paints, vehicles paints and a variety of other types of paints. In 1974 production capacity amounted to 5,650 thousand liters, but the actual production was in the neighbourhood of 2,195 thousand liters.

123. The chemical industry as a whole employed 897 workers, engaged mainly in the plastic industry whose value of production had value added amounted to JD 3,815 thousand JD 2,171 thousand respectively; it contributed 6.9 per cent to total value added in the manufacturing sector in 1974.

12. Petroleum refining

124. The Jordan Petroleum Refinery was established in 1956 and started production in 1961 by importing crude oil from Saudi Arabia through

the Tap Line . The initial production capacity was 1,000 tons/day, which was raised to 1,200 in 1970, and to 2,850 in 1973. The value of production amounted in 1974 to JD 9.3 million and value added to JD 4.8 million; petroleum refining contributed 15.1 per cent to total value added in manufacturing. Compared to 1965, the increase in the value of production and value added amounted to 200 and 243 per cent, respectively, and the annual rate of growth, in the same order, was 7.5 and 9.5 per cent.

Table III-20 PRODUCTION OF JORDAN PETROLEUM REFINERY IN SELECTED YEARS

(Thousand tons)

Production	1961	1972	1973	1974	1975
Benzine	37.2	114.1	107.6	136.0	158.8
Kerosene	39.6	93.0	109.8	109.1	113.4
Gas Oil (Solar)	41.2	144.5	169.9	194.9	226.9
Fuel Oil	50.6	165.9	188.5	189.3	193.1
Asphalt	11.9	27.9	36.7	36.7	35.2
Propane Gas	0.6	18.4	18.2	24.0	28.7

Source: Jordan Petroleum Refinery Co., 1975 annual report

### 13. Non-metallic minerals

125. The non-metallic mineral industry consists of cement, structural clay products and glass products. The major component of this industry, is the cement industry, which produces about 75 per cent of total non-metallic mineral production. The Jordan Cement Factory was established in 1954 with a capital of JD 15 million in 1974.

126. The Factory produces one kind of cement (Portland) based on USA specifications. The raw materials are obtained from local quarries located close to the factory. The number of workers were 807 persons in 1974 and the value of production was JD 7.3 millions at producers's prices (JD 4.5 millions at factor cost). Value added amounted to JD 2.2 million in the same year. Between 1965 and 1974, output and value added increased by 215 and 210 per cent, respectively and their annual rates of growth were of the order of 8 and 7.5 per cent. The quantity produced was as follows (in thousand tons):

	1972	1973	1974	1975	1976
Cement	661.6	616.8	596.2	572.2	586.4

Source: Department of Statistics, Jordan, Statistical Yearbooks.

14. Other non metallic industries

127. a) Marble and tiles. In 1974 there were about 187 establishments engaged in marble and tiles production and employing about 1,099 persons, fifty-seven of these establishments engaged five or more persons. The marble industry depends on local or imported raw materials. Recently, part of its production started to be exported, as the following table indicates:

Table III-21 PRODUCTION OF MARBLE AND TILES  
(1970 - 1974)

Year	Quantity (Ton)	Value (thousand JD)
1970	859	6.0
1971	243	2.0
1972	297	5.3
1973	7,795	23.0
1974	19,332	45.3

Gross output was valued at 1,613 thousand JD at producer's price and the value added amounted to JD 850 thousand.

129. Bricks and concrete pipes: In 1974 the number of establishments operating was 32 employing 90 workers. Their gross output was valued at JD 143 thousand and value added amounted to JD 62 thousand.

15. Basic metals

129. This industry consists of 402 establishments, two of which weld iron bars for construction purposes. The other 400 are engaged in the production of other metal works, such as blacksmithing, aluminium works, tanks, steel containers. Gross output, as well as the value added, increased during the last seven years, due to achievements in the construction sector. In 1974, the value of gross output amounted to JD 6.4 million, and value added was estimated at JD 4.8 million. Compared to 1968, output increased by 8.4 per cent and value added increased by 520 per cent. The basic metals industry realized growth rates amounting to 1.9 and 31.5 per cent in output and value added, respectively, and contributed 15.2 per cent to NI at factor cost.

130. The following table shows the progress achieved by the Jordan Iron and Steel Industry Co. in welding iron bars (in tons) during the period 1970-1975.

1970	1971	1972	1973	1974	1975
24074	2521	30183	28678	26432	31303

Source: Department of Statistics, Jordan Statistical Yearbook.

16. Electrical machinery equipment

131. This industry consists of 135 establishments, more than 95 per cent of them engaged in the repair and maintenance of electric machinery and equipment; some of these establishments produce simple spare parts. There are two firms producing batteries. One produces liquid batteries of 2,6 and 12 volts in addition to other kinds of plastic and rubber products, and employs about 410 workers (about 20 per cent of total workers in the electric industry). It produces for the local market as well as for export. The other firm produces dry batteries in different sizes for local market. Its products are not yet in a position to compete with imported dry batteries.

132. The electric industry produced J\$ 1,252 thousand of gross output in 1974 and the value added amounted to J\$ 712 thousand; it contributed 2.3 per cent to total value added in the manufacturing sector. Over the period 1967-1974, the increase in the value of output and value added was of the order of 333 and 516 per cent, respectively.

17. Transport equipment

133. This industry is one of the widely spreading industries in the country. In terms of the number of operating establishments it ranks third, after clothes and wooden furniture industries. It contains about 9.1 per cent of total operating establishments in the manufacturing sector. Out of the 680 establishments, there are about 16 establishments engaging five or more persons. These produce 16.1 per cent of total production and their share in the value added is 32.6 per cent. They are mainly concerned with fabricating steel and wood frames for lorries and buses. The remaining establishments are engaged mostly in repairs of vehicles and other mechanical work related to steel and wood frames.



134. The industry contributes 1.8 per cent to total value added generated in the manufacturing sector in 1974.

d) Electricity

135. The electricity sector occupies a special position in Jordan owing to its direct and important bearing on developments in the economic sectors, particularly mining and industry, and on improvements in the living conditions of the people.

136. Electric power generated in the kingdom rose from 278 million kWh in 1972 to an estimated 410 million kWh in 1975, or at an average annual rate of 13 per cent. The number of subscribers rose from about 98,000 to about 140,000 during the same period, or at average annual rate of 12 per cent.

137. Electric power consumption was estimated at 350 million kWh in 1975, of which about 147 million kWh (42 per cent) were consumed by industry, about 93 million kWh (26.5 per cent) by households, about 60 million kWh (17.2 per cent) by commercial enterprises and about 30 million kWh (8.6 per cent) by water pumping stations. The remainder of about 20 million kWh (5.7 per cent) was consumed for various other purposes, such as street lighting, broadcasting, television, and telecommunications.

138. In the three years 1973-1975, over 13 million Jordanian dinars were spent on electric power supply projects, of which JD 7.8 million was spent on expanding generation capacity, JD 5.25 million on expanding transmission and distribution networks, and about JD 0.4 million on economic and technical studies, engineering designs and specifications for the execution of new projects contained in the Five Year Plan (1976-1980). Hence, actual expenditures on generation, transmission

and distribution of power projects exceeded those envisaged under the three year Plan, 1972-1975, by 8.3 per cent. During the Plan period, four diesel units of 6.2 MW each were installed and operated in Amman, a new power station comprising 3 diesel units of 3.2 MW each was installed and operated in Irbid, and one 14.5 MW gas turbine was installed and operated at the Hussein Central Thermal Power Station at Zerka. Consequently, total generating capacity in the East Bank rose from 80 MW at the end of 1972 to 130 MW at the end of 1975, or at an annual rate averaging 18 per cent.

139. Thirty-three KV transmission lines totalling 150 kms. were erected and operated to connect electric power supply to many new customers. Twenty-two villages were electrified in the Amman and Irbid areas; thus at the end of 1975 there were 61 electrified towns and villages containing nearly 70 per cent of the East Bank population.

140. The Jordan Electricity Authority (JEA) was established in 1967 with the objective of organizing the supply of electricity in Jordan, providing economical and reliable electric energy through the building of a central power station and the introduction of a high voltage transmission grid for the country. The JEA started in 1973 the execution of the Hussein Thermal Power Station at Zerka. The project involves the building of Jordan's first steam power station with a generation capacity of 265 MW. The first stage includes a 100 MW generation target, two 33 MW steam generating sets and two gas turbines of 34 MW. The cost of implementing the first stage was in the range of JD 10 million. The second stage of the generation project at the Hussein Thermal Power Station involves adding a third 33 MW steam generating unit to be operational in 1978 at a cost of about JD 8 million, and the third stage involves adding two 66 MW steam generating units at an estimated cost of about JD 36 million. The complete generating capacity of the Hussein Thermal Power Station will be operational by 1981.

141. Another project was implemented to electrify the Jordan Valley. Work on the first stage started early in 1976 on the execution of this scheme with a cost of JD 2.25 million. The second and third stages will be implemented during 1978 for extending the Jordan Valley network further south and electrifying more villages. These two stages will cost around JD 2 million.

142. A third project was implemented for electrifying the south of Jordan. The first stage involves electrifying the Karak District with a cost of JD 2.5 million and the second will be implemented during 1978 for further extension to the power station and the electrification of more villages. This stage will cost JD 2.0 million.

143. The Five Year Plan, 1976 - 1980, includes allocations for increasing the capacity of the existing power station in Aqaba, and for building a new diesel power station and extending the distribution network at a cost of JD 2.4 million.

144. The Five Year Plan also includes allocations for the erection of 132 KV transmission grid. This project aims at erecting an overhead 132 KV high tension transmission grid and 132/33 KV main substations to supply electric power generated at the Hussein Central Thermal Power Station at Zerqa to the main load centres in the greater Amman area and the northern regions (Irbid). The first stage of this project, which was completed in 1976, consisted of the erection of 37 kms. of twin overhead 132 KV transmission lines linking the Hussein Thermal Station and three main 132/33 KV substations in the Amman area. The second stage will be completed this year (1977) and will consist of strengthening and expanding the Bayadir Wadi Sir main sub-station and erecting a 9 Km., 132 KV high tension line between this station and the new sub-station at Fuheis to supply electric power to the Cement Factory. The cost of this stage is estimated at JD 880 thousand.

145. The third stage comprises erection of two 132 KV high tension transmission lines: the first, 65 kms. long, extends from the Hussein Central Thermal Power Station to the city of Irbid, and the second, 25 kms. long extends between Thermal Power Station and the new sub-station in the Kaser area, south of Amman. The third stage will also involve the erection of two main 132/33 KV sub-station, at Irbid and in the Kaser area.

146. Upon completion of the transmission lines between the Hussein Thermal Power Station and the city of Irbid, the electricity link will have been realized between the areas of Amman and Irbid, and subsequently between the Jordanian and Syrian grids through the transmission line between Dera' in Syria and Irbid in Jordan. The first stage of the electricity linkage between Syria and Jordan was completed in 1976, with a cost of JD 250 thousand. The second stage is expected to be completed in 1978. This stage aims at strengthening and augmenting the electricity link between the Syrian and Jordan networks by erecting within the Jordanian territory a 20 kms., 230 KV high tension transmission between Dera'a and Irbid and building a main 230/132/66/33 KV sub-station in Irbid to serve as the main connection point between the two networks. The cost of this stage is estimated at JD 800 thousand.

147. Since Aqaba area will house few major industries (fertilizers, pharmaceuticals, oil refinery, etc.), new sources of power are now being considered. This includes nuclear power generation or a desalination plant with a power generation capacity of not less than 300 MW. It is expected that the 1980's or the 1990's will witness the execution of a relatively large power plant. These considerations involve expanding the high voltage transmission grid system to cover all Jordan and to connect Jordan with Iraq, Saudi Arabia, and probably other Arab Gulf Countries, in addition to Syria.

e) Construction

148. Construction includes all private buildings, private building maintenance, Government construction such as buildings, roads, irrigation projects, port facilities, railways, and finally UNRWA construction. The construction sector showed steady developments during the period 1967-1975, with the exception of 1970, and the income which was generated in this sector rose to JD 8.7 million in 1967, declined to JD 7.8 million in 1970, and again rose in 1975 to JD 22 million. This increase was due to the implementation of Government projects in the different sectors, such as the construction of new roads, new dams, the Port of Aqaba, railway projects and private dwellings.

149. The share of this sector in GDP amounted to 4.9, 4.1 and 7.5 per cent in 1967, 1970 and 1975, respectively. The average annual increase in value added generated in this sector for the period 1967-1975 was around 11 per cent, while the average annual increase in GDP amounted to only 6 per cent.

150. Despite expansion in investment in the construction sector, Jordan is still faced with a difficult housing crisis due to a variety of economic, social and political factors, such as the high natural growth in population, the steady migration from rural to urban areas, the flight of large numbers of inhabitants from the occupied West Bank to the East Bank and the general economic and social developments, including the rise in the number of independent households.

151. The housing requirements in the East Bank of Jordan are estimated at 18,000 units annually. Before 1965, investments in housing were mostly undertaken by the private sector. In 1965, however, the Government established the Housing Corporation in order to help solve this critical problem by extending loans to individuals of low

income and to cooperative societies, and by implementing large housing projects for low and middle income groups. The Government also established in 1973 the Real Estate Bank with a view to providing long term housing loans and entrusted the Jordan Valley Authority with the task of providing housing to inhabitants of the Jordan Valley.

152. During the Three-Year Development Plan, 1973 - 1975, 1.6 million square meters were constructed at a cost of JD 45 million, of which more than 50 per cent were constructed in Amman and Jerka. This investment was financed from the following sources:

Source	Investment (JD million)
The Housing Corporation	9.8
The Real Estate Bank	11.0
The Commercial Banks	15.3
The Agricultural Credit Corporation	1.8
Housing Funds in Public and Private Institutions	4.0
The Private Sector	3.1
Total	45.0

f) Transport

153. Development of the transport sector has received great emphasis in Jordan during the past two decades, and particularly during the Three Year Plan, 1973-1975, when an integrated project for phosphate mining, rail transport, and port facilities was initiated and implemented. The transportation sector is considered as one of the main sectors with a direct influence on economic activity. As a result, Jordan has at present a relatively well-balanced and efficient transport network,

adequate to meet the present level of requirements in most areas. Continued development of the transport sector would, however, be crucial for meeting the growth in transport demand arising from the planned growth in exports, imports, transit trade and internal trade, tourism and the social development of various regions of the Kingdom.

154. Bottlenecks may, however, soon develop in the various sectors if further development of transport facilities does not keep pace with the growing tempo of economic activity envisaged under the Five Year Plan, 1976-1980. The plan clearly recognized this need and provided for large investments in the transport sector, amounting to about JD 126 million, nearly 16 per cent of the plan's total outlay of JD 765 million.

155. On the whole, Jordan has achieved progress in implementing transport projects identified in the Three Year Plan and has very nearly fulfilled its targets in this sector. In financial terms, the total expenditure on public sector transport projects was JD 39 million, as against the plan provision of JD 27.8 million. The contribution of the transportation sector to GDP rose from JD 17 million in 1972 to JD 26 million in 1975, or by an increase of 53 per cent.

156. Total investment in the transport sector during 1973-1975, including private sector investments, amounted to about JD 70 million, an amount which makes this sector the largest single contributor to Jordan's capital formation during this period.

157. The bulk of the transport sector investments under the Five Year Plan are designed to cater mining, export and manufacturing projects which form the backbone of the Plan.

158. Most of the investments allocated in the Plan for the transport sector will be undertaken by the public sector; this would cover all investments in roads, railways, ports and airports. Private investments are relatively small, and mainly confined to road transport vehicles and related services. The Five Year Plan envisages a total investment of JD 120 million for the transport sector, including an indicative provision of JD 7.5 million for the private sector. The plan's estimate, however, excludes a major private sector investment of about JD 40 million, which the Jordanian Airlines, Alia, plans to use in expanding its international fleet.

159. The main transport projects in the public sector include:

1. Acquisition of more locomotives and wagons so as to increase the capacity of the railway in moving phosphates from El-Hasa mines to Aqaba Port from an expected 1.2 million tons in 1976 to 4.0 million tons in 1980.
2. Expanding the capacity of the road network with a view to supplementing the railway in carrying the phosphates to the port and to the new fertilizer factory, as well as to meet the heavy demand on road transport to handle the growing internal and transit traffic (the expected transit traffic to Iraq alone, passing through Jordan's port and road system, being 600,000 tons by 1978 under an agreement between the two governments).
3. Expanding port facilities by adding two new floating berths (one was opened during 1977), new storage silos and new mechanized loading plants for handling phosphate exports; and building four general cargo berths and other ancillary facilities to augment the ports general cargo facilities.

160. At the end of 1974, the road network in the East Bank totalled 5,700 Kms, of which 4094 Kms. were asphalted.



161. The Five Year Plan include several projects, the most important of these are:

Azrak-Saudi Border Road: A 56 kms. road linking Jordan with Saudi Arabia, Kuwait and the Gulf States. The estimated cost is JD 1.45 million.

Azrak-H5-Iraqi Border Road: A new 230 kms road extending to Azrak, H5 and the Iraqi border to accommodate the growing transit traffic to Iraq and other Arab countries. The cost is estimated at JD 6 million.

Azrak-Bayer-Jafer Road: A 200 kms road extends from Azrak and Jafer to Ma'an to serve the growing volume of transit trade with Iraq and other Arab countries. The cost is estimated at JD 6 million.

Safi-Aqaba Road: A 187 kms road linking the Southern Ghors region and Wadi Araba with the Port of Aqaba for transporting potash, copper, manganese and other minerals, and for developing the Wadi Araba area. The cost is around JD 4.8 million.

Kufranjeh-Kraymeh-Road: Asphaltting the existing earth road which connects the central and northern parts of the Jordan Valley with the Irbid region for purposes of transporting agricultural products, particularly exports to neighbouring Arab countries. The cost of the project is estimated at JD 525,000.

162. The railway system which exists in the East Bank consists of the following lines:

1. An 87 kms line between Amman and the Syrian border. Its capacity amounted to 54,000 tons per annum at the end of 1975.

2. A 156 kms line between Amman and H~~asa~~.
3. A 261 kms line between H~~asa~~ and Aqaba through Hittiveh Station. The annual capacity of the two sections, the new and the upgraded ones, is 1.6 million tons of phosphate rock from H~~asa~~ to Aqaba and 250,000 tons of general cargo from Aqaba to Amman.
4. A 40 kms line between Ma'an and Ras Lagab

162. During 1973-1975, the 116 kms railway line connecting Hittiyeh on the Sidjaz Railway with Aqaba was completed at a total cost of JD 26 million.

164. The new Plan, 1975 - 1980, calls for raising phosphate transport capacity of the H~~asa~~-Aqaba Railway gradually from 1.6 million tons in 1975 to 4.5 million tons in 1977 and to 7.5 million tons by the end of 1980. The project involves installing additional stations, rail sidings and rolling stock, and developing the communications and signalling systems. The cost is estimated at JD 14 million.

165. The modern development of the Port of Aqaba began in 1959, when a 160 meter deep-sea berth for general cargo was built and the existing lighterage berth was extended to 95 meters. In addition, a 220 meters phosphate berth and two phosphate stores, each with a capacity of 20,000 tons, were constructed.

166. In 1964, another 180 meters berth for general cargo was constructed and the lighterage berth was further extended to 215 meters. Two more phosphate stores, each with a capacity of 60,000 tons, as well as a second 180 meters phosphate berth equipped with automatic loading machinery were constructed.

167. At present, the port facilities also include closed warehouses with an area of 11,000 sqm, two hangars with a total area of 13,000 sq.m and open areas totalling 40,000 sq.m. In 1977 a new cargo floating berth was constructed. The development of the Port of Aqaba and its facilities came as a response to economic development in Jordan and particularly to the substantial expansion in phosphate exports and an increase in Jordan's imports.

g) Trade

1. Domestic Trade

168. Domestic trade plays a major role in the national economy of Jordan as it contributes 15 per cent to domestic income and employs around 30 thousand persons, or 8 per cent of the total labour force.

169. Table III-22 illustrates the importance of this activity in terms of the number and distribution of the commercially active establishments in the East Bank of Jordan.

Table III-22      **COMMERCIALLY ACTIVE ESTABLISHMENTS IN THE  
LAST BANK OF JORDAN (1975)**

District	Wholesale	Retail	Total
Amman	1,500	12,000	13,500
Irbid	1,050	3,650	4,700
Balqa	200	1,000	1,200
Karak	150	700	850
Ma'an	100	650	750
Total	3,000	18,000	21,000

170. Domestic trade contributed JD 19.6 million to GDP at factor cost in 1960 and JD 31.4 millions in 1965. In the East Bank, domestic trade contribution to GDP rose from JD 33 millions in 1970 to JD 52 millions in 1975, an increase of 137 per cent.

2. External trade and payments

171. External trade occupies an equally important position in the national economic life of Jordan. In the mid sixties, commodity imports represented, on average, one-third of gross national product, one-fifth of consumption expenditures, more than one-third of the raw materials and intermediate goods needed for local production, and over one-fourth of total fixed capital formation. Commodity exports, on the other hand, constituted a mere one-twentieth of gross national product and consisted predominantly of agricultural goods and rock phosphates.

172. Table III-23 shows the development of Jordan's commodity trade relations with the rest of the world. It will be noted that the value of exports in 1954 more than doubled by 1962 and continued to grow, reaching JD 10.4 million in 1966, JD 12.2 million in 1970 and JD 48.9 million in 1975. Domestic exports, as well as re-exports, displayed rapid growth, primarily as a result of the sizable expansion in national output of agricultural and mineral products. A decline in exports was started in the third quarter of 1970 due to internal disturbances in Jordan, but regained momentum during the first half of 1971. Again, in the second half of 1971 it was disrupted by border closures. In 1972, Jordan regained stability but the events of 1971 left their mark on foreign trade.

JORDAN'S EXTERNAL TRADE  
(in million)

Table III-23

	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975
Exports (FOB)	4.0	5.3	5.9	6.6	8.7	9.9	10.4	11.3	14.3	14.7	12.2	11.4	17.0	19.0	42.7	48.3
1. Domestic	3.5	4.3	4.9	5.5	7.0	7.7	8.8	10.0	12.2	11.9	9.3	8.8	12.6	14.0	39.4	40.1
2. Re-exports	0.5	1.0	1.0	1.1	1.7	2.2	1.6	1.3	2.1	2.8	2.9	2.6	4.4	5.0	10.3	8.2
Imports (cif)	42.9	41.9	45.6	50.9	53.6	56.1	68.2	55.0	57.5	67.9	65.9	76.6	95.3	108.2	156.4	234.0
Trade Deficit	38.9	36.6	39.7	44.3	44.9	46.2	57.8	43.7	43.2	53.1	53.7	65.2	78.3	89.2	113.7	185.1

Source: Department of Statistics, Jordan External Trade Statistics

173. Commodity imports, on the other hand, increased by about 250 per cent during 1954-1969, and by the same percentage during 1969-1975. This rise in imports resulted from the impressive growth in personal incomes and the growing needs for intermediate and capital goods to sustain economic activity.

174. The gap between exports and imports has, as a result, consistently widened in absolute terms. The visible trade deficit more than doubled from 1954 to 1969 and rose to over three times by 1971; thereafter it declined slightly during 1971-1973 due to the boom year of 1972. The trade deficit amounted to JD 52.7 million in 1969 and JD 185.1 million in 1975.

175. The commodity composition of Jordan's external trade also displayed important changes. As can be seen from Table III-24 the value of exported consumer goods increased by 50 per cent between 1966 and 1969, declined during 1970-1973 and rose again to around JD 16 millions in 1975. Exports of raw materials showed the same trend too. The marked increase in exports was due to expansion in the exports of unprocessed agricultural products, mainly fruits and vegetables and phosphate. Whereas these occupied an insignificant position in the early fifties, phosphate exports have developed fairly quickly and emerged in recent years as the highest single foreign-exchange earning commodity. The value of phosphate exports rose from a meager JD 0.05 million in 1954 to JD 3.3 million in 1966 and to JD 19.6 million in 1975.

176. Imports of consumption goods constitute in value terms by far the largest single item among Jordan's total imports. The value of imports of consumption goods amounted to JD 31.3 million in 1966, and JD 33.4 million in 1971 and rose steadily thereafter reaching JD 90.5 million in 1975. Among imported consumption goods, food and beverages ranked highest, with clothes as second in importance.

177. Raw materials and capital goods ranked second in Jordan's total import bill. Imports of raw materials and capital goods displayed some variation in value terms. Raw materials imports rose to JD 14.7 million in 1966, but fell to JD 13.6 million in 1971 and went up again to JD 57.2 million in 1975. Capital goods imports showed similar pattern, rising to JD 15.1 million in 1966 and falling to JD 13.4 million in 1970 and again rising to JD 82.8 million in 1975.

178. The geographic distribution of Jordan's external trade is given in Tables 25-30 Appendix I. It will be noted that the Arab countries constitute the main market for Jordan's exports.

179. Convinced of the need to expand its exports in order to attain its national objectives, Jordan made serious efforts to open up new markets for its products. Jordan is one of the five founding members of the Council for Arab Economic Unity and the Arab Common Market. In addition, it has concluded trade agreements with Lebanon, Syria, Iraq, Saudi Arabia, United Arab Republic, Sudan, India, Yugoslavia and many other countries.

180. On the other hand, Jordan's imports have come mostly from the developed countries, the United States, the United Kingdom, the European Economic Community, Japan, and other socialist countries. Imports have consistently outpaced exports and the country has consequently faced trade deficits of increasing magnitudes. These deficits were covered partly from net earnings from invisible trade (primarily from tourism and remittances of Jordanians working abroad) and partly from private and official unilateral transfer payments.

181. For over twenty years Jordan has been an exporter of know-how and skills, particularly to neighbouring Arab countries. Thousands

Table III-24 COMMODITY COMPOSITION OF EXTERNAL TRADE, 1966 - 1975  
(JD thousand)

	1966		1967		1968		1969		1970		1971		1972		1973		1974		1975	
	Val.	%	Val.	%	Val.	%	Val.	%	Val.	%	Val.	%	Val.	%	Val.	%	Val.	%		
<u>Domestic Exports</u>	8759	100	9984	100	12172	100	11916	100	9320	100	8817	100	12606	100	14010	100	39437	100	46075	100
Consumer Goods	4733	54	5877	59	6914	57	7085	60	6060	65	5450	62	6196	49	6826	49	13865	35	15999	40
Raw Materials	3634	41	3806	38	4588	38	4562	38	2585	28	2457	28	3947	31	5327	38	20796	53	21544	44
Capital Goods	341	4	258	3	628	5	226	2	672	7	873	10	2463	20	1816	13	4769	12	2528	6
Other	51	1	43	-	42	-	43	-	2	-	37	-	-	-	41	-	7	-	4	-
Re-exports	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10141	-	10315	-	8799	-
<u>Imports</u>	68211	100	55048	100	57492	100	67752	100	65882	100	76627	100	95310	100	108200	100	156507	100	234013	100
Consumer Goods	31333	46	23870	43	27606	48	33887	50	33025	50	33441	44	46287	49	50597	47	69627	45	90513	39
Raw Materials	14696	22	13722	25	12213	21	14593	22	15144	23	13212	18	18772	20	22206	20	29998	19	57222	24
Capital Goods	15100	22	14774	27	13922	24	15239	22	13375	20	17614	23	18626	19	20239	19	40913	26	82877	35
Other	7082	10	2682	5	3751	7	4033	6	4338	7	11960	15	11625	12	15158	14	15969	10	3401	2

Source: Department of Statistics, Jordan, External Trade Statistics



of Jordanians took up employment in these countries at comparatively attractive remuneration and continued to remit their savings to Jordan, partly to support their families, but mostly to have them invested in real estate or business. These remittances have increased substantially and amounted to JD 12.1 million in 1960, to both the East and West Banks. These amounted to JD 13 million in 1971 and to JD 39.4 million in 1975. Similarly, Jordanian emigrants regularly transfer funds to their relatives in this country. These private transfers rose from JD 0.2 million in 1954 to JD 2.7 million in 1966, and to JD 3.5 million in 1973 but dropped to JD 2.4 million in 1975.

182. Meanwhile, Jordan has received substantial amounts in the form of official transfers. These represent the foreign aid given to support the Government budget or in the form of economic and technical assistance, as well as expenditures of the United Nations Relief and Works Agency (UNRWA) and other United Nations organizations. In 1960, official transfer payments amounted to JD 31.4 million and in 1967 they amounted to JD 51.6 million; in 1970 official transfers declined to JD 39.1 million due to discontinuation of financial aids from some Arab States, but in 1975, these transfers rose tremendously to JD 138 million, of which JD 105.7 million came from Arab Governments, JD 22.4 million from the United States and JD 9.9 million from expenditures incurred by UNRWA and other UN agencies in support of their programmes in the country. Table 31 in Appendix I, summarizes Jordan's balance of international payments.

#### h) Services

183. Table III-25 shows that the contribution of this sector to GDP pointed to a steady growth during the period 1960-1976. Between 1960 and 1965, the value added in this sector rose from JD 32 million to JD 45 million, by 141 per cent (East and West Banks of Jordan).

In 1970, it rose to JD 61 million and to JD 73 million in 1973, and increased steadily thereafter to JD 119 million in 1976 (East Bank alone). Between 1970 and 1976, the percentage increase in value added was around 195 per cent and the percentage contribution of this sector to GDP ranged from 35.4 per cent in 1960 to 40.1 per cent in 1976.<sup>1/</sup>

#### Public administration and defence

184. This subsector includes both the Central Government and the Municipalities. In Table III-25, the value added in this subsector increased appreciably, particularly in recent years, due to the active involvement of the government in the economic and social life of the country. In addition, Jordan's expenditures on the armed forces rose from JD 17 million in 1967 to JD 33 million in 1970 and to JD 48 million in 1975. In those same years, total government expenditures amounted to JD 70 million, JD 73 million and JD 251 million, respectively.

#### Ownership of dwellings

185. This subsector comprises the rental value of dwellings. Value added in this subsector (East and West Banks) rose from JD 7 million in 1960 to JD 11 million in 1965, or by an increase of 157 per cent. For the East Bank alone, value added rose from JD 8 million in 1970 to JD 19 million in 1976, by 238 per cent.

#### Education

186. Education in Jordan witnessed significant progress during the period 1960-1975. The Government took into consideration the need for diversifying education and improving techniques, in addition to enforcing obligatory education in elementary, preparatory and secondary classes. Vocational education has been receiving increasing attention.

<sup>1/</sup> Estimated percentage

**Table III-25 VALUE ADDED IN THE SERVICES SECTOR**  
 (At Current Prices, JD million)<sup>1/</sup>

Sub-Sector	1960	1965	1970	1971	1972	1973	1974	1975	1976
Public Administration and Defence	16	21	38	39	40	41	45	55	64
Education	3	6	6	6	7	9	10	11	13
Health	2	2	2	2	3	3	4	5	6
Ownership of Dwellings	7	11	8	8	9	12	14	17	19
Other Community, Social and Personal Services	4	5	7	8	8	8	10	14	17
Total	32	45	61	63	67	73	83	102	119

Source: Jordan Department of Statistics, National Accounts Reports

<sup>1/</sup> The figures for 1960 and 1965 refer to the whole Kingdom of Jordan; for 1970-1975 they refer to the East Bank alone.

187. Value added in education showed steady increase in the period 1960-1976. It rose from JD 3 million in 1960 to JD 6 million in 1965, or by 200 per cent. In 1970, it amounted to JD 6 million for the East Bank alone and to JD 13 million in 1976, i.e. an increase of 217 per cent.

188. During 1973-1975, the Ministry of Education accommodated about 68.9 per cent of the student population; the remainder were accommodated by UNRWA schools (nearly 20.1 per cent), private schools (10.1 per cent) and the University of Jordan (0.9 per cent).

189. As can be seen from Table III-26, enrolment of all students in the academic year 1960/1961 rose from 252 thousand to 409 thousand in 1965/66. The number of students rose from 390 thousand in 1970/71 to 540 thousand in 1974/75. During the period 1973-1975, 244 new educational institutions were established; providing an opportunity for all children between the ages of 6 and 11 years to attend elementary classes, and for 72 per cent the children between the ages of 12 and 14 years to attend preparatory classes and for 35 per cent of youth between the ages 15 - 17 to attend secondary classes.

Table III-26 NUMBER OF STUDENTS, TEACHERS AND SCHOOLS FOR SELECTED YEARS<sup>1/</sup>

	1960/61	1965/66	1970/71	1971/72	1974/75
Number of Students	282,000	409,000	390,000	419,000	540,000
Number of Teachers	9,205	11,474	11,921	13,136	18,054
Number of Schools	1,595	1,929	1,528	1,711	2,231

Source: Department of Statistics, Statistical Yearbooks

<sup>1/</sup> The figures for 1960-1966 are for the East and West Banks of Jordan; thereafter they refer only to the East Bank of Jordan.

190. The University of Jordan was established in 1962. Student enrolment in this University rose from 3,030 in 1972/73 to 5,600 in 1975/76. Post-graduate programmes were introduced in the Faculties of Arts, Sciences and Education and four new Faculties (Medicine, Nursing, Agriculture, Engineering and Technology) were established.

191. In 1975, a royal decree was issued, establishing a second university in Jordan, The Yarmouk University, to be situated in the Irbid Governorate.

192. To encourage vocational education and widen its base, the Ministry of Education established an industrial school and a commercial school in Zerqa, and started the construction of an industrial school at Sweileh, in order to provide technicians to various sectors of industry. The Ministry also established a Polytechnic Institute and a Trade Training Centre at Marka, with a two year study programme. The Centre will graduate 260 technicians annually in electrical, mechanical, civil and architectural engineering, surveying, laboratory work, and chemical engineering, as well as 167 technicians in other skills. A vocational school for girls and a center for intensive short-term training in constructional trades were established in Amman. A trade training centre was opened in Mafrak and a similar one in Jerash. Industrial centres at the preparatory level were also opened in Irbid, Zerqa and Salt and vocational training centres for girls were opened in Amman, Irbid and Zerqa.

#### Health

193. Health services showed progressive improvements in the early seventies. The average infant mortality rate has dropped to 22 per thousand, and malaria has been completely eradicated. The Ministry of Health is also maintaining a continuous campaign to eradicate tuberculosis and inoculate large sections of the population.

194. The total number of hospitals (Government, private and foreign private) in the East Bank of Jordan in 1975 was 30. In 1975, three more hospitals were constructed. (See Table III-27 below).

Table III-27 NUMBER OF HOSPITALS IN JORDAN<sup>1/</sup>

	1960	1965	1970	1972	1975
Govt. Hospitals	24	25	12	12	12
Private "	13	12	8	8	11
Foreign Private Hospitals	12	17	7	7	7
Total	49	54	27	27	30

195. Table III-28 shows the number of physicians, dentists, pharmacists, midwives, professional nurses and bacteriologists in Jordan.

Table III-28 NUMBER OF MEDICAL PROFESSIONALS<sup>2/</sup>

	1960	1965	1970	1972	1975
Physicians	292	420	609	688	744
Dentists	54	66	94	112	145
Pharmacists	125	190	171	203	285
Midwives	124	280	163	181	167
Nurses (professional)	N.A.	N.A.	287	331	331
Bacteriologists	N.A.	N.A.	24	28	38

<sup>1/</sup> The figures for 1970-1975 refer to the East Bank only.

<sup>2/</sup> The figures for 1970-1975 refer to the East Bank only.

196. Health services now reach nationals in all governorates of the Kingdom. During the early years of the seventies three medical centres were established at Shobak and Wadi Musa, and work has started on a mental hospital in the Amman Governorate. In 1975, the Ancillary Medical Services Training Institute was inaugurated with an enrolment of 215 trainees, receiving training in the various ancillary medical services. Several public hospitals in Amman, Zerka and Irbid were expanded and residential quarters for nurses were constructed. The 550 bed Amman Civil Hospital, inaugurated in 1973, became the Jordan University Hospital and was attached to its medical school. The Royal Military Medical Services were greatly expanded. They now provide medical insurance to all families of Armed Forces Personnel. Statistics on Medical Services in Jordan reflect the remarkable expansion that has occurred during the last five years. There are now 189 village clinics, 27 medical centres, 39 maternity and child care centres, 6 tuberculosis control clinics and 4 malaria eradication centres.

197. As can be seen from Table III-25, the value added in the Health Sector remained stable between 1960 and 1971. In 1976 it amounted to JD 6 millions.

198. The Five Year Plan, 1976-1980, allocated resources for the establishment of 11 new health centres, four new hospitals, the construction of new buildings for the nursing college, and the construction of a laboratory for controlling the quality of various drugs marketed in Jordan.

1) Tourism

199. Jordan is richly endowed with religious, archaeological and historical sites. The Government had been giving special attention to improve tourism because of its significant contribution to output and employment and to total earnings of foreign exchange.

200. Jordan's tourism has witnessed a phenomenal expansion until 1967. As can be seen from Table III-29 the number of tourists increased from 122 thousand in 1960 to 501 thousand in 1965, which resulted in increasing income from JD 3.2 million to JD 9.8 million. This expansion was halted by the 1967 June war, and the number of tourists dropped to 375 thousand in 1968 and 322 thousand in 1970. In 1976, the number of tourists rose to 1,063 thousand, and income from tourism amounted to JD 21 millions in 1975.

201. Tourism investments in the years 1973-1975 exceeded JD 6 millions. These were spent mainly on expansion of hotel facilities in Amman and Aqaba and on the development of some tourist sites, such as Petra, Debbin, Jerash, Azraq, Ma'in Hot Springs and the Dead Sea Coast.

202. Before the June war of 1967, the majority of tourist accommodations were concentrated in the West Bank. After the June war, the East Bank of Jordan had to increase all types of tourist facilities. Consequently, there was a noticeable increase in the number of hotels, restaurants, etc., during the early years of the seventies. The number of hotels increased from 110 in 1974 to 123 in 1975. Tourism in Jordan is still in need for development and improvement in order to attract a greater number of tourists.

j) Finance

Public finance

203. The Jordanian Government, faced with a host of political, economic, and military challenges, has managed, despite its limited financial resources, to meet its growing national responsibilities and allocate a significant proportion of its budget for development purposes. Realizing the importance of institutional aspects to the development process, serious attention was duly given to the



Table III-29  
NUMBER OF TOURISTS, BY NATIONALITY  
 (Thousand)

Nationality	1960	1965	1968	1970	1973	1975	1976
Arabs	65.0	289.4	279.4	223.4	258.6	431.1	746.1
Europeans	19.9	88.4	15.0	14.5	19.2	44.2	68.0
Americans	28.2	53.8	3.5	4.6	9.8	31.9	40.3
Others	8.6	69.7	77.5	79.2	20.3	200.4	209.0
Total	121.7	501.3	375.4	321.7	307.9	707.6	1,063.4

1/ Inquiries for 1960 and 1965 refer to both East and West Banks; thereafter they refer to the East Bank only.

improvement and modernization of the government system. Existing institutions were strengthened and new ones established so that they could serve as effective agents and efficient vehicles of sustained economic growth and rapid social progress.

204. As can be noted from Table III-30, total government expenditures have steadily grown. They have more than doubled during the period 1968-1976, rising from JD 80.5 million in 1968 to JD 222.9 million in 1976. Of these, recurring expenditures have increased by 252.6 per cent in the same period, rising from JD 57.2 million to JD 144.5 million.

205. Capital expenditures also rose steadily during the same period, from JD 23.3 million in 1968 to JD 78.4 million in 1976, an increase which amounts to 336.5 per cent. Their share in total Government expenditures has consequently risen from 28.9 to 35.2 per cent, respectively.

206. Total Government revenues have likewise increased from JD 71.9 million in 1968 to JD 185.9 million in 1976, i.e., by about 258.6 per cent. This is largely attributable to the substantial growth in domestic revenues which almost quadrupled during this period, whereby they rose from JD 26.3 million to JD 117.5 million. The rapid rise in domestic revenues is attributed to a number of new fiscal measures and improvements in collection methods, in addition to the rise in national income and the resulting increase in imports and custom duties.

#### Money and credit

207. Considering Jordan's currency system and the economy's heavy dependence on foreign trade, monetary and financial developments have been instrumental in maintaining the internal and external value of money. Until 1964, the currency and monetary affairs of the

Table III-30  
SUMMARY OF CENTRAL GOVERNMENT BUDGET, 1968 - 1976  
(JD million)

	1968	1969	1970	1971	1972	1973	1974	1975	1976
<b>REVENUES</b>									
a) Domestic	71.9	76.3	68.2	78.2	25.7	105.0	125	133.2	185.2
b) Foreign Grants	26.3	32.5	30.3	35.8	42.6	46.2	63.2	84.2	110.5
c) Foreign Borrowing	40.1	38.4	35.4	35.3	44.5	45.6	53.0	30.0	41.1
d) SDRs	5.4	4.7	2.1	3.6	7.4	12.1	8.9	19.0	17.8
e) Expected loans and technical assistance	-	-	-	1.8	1.1	-	-	-	-
f) Loans Repaid to Central Government	-	-	-	-	-	-	-	-	3.0
g) I.M.F. (Compensatory Financing)	0.1	0.7	0.4	0.1	0.1	-	-	-	-
h) Domestic and Foreign Loans	-	-	-	1.6	-	1.1	-	-	-
	-	-	-	-	-	-	-	-	13.5
<b>EXPENDITURES</b>									
a) Recurring	80.5	88.4	80.7	88.1	101.5	113.5	151.5	209.4	222.2
b) Capital	57.2	65.2	59.0	60.7	70.5	78.6	104.8	136.3	144.5
	23.3	23.2	21.7	22.4	31.0	40.9	46.7	73.1	78.4
<b>SURPLUS OR DEFICIT</b>	<u>-8.6</u>	<u>-12.1</u>	<u>-12.5</u>	<u>-4.2</u>	<u>-5.8</u>	<u>-14.5</u>	<u>-26.4</u>	<u>-16.2</u>	<u>-37.0</u>
<b>DOMESTIC BORROWING</b>									
a) Treasury Bills	8.4	8.4	4.2	12.1	5.0	6.8	13.0	7.0	17.0
b) Government Bonds	-	-	-	8.4	-	2.8	5.0	1.0	6.0
c) Public Corporations Bonds	-	-	-	3.0	5.0	4.0	8.0	6.0	9.0
d) Loans from Domestic Banks	-	-	-	-	-	-	-	-	2.0
	-	-	-	0.7	-	-	-	-	-

Kingdom were managed by the Jordan Currency Board and the Currency Control Department in the Ministry of Finance. The functions of the former were limited to issuing and redeeming local currency in exchange for sterling and investing the currency cover in British treasury bills and Government securities, whereas the latter was responsible for exchange control, including the issuance of currency permits and the stability of the external value of the dinar.

208. The need, however, was soon felt for the establishment of a Central Bank to design and manage monetary policies aimed at furthering national economic and social development. Law No. 4 for 1959, as amended in 1960, was accordingly promulgated and the Central Bank of Jordan commenced its operations on October 1, 1964. These laws were superseded by the Central Bank Law for 1966 which in turn was replaced by the Central Bank law for 1971. The main functions of the Central Bank are to regulate credit, issue currency, help maintain monetary stability, and act as a banker for banks and Government. The total assets of the Central Bank have increased from JD 58.9 million in 1966 to JD 107 million in 1970 and to JD 252.6 million in 1976.

209. Recent years have also witnessed a significant expansion in the number and scale of operations of private financial institutions. There are at present 12 commercial banks and 70 branch offices operating in the country. In the near future, two new commercial banks will operate, raising the total number of the commercial banks to 14.

210. Total assets of commercial banks rose from JD 70.3 million at the end of 1966 to JD 76.4 million at the end of 1970 to JD 301.5 million at the end of 1976. The sharp increase between 1970-1976 was due to the expansion in loans and advances, which was made possible by expansion in deposits of the private sector. Most of commercial bank credit has been confined to transactions related to internal commerce and external trade.

211. Meanwhile, existing specialized public credit institutions were re-organized and new ones created to augment the flow of adequate financial resources into priority sectors. The special and saving institutions are:

- The Industrial Development Bank
- The Housing Corporation
- The Housing Bank
- The Agricultural Credit Corporation
- The Municipal and Village Loan Fund
- The Jordan Cooperative Bank
- The Post-Saving Fund

Money supply

212. The process of rapid growth in Jordan was accompanied by substantial monetary expansion, largely to finance progressively increasing levels of national output and partly to meet the changes in liquidity preferences. As can be seen from Table III-31, money supply increased from JD 47.1 million at the end of 1965 to JD 105.4 million at the end of 1970 and to JD 263.6 million at the end of 1976.

213. Currency in circulation and demand deposits increased by more than ten-fold during the period (1960-1976). Consequently, the proportion of demand deposits to money supply rose from 40 to 44.2 per cent during the five years, 1960 - 1965. In 1970, it dropped to 21.8 per cent, but again rose to 38.7 per cent in 1976. This latter phenomenon is significant from the point of view of the development of banking habits, trading practices, and liquidity preferences of Jordanians, reinforced by their growing confidence in the national economy and its future prospects.

Table III-31 MONEY SUPPLY & QUASI-MONEY AT END OF YEAR  
(JD million)

End of Period	Currency Issued (1)	Currency held by Banks (2)	Currency with the Public (3)=(1-2)	Demand Deposits (4)	Money Supply (5)=(3+4)	Quasi-money (6)	Demand Deposits as a per cent of Money Supply (7)
1960	-	-	15.6	10.4	26.0	-	40.0
1964	24.4	1.4	23.0	16.7	39.7	13.8	42.1
1965	27.6	1.3	26.3	20.8	47.1	17.0	44.2
1966	31.9	1.6	30.3	25.7	56.0	19.8	45.9
1967	53.0	1.5	51.5	23.7	75.2	18.8	31.5
1968	65.3	1.8	63.5	24.4	87.9	20.8	27.8
1969	73.1	1.9	71.2	24.9	96.1	22.6	25.9
1970	84.4	2.0	82.4	23.0	105.0	23.7	21.7
1971	84.6	1.6	83.0	25.0	108.0	27.1	23.1
1972	83.4	1.9	81.5	33.6	115.1	31.5	29.2
1973	99.5	2.1	97.4	41.8	139.2	36.8	30.0
1974	118.0	2.5	115.5	54.7	170.2	46.5	32.1
1975	141.9	2.9	139.0	79.5	218.5	59.2	36.4
1976	164.9	3.4	161.5	102.1	263.6	95.3	38.7

## Chapter IV

### INDUSTRIALIZATION POLICIES PURSUED AND INSTRUMENTS ADOPTED BY THE GOVERNMENT

#### A. Summary of Industrialization Policies

214. Basically, Jordan has adopted a policy of free enterprise with no government intervention unless it is found necessary. Consequently, the Jordan economy is overwhelmingly in the hands of the private sector. However, policies pursued and instruments adopted by the Government played an important role in formulating economic development, in general, and development of the industrial sector, in particular. Formulation of these policies was very much affected by the political and social conditions that prevailed in different periods:

#### The First Phase, 1948-1961

215. As a result of the 1948 events, Jordan faced difficult economic and demographic problems due to the great influx of Palestinian refugees. Within a short period, Jordan's population almost tripled without a corresponding increase in resources. Consequently Government industrialization policy was concentrated on:

1. Building up of infrastructure
2. Protecting infant industries from external and internal competition through either the banning of imports of similar goods or the levying of high import and custom duties or through the restriction of licenses granted to internal competitors if the commodity already produced satisfies local demand and sold at reasonable prices.

3. Encouragement of import-substitution industries.
4. Encouragement of labour-intensive industrial projects.
5. Encouragement of establishment of relatively large industrial enterprises through:
  - a) Granting of special concessional rights.
  - b) Government participation in share capital.
  - c) Extention of technical and financial aid to industrial firms whenever necessary including preparation of pre-feasibility and feasibility studies.
  - d) Granting almost all local industries the incentives and facilities incorporated in Law No. 27 of 1955 "Law of Encouragement and Guidance of Industry".

Instruments adopted

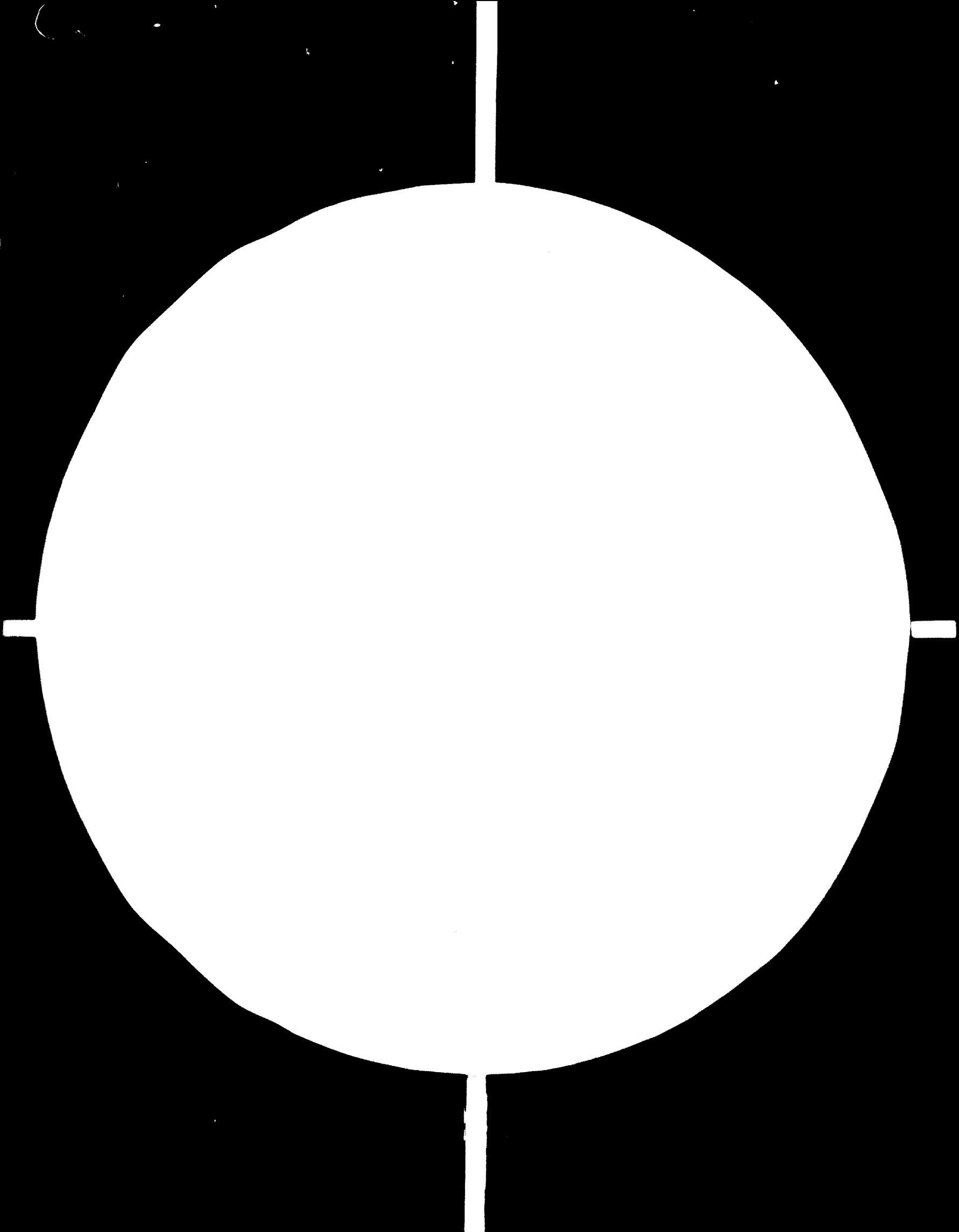
1. Enacting two laws, one for "the Encouragement and Guidance of Industries", No. 27 of 1955 and the other for "Encouragement of Foreign Investments" No. 28 of 1955.
2. Adoption of concessional laws to encourage the establishment of relatively large industrial share-holding companies that exploit natural resources, i.e., cement, petroleum refinery, potash, tannery etc.
3. Putting into practice the policy of protecting and prohibiting the import of goods similar to those which locally produced.
4. Conducting pre-feasibility and feasibility studies for potential industries.
5. Participating in the share-capital of relatively large industries which exploit available natural resources.



**C-34**

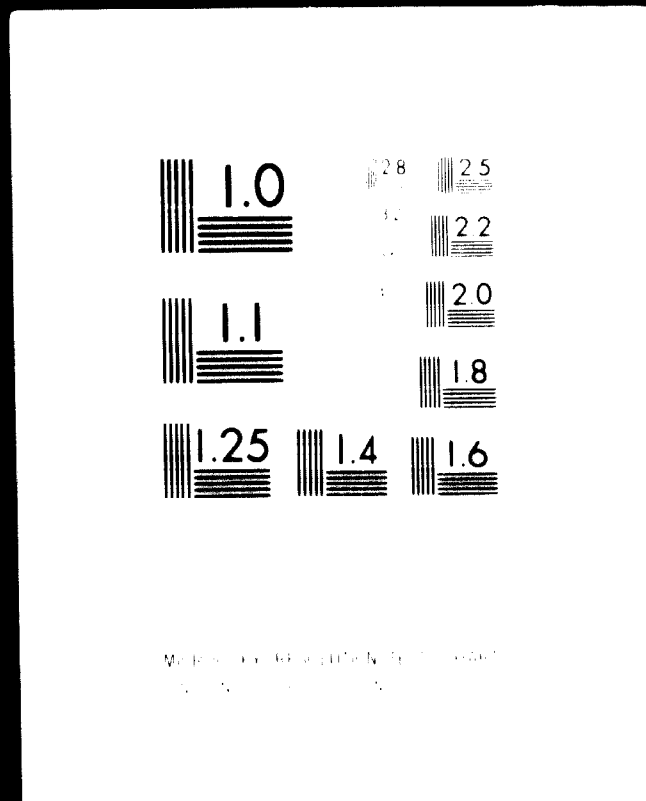


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The Second Phase, 1962-1966

216. Policies pursued

1. Continuation of preparation of well developed projects that contribute to the enhancement of economic development, in general, and development of the industrial sector, in particular.
2. Continuation of the policy which left industrial development in the realm of the private sector.
3. Continuation of the granting private industrial enterprises generous incentives and facilities provided in the Law of "Encouragement and Guidance of Industry ", No. 27 for 1955.
4. Encouragement of joint ventures.
5. Encouragement of the establishment of share-holding companies.
6. Encouraging of the establishment of labour-intensive industrial enterprises.
7. Maintenance and protection of vigorous industrial activities already started.

Instruments adopted

1. Conducting pre-feasibility and feasibility studies for potential industrial enterprises through the Jordan Industrial Development Center which was established for this purpose.
2. Conducting courses in business management, accounting, time and motion studies, maintenance, linear programming and industrial cost accounting, which were organized in co-operation with UNIDO and ILO.
3. Establishment of the Industrial Development Bank.

4. Establishment of a Standard and Specification Bureau within the Ministry of National Economy.
5. Reorganization and expansion of the staff of the industry section in the Ministry of National Economy and elevation of this section to a directorate level.
6. Adoption of a new law for "Encouragement of Investment", No. 1 of 1967 to replace the old two laws "Encouragement and Guidance of Industry" No. 27 of 1955 and Law No. 28 "Encouragement of Foreign Investment" of 1955, and the establishment of the Jordan Investment Promotion Office (JIPO).

#### The Third Phase, 1967-1970

217. The 1967 June War resulted in the occupation of the West Bank, curtailment of the developmental thrust, rise in military expenditure at the expense of development efforts and suspension of a large number of projects included in the Seven Year Plan. Government efforts were dispersed, but policies adopted in the previous period were enforced and continued despite the political, social and economic instability. In this period, Government attention was focused on appraisal of the damage inflicted on the industrial sector as a result of the June War and the internal disturbances that prevailed during the whole period. Consequently, no new instruments were developed during this phase.

#### The Fourth Phase, 1973-1975

##### 218. Policies Pursued

1. A rise in income accruing from the industry and mining sector from JD 21 million in 1971 to JD 35.5 million in 1975, or by 69 per cent.
2. Fully utilizing idle productive capacities in existing industrial and mining enterprises, which range between 25-35 per cent of installed capacity.

3. Creating not less than 9,000 new job opportunities.
4. Realizing a better geographical distribution of industrial establishments in all regions of the country.
5. Realizing a higher degree of inter-relationship among industries, on one hand, and between the industry and mining sector and other economic sectors, on the other. Also providing for stronger industrial compatibility with Arab countries.
6. Raising the value of exports of industrial and mining products from JD 4.8 million in 1971 to JD 12 million in 1975, and encouraging the production of more import-substitute commodities.

Instruments adopted

1. In order to increase income generated from industry and mining sector, the Government established the Industrial Development Corporation whose functions included expansion and development of existing industries and the establishment of new industrial and mining projects in cooperation with the private sector. This was accomplished through the utilization of government equity in public share-holding companies as a revolving fund.
2. Revision of the Encouragement of Investment Law No. 1 of 1967 with a view to granting more incentives to industrial investment and encouragement, through the granting of more generous incentives of the establishment of industrial enterprises outside the Amman-Zerka area in order to insure better geographical distribution of these projects.
3. Revision of the system of industrial licensing with a view to prohibiting duplication of existing industrial projects, protecting local industries through tariff rate manipulation, and enforcing standard specifications on locally produced commodities with a view to encouraging exports of domestic production.

4. Establishment of a special fund in the Industrial Development Bank for extending loans to craftsmen and small-scale industries.
5. Conclusion of various bilateral and multilateral agreements with Arab States as well as foreign countries, in order to ensure preferential treatment for Jordanian imports into the markets of these countries.

The Fifth Phase, 1976-1980

219. In this period, policies pursued by the Government have undergone drastic changes due to the changes in objectives. High priority is being given to commodity-producing sectors and related infrastructural projects in order to correct the imbalance in the structure of the national economy and to disperse economic activity outside the densely populated areas. The ensuing changes would be instrumental in rendering the Jordan economy more capable of self-sustenance on the grounds that development should be effected from within the country, rather than through foreign assistance and partnership.

220. Consequently, the industrial and mining policies during this period would be to:

1. Increase income originating in this sector from JD 45 million in 1975 to JD 144 million in 1980.
2. Achieve better geographical distribution of new industrial sites, as a contribution to regional development.
3. Develop activities of this sector through:
  - a) Processing of local raw materials into finished products, where this is economically feasible, and exporting raw materials which can not be processed.

- b) Establishing and developing food industries, with particular emphasis on the processing of local agricultural products.
  - c) Establishing new processing industries and expanding existing ones with a view to producing import-substituting consumer and intermediate goods as well as export-oriented commodities.
4. Achieve greater degree of integration and interaction among local industries within the sector and between the industry and mining sector and other economic sectors.
  5. Increase domestic exports of industrial and mining products from JD 33 million in 1975 to JD 150 million in 1980.
  6. Continue the geological studies on prospective local raw materials in order to determine exploitation feasibility; and concentrate efforts on oil exploration in various parts of the country.

Instruments adopted

1. Confine the functions of the Natural Resource Authority to the exploration of mineral deposits, oil, natural gas, and water; conducting related research and preliminary technical studies to determine exploitation possibilities; and design and implementation of irrigation projects in the high lands.
2. Establish, within the Natural Resources Authority, a specialized technical division to explore for oil and natural gas.
3. Establish a committee to re-examine the customs tariff structure with a view to making it more conducive to the establishment of local industries, through the exemption of primary raw materials from custom duties. This is designed to put local production on an equal footing with similar industrial products imported from countries which enjoy special exemptions either by virtue of economic agreements



or of the provisions of the Arab Common Market.

4. Provide incentives to export-oriented industries. Such incentives would call for simplifying procedures for temporary entry of raw materials and for permitting rebates proportionate to exports, calculated on the basis of a formula developed for each industry.
5. Demarcate industrial estates and zones in each of Amman, Zerka, Irbid, Salt, Aqaba and other regions, and provide these regions with electricity, water and other infrastructural facilities, including housing. Special exemptions will be given to industries which move into such zones.
6. Modify industrial licensing procedures in order to allow industries to be established regardless of duplication; license industries involving less than JD 25 thousand in machinery without requiring feasibility studies and simplify licensing procedures and requirements.
7. Continue the Government practice of taking initiative in regard to the setting-up of productive projects in various fields and participation in their capital.
8. Enforce standard specifications and control procedures with regard to national industrial products.
9. Modify the Encouragement of Investment Law No. 53 of 1972 with a view to:
  - a) Providing additional incentives to export-oriented projects.
  - b) Permitting individual foreign investors to establish industrial export-oriented projects either on their own or through unlimited participation with local capital.
  - c) Providing additional privileges and incentives to industries which produce primary and/or intermediate products for use in existing industries.
  - d) Giving greater incentives to public share-holding companies.

10. Review the role of the Industrial Development Bank with a view to enhancing its effectiveness in industrial development.
11. Augment the staff of the Amman Chamber of Industry so as to enable it to answer inquiries related to industrial investments.
12. Set-up a vocational and handicraft training fund, and encourage the establishment of cooperative societies for handicraftsmen with a view to enabling them to obtain the necessary financing.
13. Exert every effort in the area of Arab industrial coordination and cooperate with other Arab countries to implement technically and economically viable joint industrial projects.
14. Hold an industrial fair as soon as possible.

#### B. Industrialization Policies

##### Introduction

221. Industrialization policies pursued and instruments applied by the Government of Jordan contributed considerably to economic development, in general, and to industrial growth in particular.

222. As a matter of convenience, and in order to present a systematic and historic evolution of industrial policies pursued by the Government, it may be necessary to categorise the 1948-1976 period into five distinct time phases.

The First Phase, 1948-1961

A. Industrial investment climate

223. The difficult economic and demographic problems which faced Jordan as a result of the 1948 events led to great repercussions in the social and political life of the country, as most of the Palestinian refugees who sought refuge in Jordan, were relatively poor. Considerable government resources were diverted from economic development for relief to displaced people and for establishing refugee camps. The first few years that followed the 1948 events witnessed economic stagnation and political instability which continued until 1952 when the Government, with the help of Arab states, friendly countries and UNRWA, began to focus its efforts on building infrastructural projects and providing jobs for a large number of people. Jordan, which was regarded as one of the least developed countries in the world, had a very low per capita income which did not encourage investment in industrial enterprises. The persistent need for building materials to house refugees, for food and clothings, has led to the establishment of very small industrial ventures, scattered haphazardly, mostly located in residential areas.

B. The role of the private sector

224. Potential industrial investors in Jordan were limited to a group of merchants who were not very used to quick returns on their investments. However, the heavy demand for building materials convinced few of them to participate in establishing a relatively medium size plant for the production of cement whose raw materials were available locally. The authorities, represented by the Ministry of National Economy (established in 1952) decided to participate in the share capital of the proposed project up to 49.5 per cent and a public shareholding company with concessional rights emerged.

225. Having succeeded in establishing a relatively medium sized industrial plant for the production of cement, the private sector, led by the merchants class, realized in 1956 that the establishment of a petroleum refinery would also be a viable venture. With more Government support and encouragement, a similar procedure was followed and a more generous concession was granted to the public shareholding company that was formed to implement this important and vital project. On the basis of the merchants' unanimous agreement, government participation in the share equity capital of this company was limited to only 16 per cent. The petroleum refinery started production in 1961.

226. Throughout the twenty-year period that followed the establishment of the first relatively large industrial enterprise, the private sector followed similar procedures in establishing other industrial plants, and was granted concessional rights, including the privilege of exempting imports of raw materials, machinery and equipment, transport facilities, etc. from customs duties.

C. Policies pursued by the government

227. During the 1948-1961 period, Government's role had been limited to the following:

1. Providing various forms of protection to infant industrial establishments through the manipulation of tariff duties levied on similar imported products. Some of these protective devices were prohibitive, while others were quite high.
2. The banning of import goods which are similar, or even substitutable, to those produced by public shareholding companies that enjoy concessional rights; and whenever the production of those companies fell short of satisfying domestic demand they alone had the right to import the quantities which are in short supply provided that these are sold at prices agreed upon between the Government and the importing company.

3. The granting of full protection, including the banning of imports of similar or substitutable goods, to smaller industrial enterprises provided that these companies are able to satisfy local demand at acceptable prices and quality.
4. Refraining from interfering with the private sector and affording it all possible help and advice.
5. Maintaining the confidentiality of all information relevant to local industries.

D. Instruments adopted by the government

228. 1. Having given the industrial sector the highest priority, the Government enacted two laws:
- a) Law No. 27, for 1955 "Encouragement and Guidance of Industry"
  - b) Law No. 28, for 1955 "Encouragement of Foreign Investment"

These two laws were replaced by Law No. 1 of 1967 "Encouragement of Investment".

2. An industry section was established as an integral part of the Ministry of National Economy. At the outset, this section was staffed by three officials; a chemical engineer, an economist and a cost accountant. One of the main functions of this section was to study license applications and appraise industrial projects.
3. Various exemptions were granted to industries in accordance with the provision of the Law No. 27 mentioned above. These exemptions were granted either fully or partially to most industrial firms. They included, among other things, exempting industry from various types of taxes (income, buildings, and social welfare) for a period of four years, and exempted imports of needed machinery from customs duties.

4. The Economic Development Committee which was formed in accordance with the provisions of Law No. 27 for Encouragement and Guidance of Industry, acted as an advisory committee on measures to be adopted for accelerating the growth of industrial development.
5. The Government conducted a number of feasibility studies for major industrial projects. The costs of these studies were considered as part of the Government share in the capital of the companies that were subsequently formed.

#### E. Results

229. By 1961, the year which represents the end of this period, local industrial production rose from an almost insignificant figure to JD 26 million, of which JD 1.8 million was exported. Since unemployment was high, the Government encouraged labour intensive projects and took the number of jobs provided by any projects as a yardstick for the viability of that project.

#### The Second Phase, 1962-1966

##### A. Economic Setting

230. In the early part of 1962, a Five-Year Plan was prepared for the economic development of the country. The Plan aimed at fostering the rate of growth in all sectors of the economy. Later, a decision to reduce Jordan's dependence on foreign budget support necessitated revision of the Plan and adoption of the targets aimed at attaining self-sufficiency through:

1. A major reduction in the external balance of trade deficit and a rise in per capita income, at a rapid rate if possible.
2. Creation of new job opportunities with a view to reducing the level of unemployment.

231. The Seven-Year Programme reversed the order of importance of the goals of the earlier Five-Year Programme, namely raising the levels of income and employment, and reducing the deficit in the balance of trade. The new Programme gave the manufacturing sector a new thrust. It emphasized the importance of encouraging the establishment of industrial import-substitution and export-oriented projects with the aim of reducing the external balance of trade deficit.

232. The twin disadvantages that Jordan suffers from, namely, the smallness of the local market and the limitation of natural resources, were thought to be offset by the advantages inherent in the economy, i.e., the ready adaptability of its labour force, and the stability of its prices and rates of exchange.

#### B. Industrial development climate

233. Under the Seven-Year Programme for Economic Development, import substitution and export-oriented industries continued to receive Government support through tariff rate concessions or import banning of goods similar to those produced locally. The application of the Law of Encouragement and Guidance of Industry which granted exemptions from taxes on imported machinery and income to most industries established during this period gave this sector new impetus. The overall industrial development climate was therefore suitable for industrial development, particularly after many infra-structural projects had been completed.

#### C. The role of the private sector

234. With an acceptable development climate brought about by political and economic stability, coupled with Government support, the private sector took new initiatives in establishing industrial projects, and the merchant class formed a nucleus for the evolution

of industrial entrepreneurship in the country. Public shareholding companies continued to be formed for the establishment of relatively large industrial projects, benefitting from concessions similar to those granted in the previous period. Practically all industrial development was left to the private sector, as the Government had no intention of competing with the private sector in this domain. Few industries were set up as franchised ventures with foreign collaborators, such as Amstel and Henninger Beer, Worsted Mills with Hield Brothers of England, Animal Feed with Profima, etc.

D. Policies pursued by the government

235. The Government has consistently attempted to maintain a policy which is consistent with the following general principles:

1. Preparing well developed industrial projects that contribute to the enhancement of economic development.
2. Maintaining economic development, in general, and industrial development, in particular, within the realm of the private sector.
3. Encouraging private industrial enterprises by granting generous incentives.
4. Encouraging joint ventures.
5. Encouraging the establishment of shareholding companies.
6. Maintaining and protecting vigorous industrial activities already started.

E. Instruments adopted by the government

1. Feasibility studies

236. The Government continued to conduct feasibility studies for



various prospective industrial projects that depend on the exploitation of available natural resources.

2. The Industrial Development Centre

237. An Industrial Development Centre was established in the Ministry of National Economy to train technically competent personnel. The Centre, which was mainly staffed by UNIDO and ILO (with local counterparts) conducted courses in business management, accounting, time and motion studies, maintenance, linear programming and industrial cost accounting.

3. The establishment of the Jordan Industrial Development Bank

238. The major source of credit to new and expanding industries in Jordan at that time was the Industrial Development Fund. The Fund had an excellent record for providing industrial loans with a very high rate of repayment, but its financial resources were very limited and worked on revolving fund basis. Because of the limitations imposed on the Fund, a new institution with relatively much more financial resources had to be created. As a result, the Jordan Industrial Development Bank (JIDB) was established in 1965. It had been organized to assist the development of privately-owned and managed enterprises, by providing medium and long-term loans or equity financing in major industrial public share-holding companies.

4. Adoption of the "Encouragement of Investment Law" No. 1, for 1967

239. At the beginning of 1967, a new law for the encouragement of investment was enacted to replace the 1955 laws. The new legislation gave relatively more generous exemptions and

facilities and provided for the expatriation of foreign investment. The main purpose for enacting this law, however, was to extend the income tax holidays to local industrial and other projects so that these can attract foreign investment which the 1955 legislation failed to achieve.

240. 5. The setting-up of a standards bureau within the Ministry of National Economy.
241. 6. Re-organizing and expanding the industrial section in the Ministry of National Economy and elevating it to a directorate level.

#### F. Results

242. The economic achievements of this phase (1961-1966) were expected to render Jordan as a self-sustaining economy, but the June War of 1967 arrested this development momentum and created far reaching economic and social problems. During this period, however, Jordan's economy continued to grow rapid. GDP increased at an annual average rate of 8.3 per cent, rising from JD 109 million in 1962 to JD 150 million in 1966. Although money supply continued to increase at high rates, relative price stability was maintained throughout the period which led to a real increase in per capita GDP of about 3 per cent per annum.

243. Industrial income grew at rates higher than those realized in the first phase. The value added generated in this sector increased at 15 per cent per annum. The fixed assets of the industrial sector rose from JD 6 million in 1959 to JD 20 million in 1965. As a result, this phase witnessed a relative decline in imported consumer goods and sizable increase in imported raw materials and intermediate goods.

244. Industrial growth has been marked by its concentration on a few industries that produce import-substituting commodities which enjoy a modest market demand. Most of these industries have been given a chance to grow under a government umbrella, and in the face of negligible internal competition. The smallness of the market, the scarcity of raw materials and the imposition of administrative and exchange controls on imports by some neighbouring Arab countries have been the prime reason for the hesitation of the private sector to invest higher levels in industrial activities.

245. During this period, the industry sector remained to suffer from lack of a stable policy and a comprehensive set of regulations necessary for the erection of a solid industrial base, because the new instruments adopted by the Government were implemented almost at the end of this phase. Moreover, industrial projects were plagued with low productivity, small size, and a lag in the application of modern management and advanced marketing techniques. Throughout this period, under-utilization of productive capacities was a persistent problem facing industry.

### The Third Phase, 1967-1972

#### A. Investment Climate

246. The first five months of 1967 were a continuation of the accelerated momentum of economic development in which the industrial sector played a primary role as it attained an average annual growth rate of 16 per cent. The 1967 June War, however, stagnated all forms of economic life in the country and military mobilization curtailed development efforts and industry unexpectedly lost half of its natural market as a result of the occupation of the West Bank. The private sector was reluctant to invest or to establish new factories or expand existing ones. The brain drain and labour emigration

increased, especially as a result of higher wages outside Jordan. Political instability in the region made the attraction of foreign and even local investment in industry quite impossible. The internal disturbances were disastrous to economic development in general and industrial progress in particular. Under these conditions of obscure future expectations, economic development declined and the annual growth rate of the industrial sector declined from 16 per cent to 5.2 per cent.

B. The role of the private sector

247. Under such conditions, the non-war no-peace dilemma with its political and military implications, and the internal unrest which was due to the continued occupation of the West Bank, potential local and foreign investors were reluctant to take new moves. Prices and wages also started to rise. The closure of the Syrian border, coupled with the closure of the Suez Canal, had adverse repercussions on the whole economy, especially on the exportation of phosphate to European markets and on the imports of raw materials and intermediate products needed for industrial production, as most of the inventories in Jordan were already exhausted.

C. Policies pursued by the government

248. Occupied with the mobilization of resources for military purposes, the Government in this period did not pursue any new industrial policy with the exception of the evaluation of damages incurred as a result of both the June War and the 1970 internal disturbances. Many small and medium sized industries were either totally demolished or partially damaged. Total loss in the industrial sector in fixed assets was estimated at over JD 2 million. The Government, however, continued to pursue policies described in the previous phase and made some efforts to stabilize prices.

D. Instruments adopted

249. 1. Mobilization of efforts to meet the new circumstances resulting from the occupation of the West Bank which used to form an important part of the local market, including the encouragement of exports.
2. Repair of the infrastructure destroyed during the War and the 1970 internal disturbance.
3. Study and appraise damages inflicted on industrial establishments.
4. Continued adoption of the policies outlined by the Government in the preceding period.

E. Results

250. 1. Restlessness and political instability which characterized this period led to a decline in all aspects of economic development. The annual rate of growth in the industrial sector declined from 16 to 5.2 per cent at current prices, and by one per cent at constant prices.
2. A rise in wage rates resulting from the emergence of political consciousness among the ranks of the labour force.

The Fourth Phase, 1973-1975

A. Investment climate

251. Emerging from the bitter experience of the preceding period, the country gradually began to restore to normal conditions. By 1973 the Government was able to formulate the Three Year Development Plan, which injected into the economy a new thrust and helped to pave the way for regaining confidence in the future development of the country. Industrialists took new initiatives, and expansion and renovation of existing industrial establishments and erection and implementation

of new projects that were studied in the period preceding the war formed the main features and characteristics of this period. Revival of industrial activity was unprecedented and exceeded the rates of growth achieved in previous periods. The annual growth rate in the industrial sector rose 22 per cent, which exceeded by far the growth rates achieved in the past.

249. The phenomenon of a rising cost of living emerged quite markedly in this period. The cost of living index for low income earners in the city of Amman rose from 129.4 in 1972 (1967 = 100) to an estimated 185 in 1975, or at an average rate of 12.2 per cent per annum. This price inflation had adverse effects on the equitability of income distribution.

### B. The role of the private sector

253. The sudden increase in the prices of industrial raw materials and intermediate products, imported mainly from Europe and in local wages were reflected on the costs of industrial goods produced in Jordan for local consumption and for export. As a result, a substantial increase in the cost of living was experienced. The costs of new industrial investments, especially those of fixed assets grew at a rate exceeding 25 per cent per annum. Although potential investors, who anticipated a continuous rise in the cost of machinery were willing to confirm their previous orders for the purchase of machinery, domestic capital, on the whole, was more inclined to invest in quick-return projects of commercial or real estate nature, rather than in industrial development projects.

254. The problems that faced industrialists in this period were numerous: most important of these are:

1. The existing wide gap between production of the large and small industries. The average value added per worker in industries that employ 200 persons or more was estimated at JD 830 per annum as against JD 288 per annum in smaller industries.
2. Dependence of domestic transforming industries on limited local market.
3. Under utilization of productive capacities.
4. Shortage of semi-skilled labour
5. Weakness in inter-industry integration, on the one hand, and in sectoral coordination on the other hand.
6. Lack of technical know-how to upgrade the quality of domestic production.

C. Policies pursued by the government

255. The goals of the industrial and mining sector, as perceived in the Three-Year Plan, 1972-1975, may be summarized as follows:

1. An increase in income accruing from industry and mining from JD 21.0 million in 1971 to 35.5 million in 1975.
2. Making full use of underutilized capacities in existing industrial and mining enterprises, which ranged between 25 and 35 per cent of installed machinery in 1971.
3. Creating about 9,000 new job opportunities during the plan period.
4. Realizing a better geographical distribution of industrial establishments in the Kingdom.
5. Realizing a higher degree of interrelationship among industries, on the one hand, and between the industry and mining sector and other economic sectors, on the other; in addition to providing for stronger industrial compatibility with Arab countries.

6. Increasing the exports of industrial and mining products from JD 4.8 million in 1971 to JD 12 million in 1975, besides participating in the production of import-substitute commodities.

D. Instruments adopted

256. 1. Establishing an Industrial Development Corporation.

Early in 1973 the Industrial Development Corporation was established. The objectives of this Corporation were to expedite industrialization activities in the Kingdom, and encourage the utilization and development of resources.

257. 2. Providing additional incentives for investment promotion.

The Encouragement of Investment Law No. 1 of 1967 had to be revised with the objective of including additional facilities and exemptions extended to all development projects in the fields of industry, tourism, land reclamation and transport.

The new law was designed to encourage the establishment of industrial public share holding companies and of new industrial and other projects outside the Amman-Zerka area in order to decrease the rate of rural migration into urban areas. The new law also incorporated provisions for the granting of adequate guarantees against non-commercial risks and for the establishment of an Investment Promotion Directorate in the Ministry of National Economy.

258. 3. Revising the bases for industrial licensing along the following major elements:

- a) Prohibiting the establishment of new industries with a fixed capital (machinery and equipment) exceeding JD 20,000<sup>1/</sup>

<sup>1/</sup> This figure has been raised to JD 50,000 in view of inflated prices of machinery and equipment, while the period during which implementation is to take place has not been specified due to variations in the nature of projects. Applicants are, however, given a period of six months to inform the Ministry of Industry of the steps that have been taken in regard to the implementation of their projects.



unless an adequate economic feasibility study is prepared. When final approval is granted, a specified period for implementation must be started.

- b) Complying with the conditions in regard to the manufacture of the product and the location stipulated in the license granted.
- c) Unconditionally permitting the establishment of other industries if the capital allocated for machinery and equipment in these industries does not exceed JD 5,000, provided that no large-scale industry is split up into smaller units for the purpose of benefitting from this provision.
- d) Prohibiting the duplication of industry unless the proposed one is of the export oriented type or the existing factory is unable to satisfy local demand.
- e) Adopting a policy for the protection of industry through tariff manipulation.
- f) Exempting from custom duties all imported machinery and equipment needed for the establishment of new industries or for expanding existing ones.
- g) Setting-up and enforcing internationally recognized standard specifications aiming at ensuring good quality of local products.
- h) Requiring that public sector's purchases to be confined to local industrial products as long as they conform with applicable specifications provided that their prices do not exceed those of similar imported products by more than 10 per cent.
- i) Expediting the application of the industrial register system in the Ministry of National Economy.
- j) Issuing special regulation governing industrial safety.

- k) Encouraging the merger of small industries.
- l) Establishing a special fund in the Industrial Development Bank for extending loans to craftsmen and small industries.
- m) Establishing industrial zones in all regions and especially in the Amman-Zerka area, in Irbid, Salt and Aqaba.
- n) Increasing the efficiency of labour in industry through professional and on-the-job training.
- o) Requesting industrial companies and establishments with equity exceeding JD 10,000 to adopt industrial cost accounting.

#### L. Results

259. In the years 1973-1975, the industrial and mining sector in the East Bank expanded faster than envisaged in the Three Year Plan. Income from this sector (at current prices) rose from JD 21 million in 1972 to an estimated JD 45 million in 1975 (JD 8 million of this was due to an increase in phosphate prices), or at an average annual rate of 32.5 per cent. In addition, the sector's contribution to GDP rose from 11.1 per cent in 1972 to 14.8 per cent in 1975. Employment in this sector increased by approximately 8 thousand workers (from 19-27 thousand persons).

260. The Industrial Development Corporation which was set up by virtue of law No. 31 of 1973 was later abolished and replaced by the Department of Studies and Investment Promotion in the Ministry of National Economy (later re-named as the Ministry of Industry and Trade). So far, government funds which have tied up on shares and which were intended to serve as a revolving fund for the development of new industrial projects have not been utilized in the manner in which they were originally conceived.

The Fifth Phase, 1976-1980

A. Industrial investment climate

261. This phase may be characterised as a transitional period during which the country is expected to concentrate on establishing highly productive industrial projects, based on the exploitation of domestic available and proven raw materials and on projects that are complementary to the huge industrial complexes that are being built or expected to be established in the rich oil Arab States. These industries are planned to produce accessories that will be needed for these complexes.

262. As per capita income is rising at a rate higher than the average rate recorded in the cost of living index, savings and investment are likely to rise. One of the means that the Government is using to fight inflation is the issuance of Government bonds and securities. Savers, however, seem to be quite enthusiastic about investing their funds in industrial public share holding companies or in the relatively large-scale industrial projects that are to be established for exploiting local raw materials, such as the potash, or in projects designed for expanding the production of cement, refining and phosphate fertilizers.

263. The following table shows that a relatively large number of industrial projects have been licensed by the Ministry of Industry and Trade in the first two years of this period:

	1975	1976
No. of establishments	82	201
No. of workers	2,424	6,172
Estimated capital requirements (million)	8	18

264. In addition, 300 small establishments with a capital of less than JD 5,000 allocated for machinery were registered during 1976.

265. The main reason for this relatively high rate of industrial activity witnessed in this period is the decision of the Government to relax its policy regarding prohibition of duplication, the potential for growth in exports to the neighbouring oil-producing Arab States and the encouragement of the establishment of export-oriented industries.

B. The role of the private sector

266. The private sector continued to play an important role in economic development. Most, if not all, economic activities are in the hands of local businessmen and entrepreneurs.

267. The relaxation of many industrial restrictions resulting from the drastic change in Government industrialization policy had given the industrial sector new momentum and a competitive spirit unprecedented in the history of industrialization of Jordan. Industrial activity picked up a new rate of growth at the beginning of 1975 and is expected to continue to grow as long as there are export potentials for domestic production.

C. Policies and organizational measures

268. 1. Reduction in tariff rates levied on imported industrial raw material

In order to enable industry to face the competitive challenge created by the reduction of tariff rates on similar imported goods, most of these are imported free of duty from member states of the Arab Common Market. The Government announced, on 15 March 1977, the reduction of duties on a number of

raw materials to 6 per cent of CIF value (4 per cent as an import tax and 2 per cent as additional fees), as well as on all imports of machinery and equipment.

201. 2. Export promotion

because of domestic market limitations and low purchasing power of the population, on the one hand, and the importance of economies of scale, on the other, industry in Jordan had to look for potential markets not only in the neighbouring Arab countries, but also in other parts of the world where Jordanian products might have a comparative advantage. A suggestion has, therefore, been made to the Government for granting export-oriented industries exemptions and facilities directly proportional to their total exports and for simplifying the temporary entrance measures for their raw materials. Studies are being conducted with a view to determining the best means for adopting such a policy.

A second proposal suggested that the Government should consider the adoption of a policy which aims at permitting the duplication of existing industrial projects (with the exception of those that are protected by special concessions) and that, in all cases, unconditional licensing should be granted to all industrial enterprises established for export purposes regardless of their number. However, in cases where Government is a share-holder, studies are to be conducted for ascertaining whether potential export markets exist. The proposal indicated that, as a general rule, licensing should be granted to industries whose machinery costs do not exceed JD 20,000, and that permission for expansion should be automatically given upon request. This policy has been adopted recently. At the same time, the proposal suggested that a suitable antitrust legislation should be enacted in order to encourage industrial enterprises whose capacities exceed the quantities needed to satisfy local demand, to seek outside markets for their products.

270. 3. Participation of the government in industrial companies

The Government currently holds shares in 21 local industrial companies with a total value of around JD 12 million.

While it is understood that the main objective of the Government's contribution to capital formation is to support these industries during their early stages of development, none of these shares, however, has been sold and re-invested in new development projects. Since most of these companies have passed this stage and are not in real need of these contributions, it has been suggested that Government shares should be sold gradually and re-invested in new industrial enterprises that:

- a) produce strategic goods, such as cement, vegetable ghee;
- b) are basic and infrastructural, as electric power generation and distribution;
- c) exploit local raw materials, such as fertilizers and mining;
- d) viable but, for one reason or the other, local entrepreneurs hesitate or refrain from investing in them, or fail to cover the total capital cost of these industries.

271. 4. Quality control and standards

The Standard and Specifications Department in the Ministry of Industry and Trade is not being fully utilized because its laboratories are not yet ready to enable it to enforce set standards and specifications, giving due consideration to local conditions and technical know-how. The Government of Jordan is mindful of the extreme importance of providing the Standards and Specification Department with all the facilities in order to enable it to start functioning as soon as possible. It is expected that this Department will be in full operation by the end of 1977.

272. 5. Foreign investments

In spite of the fact that the first law for encouragement of foreign investments was enacted as early as 1955 and amended twice in 1967 and 1972, results were not encouraging and foreign investment did not find its way through Jordan's industrial sector at an acceptable rate. A new draft law has been prepared with a view to providing more generous incentives to industrial investments, especially to foreign investment and to investments which contribute to the distribution of development projects in the underdeveloped areas of the country, particularly in the southern region. A draft law had been formulated and it is now awaiting approval of the Council of Ministers.

273. 6. Industrial cost accounting

Industrial cost accounting has been the main problem facing Jordanian industries as these have been following various systems of accounting. It is now suggested that industrial firms, with allocations for machinery and equipment exceeding JD 10,000, should follow a standardized system for cost accounting approved by the authorities concerned.

Chapter V

PROJECTIONS OF FUTURE DEVELOPMENT

A. Projections of future development

1. Human resources

274. Population of the East Bank of Jordan is estimated at 2.018 million (1976). Since no new population census has been conducted since the 1961 census, estimation of population growth in the East Bank was calculated on the basis crude birth and death rates together with estimation of the population influx from the West Bank resulting from the 1967 June War<sup>1/</sup>. It is believed that the high rate of growth in population which prevailed in the early seventies may decline moderately in the coming 25 years to 3.1 - 2.7 per cent per annum.

275. Despite the ever decreasing mortality rate due to the special attention given to public health, and mother and child care, it is assumed that future rates of growth will follow the pattern shown in Table I-1.

276. Percentage distribution of population according to age structure in the period 1970-1976 is shown in Table V-2 below. The figures indicate, among other things, that a sizeable increase in the economically

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<sup>1/</sup> Crude birth rates ranged between 46-47 per thousand while death rates averaged 16 per thousand which gave a natural growth rate of population of 3.0 to 3.1 per cent during the early sixties and 3.4 to 3.6 per cent during the early seventies. The influx of population from the West Bank to the East Bank of Jordan, because of the 1967 June War, was estimated at 400,000 persons.



**Table V-1**  
**DETERMINANTS OF POPULATION GROWTH**  
**(1980 - 2000)**

Year	Crude Birth Rate per 1000		Crude Death Rate per 1000	Net rate of growth				Projected Population (000)		
	Constant Fertility	Slightly Decreasing Fertility		High	Med.	Low	High	Most Likely	Low	
1980	46	42	11	35	31	29	2318	2274	2253	
1985	46	40	10	36	30	27	2765	2636	2573	
1990	46	38	9	37	29	25	3315	3042	2910	
1995	46	36	8	38	28	22	3995	3492	3245	
2000	46	34	7	39	27	19	4838	3988	3566	

active population is anticipated within the next 25 years, as the age groups of 1 - 14 and 15 - 39 years constituted in 1976 84.6 per cent of total population, or a total of 1.7 million. These will be economically active at one period or another in the different time phases of the projection period.

Table V-2 PERCENTAGE DISTRIBUTION AGE STRUCTURE OF POPULATION

Age Group	1961	1970	1973	1974	1975	1976
0 - 4	17.8	17.5	17.8	18.8	19.1	19.3
5 - 9	14.8	17.7	18.0	17.5	17.5	17.4
10-14	12.4	15.4	15.6	15.2	15.3	15.4
15-39	37.9	33.2	32.7	32.6	32.3	32.5
40-64	13.4	13.4	13.3	13.0	13.1	13.2
65+over	3.7	2.8	2.6	2.9	2.7	2.2
All ages	100.0	100.0	100.0	100.0	100.0	100.0

277. Since Jordan's population, according to projected rates of growth, is expected to be around 3.988 million by the year 2000 and in view of the expected gradual shift of the various age groups, the distribution of age structure of the population during the different time phases of the projection period is visualized in Table V-3.

Table V-3 PERCENTAGE AND PROJECTED DISTRIBUTION  
AGE STRUCTURE OF THE POPULATION

Age Group	1980		1985		1990		1995		2000	
	%	No.	%	No.	%	No.	%	No.	%	No.
0 - 4	19.1	435	19.2	504	19.1	582	18.5	646	18.6	741
5 - 9	17.5	398	17.5	461	17.8	540	17.2	601	17.3	690
10-14	15.3	347	15.2	402	15.8	480	16.1	562	16.2	646
15-39	32.3	734	32.4	852	32.5	990	33.0	1152	33.2	1324
40-64	13.1	298	13.0	345	12.1	367	12.5	436	12.2	487
65+over	2.7	62	2.7	72	2.7	83	2.7	95	2.5	100
Total	100.0	2274	100.0	2636	100.0	3042	100.0	3492	100.0	3988

278. Not all of the age groups, 15 - 64, are economically active, as a large portion of the population in the age group 15 - 19 is attending school (more than 70 per cent) and women have a low rate of participation, estimated at 10 per cent of total labour. Together, these drastically reduce the size of the available labour force. Concentrated efforts are being made to encourage women to participate in the developmental activities of the country. The anticipated number and percentage of labour, according to age groups, is shown in Table V-4 below.

Table V-4 PERCENTAGE AND NUMBER OF LABOUR FORCE BY AGE GROUPS  
(Percent; thousand)

Age Group	1975	1980	No.	1985	No.	1990	No.	1995	No.	2000	No.
15-39	40	41	301	43	349	45	446	48	553	51	675
40-64	37	38	113	39	131	40	147	41	179	43	209
65+over	18	18	11	17	13	16	13	15	14	14	14

279. The anticipated increase in labour in the age group 15 - 39, from 40 per cent in 1975 to 51 per cent in the year 2000, is based on the assumption that women participation in this age group would increase from about 8 per cent to about 20 per cent in the year 2000.

280. Due to the large doses of developmental activities that are being launched and to the outflow of highly skilled and semi-skilled labour to the neighbouring oil-producing Arab countries, the projected labour force may not be sufficient to cope with all developmental requirements. Jordan may have to import semi-skilled and unskilled labour during the coming generation. The influx of cheap labour may cause productivity to fall. In order to combat this problem, Jordan would eventually have to encourage capital-intensive ventures, thus benefitting from economies of scale. Because of the limitation of the domestic market and the relatively low per capita income, potential export markets would have to be found. This will form a basic shift in the agricultural and industrial policies pursued and the instruments adopted in Jordan.

281. Another problem that stems out of the population structure is the rise in migration from rural to urban areas. The scope and magnitude of this problem is indicated in Table V-5 below.

282. The impact of rural migration becomes more conspicuous when one examines the future labour requirements of the major sectors of the economy. Table V-6 below shows that the anticipated labour force in agriculture will gradually decline from 66 thousand in 1980 to 58 thousand in the year 2000. In the mining and manufacturing sector, a relatively high rate of growth in the labour force is expected to raise the number from 39 thousand in 1976 to 110 thousand in the year 2000.

Table V-5 TOTAL POPULATION PROJECTIONS AND POPULATION STRUCTURE, 1980 - 2000

Year	Total Projected Population (000)			Urban (000)			Rural (000)			Urban as Percentage of Total		
	High	Most Likely	Low	High	Most Likely	Low	High	Most Likely	Low	High	Most Likely	Low
1980	2318	2274	2253	1623	1509	1510	695	705	743	70	69	67
1985	2765	2636	2573	2046	1948	1801	719	738	772	74	72	70
1990	3315	3042	2910	2586	2282	2124	729	750	766	75	75	73
1995	3995	3492	3245	3236	2759	2477	759	733	740	81	79	77
2000	4838	3988	3566	4112	3310	2888	726	678	678	85	83	81

Table V-6 PROJECTED LABOUR FORCE BY ACTIVITY  
(1980-2000)  
(In 000)

Activity	(Year)	1980	1985	1990	1995	2000
Agriculture		66	65	62	60	58
Mining and Manufacturing		42	58	85	96	110
Electricity, Gas and Water		2	4	5	7	8
Construction		42	55	66	79	96
Trade Services		70	83	103	134	157
Transportation		36	43	63	74	85
Finance and Real Estate		6	10	14	17	22
Social and Community Services		150	160	190	257	335
Total Employed		414	478	588	724	871
Total Unemployed		11	15	18	22	27
Total Labour Force		425	493	606	746	898

The trade and services sector is also expected to participate actively in providing a relatively large number of new job opportunities for the future labour force. The number of workers in this sector will increase from 70 thousand in 1980 to 157 thousand in the year 2000. The social and community services sector will retain its lead in providing and generating new job opportunities in the future as the number of workers that will be required by this sector is expected to rise from 150 thousand in 1980 to 335 thousand in the year 2000.

283. Total employed labour force is anticipated to increase from 390 thousand in 1975 to 414 thousand in 1980, or at a compound rate of growth of 1.3 per cent to 478, 588, 724 and 871 thousand in 1985, 1990, 1995 and 2000, respectively, or at a compound rate of growth of about 3, 4.8, 4.8 and 3.8 per cent.

284. The unemployment rate is expected to remain at a low level, relative to the total labour force available, i.e., at 2.1 per cent in 1975, 2.6 in 1980, 3 in each of 1985, 1990, 1995 and the year 2000.

## 2. Future development

### a) Economic development, 1973-1975

285. The Three-Year Development Plan, 1973-1975, which aimed at revitalizing economic activities after the 1970 civil war, succeeded in fulfilling its aims and in causing development momentum to be resumed. Annex table 2 shows that expenditures on GDP at current prices rose from JD 202 million in 1972 to JD 338 million in 1975, or at a compound rate of growth of 19 per cent per annum. At constant 1970 prices, GDP rose from about JD 188 million in 1972 to about JD 237 million in 1975, or at a real compound rate of growth of 8 per cent per annum.

286. Total consumption expenditure on goods and services increased from JD 198 million in 1972 to JD 305 million in 1975 (1970 prices), or at a real compound rate of growth of 15 per cent per annum. Private consumption expenditures on goods and services, likewise rose, during the same period, from JD 152 million in 1972 to JD 206 million in 1975, or at a compound real rate of growth of about 11 per cent per annum, while public consumption expenditures on goods and services rose during the same period from JD 65 million to JD 99 million, or at a compound real rate of growth of 15 per cent per annum. The proportion of private consumption expenditures to total consumption expenditures declined from 68.4 per cent in 1973 to 67.5 in 1975.

287. Gross capital formation registered an increase in the order of JD 210 million (at 1970 prices) during this period while increments attained in GDP as a result were JD 60 million. This gives a capital output ratio, in its simplest concept, of 3.5:1. Exports of goods and services, however, declined from JD 54 million in 1973 to JD 48 million in 1975. Net factor income from abroad displayed an impressive increase from JD 17 million in 1973 to JD 39 million in 1975 or by 230 per cent. This is mainly due to the fact that Jordan has been an exporter of manpower to neighbouring Arab countries. Tens of thousands of Jordanians are now employed in these countries and their remittances amounted to JD 113 million in 1976 (at current prices), or to JD 70 million at 1970 prices.

288. Table V-8 below indicates the relative change in the composition of total economic resources and their uses. It shows that the contribution of GNP to total economic resources declined from 64.8 per cent in 1973 to 60.9 per cent in 1975. Consequently, the share of imports rose from 35.7 per cent to 39.1 per cent during these two years.



28). Meanwhile the resource pattern showed marked relative changes which signify increases in consumption of both the private and public sectors and a drop in gross capital formation and exports of goods and services. This means that the country has been consuming more and saving less for investment purposes. Net factor income from abroad, however, displayed a marked increase which helped to alleviate some of the problems that might have resulted from the increase in consumption and the drop in capital formation.

Table V-7 TOTAL ECONOMIC RESOURCES AND THEIR USE  
( at 1970 market prices)

	1973		1975	
	JD Million	Percent	JD Million	Percent
<b>1. RESOURCES</b>				
a) GNP	213	64.3	270	60.9
b) Imports of Goods and Services	<u>118</u>	<u>35.7</u>	<u>177</u>	<u>39.1</u>
c) Total Resources	331	100.0	453	100.0
<b>2. USES</b>				
a) Consumption of Goods and Services	212	64.0	305	67.4
1. Private	(145)	(43.8)	(206)	(45.4)
2. Public	( 67)	(20.2)	( 99)	(21.9)
b) Gross Capital Formation	47	14.2	61	13.5
c) Exports of Goods and Services	54	16.3	48	10.5
c) Net Factor income from Abroad	17	5.5	39	8.6

290. Table V-9 below shows the contribution of major sectors to GDP in the period 1973-1975.

Table V-9 GDP AT MARKET PRICE BY SECTORS OF PRODUCTION, 1973-75  
( at 1970 prices)

Major Sector	1973		1974		1975	
	Value in JD Million	Percent	Value in JD Million	Percent	Value in JD Million	Percent
Agriculture	15.8	8.10	29.65	13.55	19.60	8.27
Mining and Manufacturing	20.0	10.22	33.19	15.17	39.00	14.77
Electricity, gas and water	2.7	1.38	2.70	1.24	3.15	1.33
Construction	13.7	7.02	13.09	5.98	15.40	6.50
Trade and services	50.5	25.80	50.05	22.88	59.50	25.10
Transport and storage	16.2	8.28	16.17	7.40	18.22	7.69
Finance and Real Estate	13.8	7.05	13.86	6.34	15.40	6.50
Community Services	36.7	18.75	34.65	15.84	38.50	16.24
GDP at Factor Cost	169.4	86.60	193.36	88.40	204.75	86.40
Indirect Taxes	26.3	13.40	25.41	11.60	32.23	13.60
GDP at Market Prices	195.7	100.00	218.77	100.00	237.06	100.00

2)1. Fluctuation in the contribution of agriculture has been a common phenomenon in the Jordanian economy because of the dependence of agriculture on seasonal rainfall. Mining and manufacturing contribution displayed some fluctuation because 1974 was a slack year; but, in general, one could say that the sector had made some headway during the 1973-75 period.

2)2. Electricity, gas and water sector remained at about the same level in the first two years and displayed a marked improvement during 1975 due to the implementation of electric projects and improvements in water supply systems. Construction has dropped in 1974 and rose again but failed to maintain the same percentage although the value of its contribution rose from JD 13 million in 1974 to JD 15 million in 1975. Trade and services maintained the same level of contribution in the first two years of this period.

2)3. Foreign grants and loans play a major role in sustaining economic growth in Jordan. The scope of this role during this period can be shown quite vividly in Table V-10.

Table V- 9 RELATIONSHIP BETWEEN DOMESTIC AND FOREIGN RESOURCES  
AT 1970 PRICES  
(JD million; percentages)

	1973	1974	1975
1. Expenditure on consumption and gross capital formation	259.24	315.05	365.72
2. Surplus on Balance of Goods and Services Plus Factor Income Payments	-46.47	-72.95	-89.35
3. GNP	212.77	242.10	276.37
4. Ratio of (1):(3)	122.23	130.13	132.34

294. The ever increasing dependence of Jordan on foreign aid and loans is a serious problem and the authorities feel that in the coming ten or fifteen years, the country may even have to absorb higher levels of foreign grants and loans in order to use these for investment purposes so that the economy may attain self-sustenance in the long-run.

295. Since agricultural development is rather limited and may soon approach the saturation point because of the limitation in water resource availability and the nature of the cultivable areas, it may seem reasonable for Jordan to concentrate its future development efforts on mining and manufacturing and related infrastructural sectors.

b) Projections of future development in the period 1976-2000

296. The Five-Year Development Plan, 1976-1980, envisages a total investment of JD 765 million at 1975 prices. This relatively large amount of investment would have an important impact on the Jordanian economy, in general, and on the commodity producing sectors and other related sectors, in particular. Of this total investment, about JD 382 million will be undertaken by the public, and the remainder, JD 383 million, will represent investment anticipated to be made by the private sector. The ratio of fixed investments to GDP will increase from 32 per cent in the Three-Year Development Plan period, 1973-1975, to 36.4 per cent in the Five-Year Development Plan period, 1976-1980.

297. Since priority has been given to projects which are expected to contribute to the expansion of production and agriculture, mining and industry, tourism and related infrastructural projects, to

the extent of their bearing on requested expansion of productive capacities, and since most of the required statistical data for 1976 had been acquired from official sources, projections of future economic development for the period 1976-2000 were based on strategies and goals expressed in the Five Year Development Plan and on expectations related to the form and size of anticipated investments and other economic activities. These expectations are based on the reports of the Natural Resources Authority regarding discovered and proven natural resources and the intentions to utilize and exploit these resources in future years. With this background in mind, coupled assumptions regarding the availability of capital and labour, and possibilities of importing technical know-how, the following assumptions were made:

- a) All figures were deflated to 1970 prices in order to avoid price escalations.
- b) Acquired data for 1976, which forms the first year of the Five Year Plan, was used as a starting base for future projections.
- c) Various rates of growth for each of the major economic sectors were given, based upon the set development programme as outlined in the Five-Year Plan, 1976-1980 and visualized of the rates of growth that could be attained at the end of each time-phase of the period up to the year 2000.

298. The values given in Table V-11 were on the basis of the expected rates of growth in each of the major economic sectors in 1980, 1985, 1995 and 2000. Indirect taxes were projected at the following annual compound rates of growth:

	1976-80	1980-85	1985-90	1990-95	1990-2000
Anticipated rates of growth	7.5	7.3	7.2	6.9	6.5

29. On the basis of these calculations, GDP at market price may approach the levels of JD 341 million in 1980, JD 483 million in 1985, JD 682 million in 1990, JD 947 million in 1995 and JD 1,307 million in the year 2000.

Table V-13 INDUSTRIAL ORIGIN OF EXPECTED GDP, 1976-2000  
(AT 1970 PRICES)  
(JD million)

	1976*	1980	1985	1990	1995	2000
1) Agriculture	23	27	30	44	53	65
2) Mining and manufacturing	36	53	80	128	197	288
3) Electricity	3	5	9	14	20	29
4) Construction	17	21	29	37	45	55
5) Transportation	19	28	43	66	92	130
6) Finance	16	23	38	55	81	120
7) Trade	40	49	62	79	101	129
8) Public Adm. and Defence	35	46	61	82	110	147
9) Services	30	41	57	80	113	158
GDP at factor cost	219	293	415	585	812	1121
Indirect Taxes	36	48	68	97	135	186
GDP at market price	255	341	483	682	947	1307
GPI	70	122	216	348	560	902
GNI	325	463	699	1030	1507	2209

\* Agriculture (1976) represents the average value for (1973-1976) due to seasonal fluctuations.

Notes: The growth rates applied to this table are:

	1980	1985	1990	1995	2000
Agriculture	4	6	4	4	4
Mining and manufacturing	As in detail in Table V-16				
Electricity	15	12	8	8	8
Construction	6	6	5	4	4
Transportation	10	9	9	7	7
Finance	10	10	8	8	8
Trade	5	5	5	5	5
Public Adm. and Def.	7	6	6	6	6
Services	8	7	7	6	6

- d) Net factor income which represents remittances of Jordanians working in neighbouring Arab countries was computed on the basis of expectation as to the number and wages of Jordanian labour force working outside the country. Since remittances are expected to increase by about thirteen-fold during the projection period, it follows that these would grow from JD 70 million to about JD 907 million during the period 1976-2000.
- e) Hence, GDP was computed to be JD 463 million in 1980, JD 699 million, JD 1,030 million, JD 1,507 million and JD 2,209 million in the years 1985, 1990, 1995 and the year 2000, respectively.
- f) During the period 1972-1976 imports of goods and services grew at a compound rate of 12 per cent per annum, while imports of goods only grew at a compound rate ranging between 7 - 8 per cent per annum. Therefore, in Table V-12, the expected imports of goods alone were projected at the following rates of growth:

<u>1975-80</u>	<u>1981-85</u>	<u>1985-90</u>	<u>1990-95</u>	<u>1995-2000</u>
7	8	6	6	6

300. Imports of services were given various weights compatible with expected development in each of the five projected periods. The value of imported services was estimated at JD 93 million in 1980, JD 134 million, JD 180 million, JD 210 million and JD 254 million in 1985, 1990, 1995 and the year 2000, respectively.

- g) Exports of goods and services for the period 1972-1976 rose from JD 39.31 million to JD 63.38 million at constant 1970 prices, thus recording a growth rate of about 10 per cent. Goods alone, however, were estimated, for projection purposes,

Table V-11 PROJECTIONS FOR IMPORTS IN MILLION US DOLLARS  
(at market and 1970 price)

	1975	1980	1985	1990	1995	2000
Food and Live Animals	75.2	105.4	154.8	207.1	277.1	370.8
Beverages and tobacco	1.9	2.7	4.0	5.4	7.2	9.6
Crude materials credible except fuel	8.9	12.5	18.4	24.6	32.9	44.0
Mineral Fuels and Related Materials	37.9	53.1	78.0	104.4	139.7	186.9
Animal and vegetable oils and fats	1.9	2.7	4.0	5.4	7.2	9.6
Chemicals and products	18.6	26.1	38.3	51.2	68.5	91.7
Manufactured Goods	68.2	95.6	140.4	187.9	251.4	336.4
Machinery and Trans- port Equipments	112.7	158.0	232.1	310.5	415.5	555.8
Miscellaneous Manu- factured Articles	25.6	35.9	52.7	70.5	94.3	126.2
Not Classified	5.2	7.3	10.7	14.3	19.1	25.6
Total	356.1	499.3	733.4	981.3	1312.8	1756.6



on the basis of the expected output of each sector and the percentage of exports. Consequently, assumed weights of growth had been assigned to exportable commodities as shown in Table V-13 below. In so far as services are concerned, a major item of considerable magnitude, i.e., income from tourism, had been taken as a base.

Table V-12 PROJECTIONS EXPORTS IN MILLION US DOLLARS, FOR<sup>1/</sup>  
(at 1970 constant prices)

	1975	1980	1985	1990	1995	2000
Food and live animals	70.6	119.0	229.1	403.7	621.3	971.6
Beverages and tobacco	2.8	4.7	9.0	15.9	24.5	37.7
Crude materials, credible except fuel	12.5	21.1	40.1	70.7	108.8	167.4
Mineral fuels and related materials	0.7	1.2	2.3	4.1	6.3	9.7
Animal and vegetable oils and fats	1.0	1.7	3.3	5.8	8.9	13.7
Chemicals and products	5.5	9.3	17.9	31.5	48.5	74.6
Manufactured goods	11.5	19.4	37.3	65.7	101.1	155.6
Machinery and transport equip.	0.8	1.3	2.5	4.4	6.8	10.5
Miscellaneous manufactured articles	4.5	7.6	14.0	25.7	39.0	60.9
Commodities and transactions not classified according to kind	-					
Exports (Goods)	109.9	185.3	350.1	627.5	965.8	1501.7
Services	57.0	105.0	225.0	315.0	441.0	520.0
Total	166.9	290.3	581.1	942.5	1406.8	2021.7

<sup>1/</sup> The following growth rates were used in projecting exports:

$\frac{1980}{11}$	$\frac{1985}{14}$	$\frac{1990}{12}$	$\frac{1995}{9}$	$\frac{2000}{9}$
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h) Net transfer payments of the private sector and central government plus transfer payments from Arab and friendly countries totalled JD 70 million in 1976. Since one of the goals of the Five Year Development Plan (1976-1980) is to cut down on foreign aid, this figure is projected at a deminishing scale, i.e., from JD 70 million in 1980 to JD 40 million in the year 2000.

i) Total consumption of goods and services was calculated on the following assumptions:

1. Natural growth of population of 3 per cent per annum
2. Moderate rise in the standard of living of around 3 - 4 per cent per annum
3. Savings from GDP to be plowed back into the investment stream.

301. Consequently, total consumption expenditures on goods and services are likely to approach JD 458 million in 1980, JD 611 million, JD 850 million, JD 1,147 million and JD 1,560 million in 1985, 1990, 1995 and the year 2000, respectively, or to grow at a real compound rate of 4 per cent per annum in the period 1976-1980, 6 per cent during the period 1980-1985, 6.9 per cent during 1985-1990, 6.2 per cent during 1990-1995 and 6.2 per cent during 1995-2000.

302. Based upon assumptions made in items (f - i) above, tables V-14 and V-15 were constructed.

Table V-13 INTERNATIONAL TRANSACTIONS  
(JD million)

	1976	1980	1985	1990	1995	2000
Imports	217	303	376	504	643	834
Goods	165	210	242	324	433	580
Services	52	93	134	180	210	254
Exports	64	96	192	312	465	685
Goods	45	61	117	207	318	495
Services	19	35	75	105	147	190
Transfers (Net)	70	70	60	50	50	40
Net Factor Income	70	122	216	348	560	902

Table V-14 EXPENDITURE ON GROSS NATIONAL PRODUCT  
(JD million)

	1976	1980	1985	1990	1995	2000
Consumption	326	458	611	850	1147	1560
Investments	82	90	108	150	215	260
Exports	64	96	180	312	465	685
Imports	217	303	416	630	880	1198
GDP	255	341	483	682	947	1307
NFI	70	122	216	348	560	902
GNP	325	463	699	1030	1507	2209

c) Mining and manufacturing

1. Introduction

303. The transition that Jordan seeks to achieve depends largely on the long-term strategy of which the Five-Year Development Plan, 1976-1980 is only a part. In order to understand the reasons that lie behind long-term strategy, one would have to familiar himself with the overall picture of the Jordan's economy. Chapter I and section 2 of this chapter highlighted the main features of this economy, and the following main points emerged:

- a) that there is an ever increasing gap between GDP and total consumption and gross capital formation. Consequently, Jordan will have to depend, rather heavily and for a long period to come, on outside financial aid;
- b) that capital formation, though still low, is rising and will be expected to gain momentum in the future;
- c) that exports of goods and services are meager compared to imports of goods and services and that the latter are escalating at a high rate for imports to be almost as large as private consumption.

304. This eye-bird's view of the prevailing economic conditions in Jordan provides the basis on which a long-term economic strategy would need to be formulated so as to enable Jordan to overcome some of its most serious economic problems.

2. The Five Year Plan and its impact on future developments in the mining and industrial sector

305. The first long-term objective, set out in the Plan, is:

"Achievement of structural changes in the Jordanian economy through developing the commodity-producing sectors, increasing their share in GDP, strengthening the movement towards a self-sustained economy and expanding its productive capacity".

306. To achieve this general objective of development, high priority was given to commodity-producing sectors and related infrastructural projects in order to correct the imbalance in the structure of the economy and to disperse economic activity outside the densely populated areas. The ensuing changes would be instrumental in rendering the Jordanian economy more capable of self-sustenance on the grounds that development should be effected from within rather than through foreign assistance and partnership. These can only complement domestic efforts but not supplant them.

307. Most important of the commodity-producing sectors is the mining and manufacturing sector which constitutes the backbone of development skeleton in the Jordanian economy.

308. This sector can contribute a great deal to the rectification of the imbalance inherent in the structure of the Jordanian economy provided that the plan for its development follows the same line of thought specified in the long-term industrial strategy.

309. Because of the industrialization policies that were pursued in the past and instruments that were adopted, and because of the various circumstances that surrounded the economy, a very loose and unintegrated manufacturing sector has developed. It lacks the broad industrial base on which to build further expansions. The new policy of allowing the establishment of new industries and of encouraging import-substituting and export-oriented industries might, in due time, help in solving this problem. Integration between the sub-sectors of manufacturing can be achieved when markets for products can be secured. This means that more efforts for expanding the markets for Jordanian manufactured goods should be exerted through:

- a) Concluding bilateral and/or multi-lateral trade agreements with non-Arab countries in Asia, Africa and Europe in order to secure preferential treatment for Jordanian products.
- b) Participating in the share capital of industrial companies set up solely or even partially for export purposes in order to reduce the risks involved and to follow-up on the progress of their development and problems.
- c) Enhancing and fostering the development of import-substitution industries through exemptions of all primary and intermediate raw materials and imported machinery from all forms of duties and additional taxes.
- d) Facilitating the temporary entry of primary and intermediate goods and machinery required for export-oriented industries.
- e) Establishing industrial estates and free zones with all infrastructural facilities throughout the Kingdom.
- f) Reducing the cost of electric power, fuel and water consumed by manufacturing enterprises to a level equal, at least, to the rates prevailing in neighbouring countries such as Syria, Saudi Arabia, Kuwait and Iraq.
- g) Establishing a special fund for subsidising manufactured products marketed in countries that are not members of the Arab Common Market. Funds for this purpose can be raised from increments on import taxes levied on certain luxury goods, such as automobiles, cosmetics, etc.

310. Despite that some of these instruments have already been partially adopted, a more drastic and comprehensive formulation of policies and implementation of instruments is needed.

311. Although Jordan is a member of the Arab Common Market, such an arrangement has yet to help in developing export markets for its manufactured products. Other bilateral agreements, the most out-

standing of which is the agreement on cooperation and coordination with Syria, have given the Jordanian manufacturing sector a new horizon. The agreement with Syria has activated idle manufacturing capacities and motivated the establishment of various other industries with a view to producing commodities needed for both the Syrian and Jordanian markets.

312. Infrastructural facilities, especially electric power and water, are not only insufficient but are also expensive compared to those available in neighbouring countries.

313. National technical research is far from being sufficient and industrial development in Jordan will have to rely on imported technical know-how for a long time to come, especially with the brain drain that has resulted from the migration of trained Jordanians to neighbouring oil-producing countries.

314. Mining industry is relatively new and, with the exception of phosphates, no other natural resource is being extensively exploited. Studies are being conducted to exploit proven deposits of copper ore and the extraction of potash from Dead Sea brine is being implemented. A public company was formed recently for the exploitation of clays, gypsum, feldspar and other non-metallic ores. The erection of a phosphatic fertiliser plant (triple super phosphate) is planned in the Five-Year Plan, 1976-1980 period. A large programme for expanding the production of rock phosphates is also envisaged during the same period.

315. In the manufacturing industries, expansion is underway for increasing the production of cement and petroleum refining. A new cement plant and a second petroleum refinery are being planned for erection in the Southern Region of the Country. A glass sheet factory is also being considered and two large plants for clay and sand bricks are being studied. A total of 201 industrial establishments with a total capital requirement of JD 18 million have been licensed

during the first year of the plan.

316. The Five-Year Plan, 1976-1980, assumes an annual growth rate of 21 per cent in the commodity-producing sectors and only 8.6 per cent in the services sector. Accordingly, the relative importance of the mining and manufacturing sector in GDP will rise by the end of the plan period from 15.6 to 28.3 per cent. The Plan also assumes that private consumption will increase by 7 per cent per annum, as against 9.4 per cent in private disposable income, and that the ratio of private consumption to gross national product will fall from 74 per cent in 1975 to 61 per cent in 1980. Consequently, more savings would be generated by the private sector for investment purposes.

317. Planned total investment in the mining and manufacturing sector is expected to be in the magnitude of JD 229.9 million, or 29.9 per cent of total investments in all sectors of the economy. The high ratio of investment in mining and manufacturing emphasizes the relative importance of this sector in overall planning. However, the financial resources allocated for the projects included in the Plan are expected to fall short of the anticipated real costs of these projects. For example, the estimated cost of potash extraction is JD 45 million while a recent feasibility study showed that the project may cost as much as JD 95 million. Cost escalations are, therefore, expected and, consequently, new sources of finance will have to be found. Estimates of these escalations may be in the magnitude of JD 137 million.

318. The real thrust that can be attained in economic and social development may be confined mainly to new capacities. Therefore, implementation of new large projects, and expansion and renovation of existing capacities will, in fact, determine the real growth in industrial production. Consequently, projections should be made



on sub-sectoral bases, so that estimated growth, in real terms, could be arrived at for each of the prospective sub-sectors of manufacturing industry, with due consideration being given to planned expansion and renovation of existing industries and to implementation of new projects.

317. Projections made for the mining and manufacturing sector were based on the following assumptions:

1. All values have been deflated to 1970 prices in order to avoid the problem of price escalations and to measure growth in real terms.
2. Assumed growth rates have been assigned to each of the sub-sectors in the mining and manufacturing sector. These anticipated growth rates have been based on:
  - a) Expected growth rates for the period 1976-80 and these have been computed on the basis of an evaluation of the implementation of the Five Year Development Plan, 1976-80.
  - b) Expectations of future development based on reports of the various authorities concerned, especially those published by the Natural Resources Authority concerning the proven deposits of natural resources, their locations, quantities, qualities, and the possibility of their exploitation.
3. Computed growth rates shown in Table V-16 for each sub-sector, taking the 1976 data (the first year of the Five Year Development Plan, 1976-1980), as a starting point. The results are given in Table V-17 below:

Table V-13. ASSUMED RATES OF GROWTH FOR PROJECTING VALUE ADDED IN THE MINING AND MANUFACTURING SECTOR (Percent)

Industry	1980	1985	1990	1995	2000
Mining and quarrying	11	10	10	10	10
Food manufacturing	6	6	6	6	6
Alcoholic beverages	7	5	5	5	5
Soft drinks	7	6	6	6	6
Tobacco	5	5	5	5	5
Textiles	9	8	6	5	5
Clothing	10	9	8	7	6
Leather and leather products	6	6	6	5	5
Footwear	8	8	7	7	7
Wood and products	8	6	5	5	5
Paper and products	8	7	5	5	5
Printing and publishing	7	8	8	7	7
Chemical industry	8	20	20	20	8
Petroleum refinery	20	7	12	7	7
Rubber and products	4	4	4	4	4
Plastic and products	7	7	7	6	6
Non-metallic minerals	10	12	10	10	9
Basic metal products	10	10	10	10	8
Electric machinery	10	10	9	5	8
Transport equipment	6	7	7	6	5
Miscellaneous	7	7	6	6	5

Table V-16 VALUE ADDED IN MINING AND MANUFACTURING, AT 1970 PRICES  
( JD million)

	1976	1980	1985	1990	1995	2000
Mining and quarrying	6.82	14.63	29.82	46.75	73.16	114.63
Food manufacturing	4.69	5.60	7.49	10.08	13.44	17.90
Alcoholic beverages	0.21	0.28	0.35	0.42	0.49	0.56
Soft drinks	0.35	0.42	0.56	0.70	0.91	1.26
Tobacco	1.68	1.80	2.31	2.94	3.71	4.75
Textiles	2.59	3.08	4.34	6.09	8.54	11.41
Clothing	1.82	2.03	3.15	4.62	6.44	8.61
Leather and products	0.91	0.98	1.33	1.75	2.24	2.87
Footwear	0.21	0.28	0.42	0.63	0.91	1.19
Wood and wood products	1.05	1.33	1.75	2.24	2.87	3.71
Paper and paper products	0.35	0.42	0.56	0.70	0.91	1.19
Printing and publishing	0.56	0.63	0.91	1.33	1.89	2.66
Chemical industry	1.19	2.45	6.09	8.96	12.53	17.64
Petroleum refinery	6.16	7.42	10.36	15.96	22.40	31.43
Rubber and products	-	-	0.21	0.28	0.35	0.42
Plastic and products	0.84	0.98	1.40	1.96	2.59	3.43
Non-metallic minerals	2.73	3.92	6.93	11.20	17.99	27.72
Basic metal products	4.69	6.86	11.06	17.85	28.70	42.14
Electric machinery	0.63	0.77	1.26	1.96	2.87	4.20
Transport equipment	0.70	0.77	1.05	1.47	1.96	2.52
Miscellaneous	0.35	0.42	0.56	0.77	0.98	1.26
Total	36.5	53.2	80.2	128.4	197.3	288.4

A. Mining

Projection assumptions

320. a) Phosphates

1. As envisaged in the Five-Year Plan, 1976-80, phosphate production was assumed to increase from 2.5 million tons to 10 million tons at the end of 1980. Projections were calculated at 1970 prices. Therefore, the anticipated annual compound rate of growth for the first period 1976-1980 is 11 per cent.
2. In the following three periods, 1980-1985, 1990-1995 and 1995-2000, phosphates are estimated to grow at the compound rates shown in Table V-19.
3. Value added by phosphate and other mining, at 1970 prices, are expected to reach the level of JD 114 million by the year 2000 (see Table V-19).

321. b) The other mining and quarrying activities that are anticipated include possibilities for the exploiting of proven copper reserves and other mining, such as marble and calcium carbonate rocks quarrying, gypsum, feldspar, clays, etc.

Table V-17 GROSS OUTPUT OF THE MINING SECTOR, AT 1970 PRICES  
(JD million)

	1975	1976	1980	1985	1990	1995	2000
Phosphate	12.18	3.32	16.68	26.85	43.21	63.44	111.60
Other	1.12	1.17	1.80	13.15	21.14	34.04	54.90
Total	13.30	11.09	18.48	40.00	64.35	103.48	166.50

Table 7-15 VALUE ADDED OF THE MINING SECTOR, AT 1970 PRICES<sup>1/</sup>  
(100 million)

	1975	1980	1985	1990	1995	2000
Phosphate	8.10	9.79	11.58	13.78	28.05	68.51
Other	0.91	0.92	2.08	11.04	17.30	28.64
Total	9.01	10.71	13.66	24.82	45.35	97.15

B. Food Manufacturing

Sub-sectoral assumptions

322. Planned expansion in irrigated areas, land reclamation programmes, introduction of modern farming techniques and practices and encouragement of cooperative movements in rural areas are under way and new processing capacities, though at a small scale, are apt to be established within the period 1976-1980. The rates that were attained in the previous periods (6 per cent per annum) are expected to be maintained throughout the projection period.

C. The Beverage Industries

Sub-sectoral assumptions

323. Expansion of beer production is planned for the period 1976-1980, due to expected increase in export to the Syrian Market and in domestic consumption.

324. In the spirits and distillation units for liqueur production, renovation and modernization of one of the three main factories is envisaged within the 1976-1980 period.

<sup>1/</sup> The growth rates assumed for the mining sector were as follows:

	1980	1985	1990	1995	2000
Phosphate	10	10	10	10	10
Other	30	30	10	10	10

D. The Tobacco-Industry

Sub-sectoral assumptions

325. This sub-sector suffers from a decline in domestic raw materials. It is, therefore, anticipated that the proportion of value added to gross domestic output will decline, as the industry will have to rely more in imported ingredients.

326. As a consequence, costs and prices are anticipated to rise, with the latter affecting exports of this commodity.

E. The Textile Industry

Sub-sectoral assumptions

327. This sub-sector has witnessed relatively high rates of growth in the past ten years and is expected to maintain the same rate in the 1976-1980 period, and to slow down in the following period.

328. Since most of the raw materials used to be imported, a relatively large spinning plant has been implemented at a cost of JD 6 million. The plant is composed of three phases, of which only the first phase has been implemented. Yarn, which is not all produced locally, will form the major component of imports for this industry.

329. A relatively large number of small textile factories have been set up and further expansion in this sub-sector is expected during the plan period. Exports are expected to rise while imports are expected to decline due to the establishments of the spinning plant referred to above.

F. Clothing Industry

Sub-sectoral assumptions

330. Output produced by this industry for local consumption is assumed to be directly proportional to the rate of growth of population; additional output of ready-made clothes must seek outside markets.

331. Since consumption of ready-made clothes is based on taste and fashion, high levels of import are expected to continue because fashion houses are usually located in Europe.

332. The expected rise in per capita income would tend to accentuate the problem of rising imports in the short-run, but these may decline at a later stage because of possible transfers in technology and know-how. Imports are, therefore, assumed to decline after 1986.

G. Leather and Footwear

Sub-sectoral assumptions

333. Growth in total consumption in leather and footwear products has been assumed to follow the normal rate of growth of population and the rise in the standard of living, namely, 3 per cent for population growth and 4 per cent for improvements in the standard of living.

334. Growth in value added has been calculated on the following assumptions:

- 8 per cent per annum for the 1975 - 1985 period
- 7 per cent per annum for the 1985 - 1995 period
- 6 per cent per annum for the 1995 - 2000 period.

335. Leather production is assumed to be influenced by the expected expansion in the tannery productive capacity, and to grow at the following rates:

- 6 per cent per year for the 1975 - 1990 period
- 5 per cent for the period after 1990.

#### H. Manufacture of Wood and Wood Products

##### Sub-sectoral assumptions

336. a) Total consumption is assumed to grow during the whole period of projection at a compound rate of growth of 7 per cent per annum, while value added may achieve 8 per cent during 1975-1980, 6 per cent during 1980-1985 and 5 per cent through the rest of the projection period.
- b) While imports are expected to maintain the same rate of growth achieved during the 1970-1975 period, exports may not be sufficiently significant because of the uncertainty surrounding the establishment of the wood complex.

#### I. Paper and Paper Products

##### Sub-sectoral assumptions

337. a) Consumption of paper and paper products is expected to grow at a compound rate of 7 per cent per annum, while value added may achieve the following rates of growth:
- 8 per cent per annum in the 1975-1980 period
  - 7 per cent per annum in the 1980-1985 period
  - 5 per cent per annum in the 1985-2000 period
- The Jordan Paper and Cardboard Co. is envisaged to start producing corrugated board before 1985.



b) Imports are expected to grow at a lower rate than in the 1970-1975 period. A growth rate of 10 per cent per annum is assumed to hold throughout the period of projection.

Exports may grow at the same rate as that in the 1970-75 period, namely, at 12.5 per cent per annum in the 1976-1985 period and at 10 per cent per annum during 1985-2000.

#### J. Printing and Publishing

##### Sub-sectoral assumptions

338. Since the annual growth in domestic demand is expected to be around 7 per cent during 1975-1980, 8 per cent during 1980-1990 and 7 per cent in 1990-2000, consumption and domestic output are assumed to increase at the same rates.

339. Neither exports nor imports are likely to be sufficiently significant.

#### K. Chemical Industry

##### Sub-sectoral assumptions

340. The potash extraction project is being implemented and is in its first stage. Production may start by 1982 at a capacity of one million tons of potash per year, with capabilities for expansion up to 1.7 million tons. In 1970, the price of potash was around US\$ 55/ton. On this basis, exports of industrial chemical products are anticipated to increase in the 1980-1985 period by about JD 18 million, since all potash is produced for export.

341. Other industrial chemicals, such as bromides and iodides, are also expected to be extracted from lead sea brines during the 1985-1990 period and therefore, a growth rate of 20 per cent per annum in the production of these chemicals is expected during this period. Domestic output may tend, however, to taper off to about 7 per cent per annum during the 1990-2000 period.

342. A large fertilizer complex, with an estimated cost of about US\$ 300 million, is envisaged to have a capacity of 600,000 tons of triple super phosphate. Production is anticipated to start in the early eighties.

#### L. Petroleum Refining

##### Sub-sectoral assumptions

343. Expansion of the existing petroleum refinery is envisaged at a cost of around US\$ 215 million. The expansion which has been started will raise the productive capacity of the refinery from one million metric tons to 3.45 million tons per annum by 1990.

344. Preliminary studies are being conducted to erect a new petroleum refinery in the South with a capacity of 6 million tons and an estimated cost of JD 185 million.

#### M. Rubber and Rubber Products

##### Sub-sectoral assumptions

345. In this sub-sector, as is the case in the chemical and petroleum refining sub-sectors, considerable room exists for domestic expansion. Domestic output is only JD 0.42, while total consumption is JD 2.25 million.

346. Value added is expected to grow at a slow rate, around 4 per cent per annum, throughout the period of projection.

347. Consumption and imports are expected to grow by at least 7 per cent per annum, and this will raise consumption from JD 2.28 million in 1975 to JD 12.6 million in 2000, and imports from JD 2.25 million to about JD 11.6 million in 2000.

N. Non-Metallic Minerals

Sub-sectoral assumptions

348. Expansion of the Cement Company, which is expected to be undertaken at a cost of JD 15 million and to be completed by the middle of 1978 will raise the annual productive capacity of the plant from 600,000 tons to 1.2 million tons.

349. The construction of a new plant in the South is being studied. The project, whose production is designed mainly for export, is envisaged to have an output of one million tons per year and to cost JD 22 million.

350. A second plant with a capacity of 100,000 tons of white cement is being contemplated for erection in Jordan in cooperation with the Syrian Government.

351. Value added in this sub-sector remained almost the same during the period 1970-1975.

352. In 1976, exports of cement were prohibited and this prohibition will remain in force until the planned expansion is completed. Exports are, therefore, expected to decline to a minimal level in the period 1975-1980.

O. Basic Metal Industries

Sub-sectoral assumptions

353. A number of known minerals have been found in Jordan. These include iron ore, lead sulphide and copper (copper has been covered in the mining and quarrying sub-sector), granite, molybdenum and gypsum.

354. Accordingly, the rate of growth in this sector is expected to be relatively high, i.e., 10 per cent per annum for the period 1975-1995 and 8 per cent for the period 1995-2000.

355. Exploitation of these minerals is also assumed.

P. Electric Machinery

Basic assumptions

356. This sub-sector has considerable room for expansion.

357. The establishment of a T.V. assembly plant is being entertained.

358. Domestic output is expected to attain relatively high rates of growth. The assumed rates are: 10 per cent per year during the 1975-1985 period, 9 per cent per year in the following five years and 8 per cent per year between 1990 and 2000.

d. Economic Development

359. Jordan is expected to witness vigorous economic and social development in the next generation. As can be seen from Table 20, gross national product is expected to rise from JD 325 million at the end of 1975 to JD 463 million at the end of 1980, or at a compound rate of real growth of 7.3 per cent. GNP at constant prices may approach the levels of JD 669 million in 1985, JD 1,030 million in 1990, JD 1,507 million in 1995, and JD 2,209 million in 2000. The compound rate of real growth in GNP is projected at 8.5 per cent for the 1980-1985 period and at 8.0 per cent for the remaining three periods. Aggregate consumption expenditure is anticipated to grow during the whole period of projections at an average compound rate of 6.5 per cent. The expected rate of growth in aggregate consumption seems to be logical, since the expected rate of natural growth in population is 3 per cent per annum and the rise in the standard of living is expected to be in the neighbourhood of .5 - 4 per cent per year. Consequently, aggregate consumption of goods and services may grow from JD 326 million in 1976 to JD 458 million in 1980, JD 611 million in 1985, JD 850 million in 1990, JD 1,147 million in 1995 and JD 1,560 million in 2000.

360. Table V-21 below shows that the percentage contribution of GNP to total resources is expected to increase from 60 per cent in 1976 to 60.4 per cent in 1980 and to 64.9 per cent in 2000. Consequently, the share of imports of goods and services in total economic resources are anticipated to gradually decline over the whole period of projection, from 40 per cent in 1976 to 35.1 per cent in 2000.

361. On the uses side, share of aggregate consumption in total resources is also expected to fall gradually from 60.1 per cent in 1976 to 45.8 per cent in 2000.

Table V-13 GROSS NATIONAL PRODUCT AND ITS COMPONENTS  
(JD million; per cent)

	1976		1980		1985		1990		1995		2000	
	Value	%	Value	%	Value	%	Value	%	Value	%	Value	%
Consumption expenditures	326	7.0	458	7.0	611	6.0	850	7.0	1147	6.1	1560	6.4
Gross capital formation	82	1.4	90	1.4	108	4.0	150	6.6	215	7.5	260	4.0
Exports of goods and services	64	8.5	96	8.5	180	13.3	312	11.6	465	8.3	685	8.1
Imports of goods and services	217	7.0	303	7.0	416	6.5	630	8.6	880	7.0	1198	9.9
Net factor income	70	11.7	122	11.7	216	12.1	348	10.0	560	9.9	902	10.0
Gross National Product	325	7.3	463	7.3	699	8.5	1030	8.0	1507	8.0	2209	10.0

Table V-20 . . . EXPECTED TOTAL ECONOMIC RESOURCES AND THEIR USE  
(JD million; per cent)

	1976		1980		1985		1990		1995		2000	
	Value	%	Value	%	Value	%	Value	%	Value	%	Value	%
<b>A. Resources</b>												
Gross National Product	325	60.0	463	60.4	639	62.7	1030	62.0	1507	63.1	2209	64.9
Imports of goods and services	217	40.0	303	39.6	416	37.3	630	38.0	880	36.9	1198	35.1
Total resources	542	100.0	766	100.0	1115	100.0	1660	100.0	2387	100.0	3407	100.0
<b>B. Uses</b>												
Consumption (private and public)	326	60.1	458	59.8	611	54.8	850	51.2	1147	48.0	1560	45.8
Gross capital formation	82	15.1	90	11.8	108	9.7	150	9.0	215	9.0	260	7.6
Exports of goods and services	64	11.8	96	12.5	180	16.1	312	18.8	465	19.5	685	20.1
Net factor income	70	13.0	122	15.9	216	19.4	348	21.0	235	23.5	902	26.5

362. Although gross capital formation is expected to increase in value, its share in aggregate resources is anticipated to decrease from 15.1 per cent in 1976 to 7.6 per cent in the year 2000. This implies that Jordan will be able to absorb higher levels of investment provided that an adequately trained labour force is available.

363. Exports of goods and services are expected to rise during the period of projection, both in absolute and relative terms, from JD 64 million in 1976 to JD 685 million in 2000, or from 11.8 per cent of total resources in 1976 to 20.1 per cent in 2000.

364. Net factor income reflects the size and impact of future transfers of Jordanians working in neighbouring Arab countries. These transfers are expected to multiply about thirteen times during the period 1976-2000, which indicates that the export of human resources will become increasingly important. They are anticipated to play an important role in the balance of trade as can be manifested by the increase in the share of these transfers in total economic resources, namely, from 13 per cent in 1976 to 26.5 per cent in 2000.

365. Table V-22 shows the anticipated structural shifts in the relative importance of the different sectors of the economy. The most outstanding of these relates to the mining and manufacturing sector. The expected growth in this sector is very impressive; its contribution to GDP is expected to grow from JD 40 million in 1976 to JD 53 million in 1980 and to JD 288 million in 2000, or from 14.1 per cent of GDP in 1976 to 22 per cent in 2000. Other infrastructural sectors are also expected to display gradual improvement relative to GDP. Electricity's contribution to GDP is expected to grow from 1.2 per cent in 1976 to 2.3 per cent in the year 2000. Similarly, the share of transportation in GDP is expected to grow from 7.5 per cent in 1976 to around 10 per cent in 2000.



Table V-21 EXPECTED SHARE OF MAJOR ECONOMIC SECTORS IN GDP, 1976 - 2000  
(AT 1970 PRICES)  
(JD million; per cent)

	1976		1980		1985		1990		1995		2000	
	Value	%	Value	%	Value	%	Value	%	Value	%	Value	%
Agriculture	23	3.0	27	7.3	36	7.5	44	6.5	53	5.6	65	5.0
Mining and manufacturing	36	14.1	53	15.5	80	16.6	128	18.8	197	20.8	288	22.0
Electricity	3	1.2	5	1.5	3	1.3	14	2.1	20	2.1	23	2.3
Construction	17	6.7	21	6.3	23	6.0	37	5.4	45	4.8	55	4.2
Transportation	13	7.5	28	8.3	43	8.9	66	9.7	92	9.7	130	9.9
Finance and real estate	16	6.3	23	6.7	38	7.9	55	8.1	81	8.6	120	9.2
Trade	40	15.7	43	14.4	62	12.8	73	11.6	101	10.7	123	9.8
Public administration and defense	35	13.7	46	13.5	61	12.6	82	12.0	110	11.6	147	11.3
Services	<u>30</u>	<u>11.7</u>	<u>41</u>	<u>8.8</u>	<u>57</u>	<u>11.7</u>	<u>80</u>	<u>11.7</u>	<u>113</u>	<u>11.7</u>	<u>158</u>	<u>12.1</u>
GDP at factor cost	213	85.3	273	85.3	415	85.3	585	85.8	812	85.7	1121	85.8
Indirect taxes	<u>36</u>	<u>14.1</u>	<u>48</u>	<u>14.1</u>	<u>68</u>	<u>14.1</u>	<u>71</u>	<u>14.2</u>	<u>135</u>	<u>14.3</u>	<u>186</u>	<u>14.2</u>
GDP at market price	255	100.0	341	100.0	483	100.0	682	100.0	947	100.0	1307	100.0

366. It might be interesting to note that contribution of the productive and related infrastructural sectors, i.e., agriculture, mining and manufacturing, electricity, construction and transportation to GDP is expected to grow from 38 per cent in 1970 to 43.4 per cent in 2000. Consequently, the share of other sectors in GDP, i.e., the services sectors, is expected to drop from 62 per cent in 1970 to 56.6 per cent in the year 2000.

367. The extent to which foreign grants and loans are expected to supplement future domestic resources for sustaining the anticipated high rates of economic growth is shown in Table V-23 below.

Table V-22 EXPECTED RELATIONSHIP BETWEEN DOMESTIC AND FOREIGN RESOURCES, AT 1970 PRICES

(JD million)

	1976	1980	1985	1990	1995	2000
1. Expenditure on consumption and domestic capital formation	408	548	719	1000	1302	1820
2. Surplus on balance of good and services plus net factor income payments	-83	-85	-20	+30	+145	+389
3. GNP (1 + 2)	325	463	699	1030	1507	2209
4. Ratio of (1) to (3) %	126	118	103	97	90	82

368. It is interesting to note that on the basis of anticipated future growth and provided that political and social stability is maintained, Jordan may be able to reach the stage of self sufficiency in 1989, or 1990 at the most.

STATISTICAL APPENDIX

Table 1  
Population and Population Structure  
1960 - 1976<sup>1/</sup>

Year	Total 000	Urban 000	Rural 000	Urban Population as a percentage of Total
1960	878	408	470	46.5
1961	904	426	428	47.2
1962	932	455	477	48.8
1963	962	487	475	50.6
1964	992	521	471	52.5
1965	1024	558	466	54.4
1966	1059	600	459	56.6
1967	1294	672	622	51.9
1968	1426	752	674	52.7
1969	1600	842	758	52.6
1970	1668	926	742	55.5
1971	1723	1001	722	58.1
1972	1774	1090	684	61.4
1973	1831	1160	671	63.3
1974	1890	1226	664	64.9
1975	1952	1295	657	66.3
1976	2018	1366	652	67.7

- <sup>1/</sup> 1961 figures from the results of the first census of population. Figures for all other years depended basically on the estimated of the Department of Statistics based on several statistical surveys in particular:
1. Internal migration survey of 1967
  2. Multi-purpose household survey (1972-1976)
  3. Several quick counts of some small towns and villages
  4. Quick count of Amman city 1970
  5. Extrapolated data - unpublished

Several adjustment factors were made particularly for the years 1967-1969 to take care of the influx of about 400,000 displaced persons from the West Bank as a result of 1967 war.

All information pertain to East Bank only.

Table 2  
Determinants of Population Growth for  
Jordan

Year	Crude Birth Rate per 1000 Inha- bitants	Crude Death Rate per 1000 Inha- bitants	Natural Rate of Increase in Popu- lation per 1000
1960	46	17	29
1961	46	16	30
1962	46	16	30
1963	46	16	30
1964	46	16	30
1965	46	15	31
1966	46	15	31
1967	46	15	31
1968	46	15	31
1969	46	15	31
1970	46	14	32
1971	46	14	32
1972	46	14	32
1973	46	14	32
1974	46	14	32
1975	46	12	34

Source: Unpublished estimates by the Demographic Section in the Department of Statistics: The estimates are based on the assumption that the birth rate is constant and that the death rate is declining with the improvement of personal hygiene and medical care.

Table 3  
Labour Force, Employment and Unemployment  
1960-1975

Year	Total Labor Force 000	Employed 000	Unemployed 000	Unemployed as a Percentage of Total Labor Force
1960	397	365.2	31.8	8.0
1961	404	371.7	32.3	8.0
1962	420	386.4	33.6	8.0
1963	428	398.0	30.0	7.0
1964	445	413.8	31.2	7.0
1965	434	408.0	26.0	6.0
1966	462	434.3	27.7	6.0
1967	474	440.8	33.2	7.0
1968	299	221.8	14.2	6.0
1969	336	319.2	16.8	5.0
1970	-	-	-	-
1971	345	331.2	13.8	4.0
1972	355	344.3	10.7	3.0
1973	366	357.6	8.4	2.3
1974	378	370.1	7.9	2.1
1975	390	381.8	8.2	2.1

- Notes: 1. Informations for the years 1960-1967 pertaining to East Bank and West Bank of Jordan.  
2. Informations for the years 1968-1975 pertaining to East Bank only.

Source: Information based on data provided by the Dept. of Statistics, namely in the reports of:

- a) The First Population Census of 1961
- b) Manpower Surveys of 1966, 1968 & 1974
- c) Multi-purpose Household Surveys 1972-1975

Table 4

Economically Active Population by Activity According  
To ISIC Codes  
 ( 000 Persons )

Year	Agriculture, Hunting and Fishing	Mining and Quarrying	Manufactur- ing	Electricity, Gas and Water	Construction	Wholesale, Retail Trade, Restaurants and Hotels	Transport Storage & Communica- tion	Financing Insurance & Real Es- tate	Social Com- munity and Personal Services	Total
1960	122	2	23	1	35	35	10	2	135	365
1961	129	4	26	1	40	33	12	3	123	372
1962	115	4	25	1	43	40	13	3	142	380
1963	110	4	25	2	40	52	14	3	148	398
1964	125	3	28	2	42	55	14	3	142	414
1965	120	4	33	2	35	48	13	2	151	408
1966	135	4	33	1	32	45	15	2	167	434
1967	130	4	30	2	35	50	17	2	171	441
1968	73	3	18	1	25	36	13	2	128	299
1969	73	3	22	1	27	47	18	3	142	336
1970	72	3	24	1	24	48	21	4	141	338
1971	72	3	28	2	28	54	23	5	130	345
1972	71	2	30	2	30	58	24	5	133	355
1973	70	2	31	2	31	60	25	5	140	368
1974	69	3	33	2	32	64	28	5	141	378
1975	67	3	34	2	38	67	30	5	144	390
1976	66	3	36	2	42	70	34	6	150	409

- Notes:**
1. Information for the years 1960-1967 pertain to East & West Banks
  2. Information for the years 1968-1976 pertain to East Bank only
  3. Estimates made by SMS based on the following reports by Jordan Department of Statistics:
    - a) Population Census 1961 (adjusted)
    - b) Multipurpose household survey, two reports 1972, 1974 and unpublished computer print outs for the years 1971, 1973 & 1975.
    - c) Manufacturing Census 1974
    - d) Agricultural Census 1974
    - e) Internal Migration Survey 1966
    - f) Manpower Surveys 1967-1973
    - g) Manpower Census 1974
    - h) Agriculture Sample Surveys, several years

Table 5

Number of Workers in Mining & Manufacturing Industry  
by Major Sub Sector in the East Bank of  
Jordan

	1959	1965 <sup>1/</sup>	1967	1968	1974
1 . Mining & Quarrying	750	2241	2495	3129	2405
2 . Food Manufacturing	1813	1366	2933	3238	3479
3 . Beverage	242	252	269	260	417
4 . Tobacco	721	713	716	652	540
5 . Textiles	491	1117	1487	1328	1516
6 . Clothing	520	486	985	1505	4414
7 . Footwear	537	577	836	827	506
8 . Wood, cork	-	-	-	-	-
9 . Furniture & fixtures	1227	813	1506	1891	2032
10. Paper & products	55	226	442	248	341
11. Printing & publishing	512	422	415	925	768
12. Leather & products	130	203	212	210	285
13. Rubber & products	72	98	146	133	30
14. Chemical products	31	403	358	364	897
15. Petroleum refinery	...	775	917	958	1363
16. Non-metallic minerals	986	1003	1413	1342	2136
17. Basic metal products	1072	770	2143	1945	1583
18. Non electrical machinery	178	58	18	17	-
19. Electrical machinery	112	291	603	591	601
20. Transport equipment	528	325	852	655	1466
21. Miscellaneous	134	30	235	275	734
<b>Total</b>	<b>10111</b>	<b>12169</b>	<b>18979</b>	<b>20493</b>	<b>25513</b>

<sup>1/</sup> 1965 figures are adjusted

Source: Jordan Department of Statistics: Various industrial survey reports.

Table 6

Number of Persons Employed in Manufacturing  
Industry Establishments Engaging 5 or more Persons in 1974  
(East Bank)

ISIC Code	Type of Industry	Total Number Employed	Professional, Tech. & Clerical Staff	Skilled Labour	Unskilled labour
311/12	Food manufacturing	3418	244	3015	159
313	Beverage industries	346	29	220	107
314	Tobacco Manufactures	525	50	461	14
321	Manufacture of Tex.	1513	211	1272	30
322	Manufacture of wearing apparel	4407	71	4316	20
323	Manufacture of leather and products	285	27	194	64
324	Manufacture of footwear	506	15	484	7
332	Manufacture of furniture & fixture	2029	63	1959	7
341	Manuфт. of paper & paper products	340	51	256	33
342	Printing & publishing	760	103	618	39
351	Manufacture of industrial chemicals	436	92	299	45
353	Petroleum refinery	1350	242	856	252
355	Manufacture of rubber products	30	3	27	-
36	Manufacture of non-metallic minerals	1121	159	917	45
37	Basic metal industries	1582	112	1455	15
382	Manufacture of machinery except electrical	-	-	-	-
383	Manufacture of electrical machinery	601	18	572	11
384	Manufacture of transport equipment	1462	18	1441	3
385	Other industries	734	21	705	8
	TOTAL	21445	1529	19057	859



Table 1

Expenditure on G.N.P.  
(in current prices) and in million JRs.

Year	Consumption		Gross Fixed Capital Formation		Change in Stock	Imports of Goods and Services	Exports of Goods and Services	Gross Domestic Product	Net Factor Income from Abroad	G.N.P.
	Private	Public	Private	Public						
1960	88.45	27.2	13.05	4.46	- 0.42	47.05	12.79	98.30	7.31	105.69
1961	102.76	28.12	11.48	5.47	+ 1.97	46.61	16.95	120.14	7.00	127.14
1962	102.36	29.04	13.95	8.06	- 0.02	51.80	19.08	118.90	11.93	130.83
1963	116.82	33.04	12.86	7.16	+ 0.02	61.06	20.26	129.06	8.56	137.62
1964	123.47	32.27	12.80	5.97	+ 6.52	56.65	24.57	148.95	11.67	160.62
1965	138.04	36.79	13.55	10.35	+ 3.89	63.55	28.54	167.61	12.93	180.54
1966	149.61	39.17	15.20	12.45	- 1.26	76.60	32.06	170.63	15.15	185.78
1967	158.55	46.36	11.15	14.97	- 0.70	63.68	27.66	194.71	11.24	205.95
1968	153.36	58.61	14.69	15.95	+ 7.01	90.98	28.27	186.91	10.37	197.28
1969	164.47	67.08	22.74	16.62	+25.21	108.69	32.26	219.69	14.03	233.72
1970	134.30	57.00	17.00	9.00	+13.00	89.89	32.33	172.74	12.64	185.38
1971	150.60	60.00	29.00	15.00	-	97.90	29.70	186.40	9.70	196.70
1972	164.70	70.00	28.60	17.40	-	118.10	40.10	202.70	10.80	213.70
1973	166.60	77.00	31.00	24.00	-	136.10	55.80	218.30	19.80	237.80
1974	201.60	119.00	34.00	46.00	-	197.90	81.40	284.10	30.80	316.70
1975	286.60	138.00	41.00	53.00	-	301.10	121.00	338.50	61.50	400.00
1976	334.6	155.00	80.00	63.00	-	386.30	164.80	411.10	122.70	533.80

Note: 1. The information for the years 1960-1969 pertaining to East and West Banks  
2. The information for the years 1970-1975 pertaining to East Bank

## Source:

1. Department of Statistics, National Accounts Reports
2. Five Year Plan, National Planning Council
3. For the years 1974-1976, estimates made by SMS

Exports and Imports  
(at 1970 Market Prices) in Million Rs

Year	Consumption		Gross Fixed Capital Formation		Change in Stock	Imports of Goods and Services	Exports of Goods and Services	Gross Domestic Product	Net Factor Income from Abroad	G.N.P.
	Private	Public	Private	Public						
1960	118.09	36.32	15.76	5.39	- 0.51	56.82	14.77	133.00	8.83	141.83
1961	136.39	37.05	13.60	6.48	+ 2.33	55.23	19.78	160.40	8.29	168.69
1962	133.80	37.96	17.01	9.83	- 0.20	63.17	21.37	156.60	14.55	171.15
1963	153.71	43.47	15.53	8.65	+ 0.20	73.74	23.39	171.21	10.33	181.54
1964	161.61	42.24	15.46	7.21	+ 7.87	68.42	27.79	193.76	14.09	207.85
1965	173.42	46.22	16.36	12.50	+ 4.70	76.75	30.43	206.88	15.62	222.50
1966	183.80	48.12	17.84	14.61	+ 1.48	89.91	34.85	210.79	17.78	228.57
1967	182.03	53.23	12.49	16.76	- 0.78	71.31	26.70	219.12	12.59	231.71
1968	176.69	67.52	16.29	17.68	+ 7.77	100.86	25.33	210.42	11.50	221.92
1969	175.72	71.67	24.56	17.95	+27.22	117.38	28.00	227.74	15.15	242.89
1970	134.30	57.00	17.00	9.00	+13.00	89.89	32.33	172.74	12.64	185.38
1971	147.85	58.82	28.43	14.81	-	95.98	29.87	183.80	9.51	193.31
1972	152.50	64.81	26.98	16.42	-	111.82	39.31	188.70	10.19	198.89
1973	144.87	66.96	26.72	20.69	-	117.71	54.17	195.70	17.07	212.77
1974	160.00	94.44	25.76	34.85	-	136.98	40.70	218.77	23.33	242.10
1975	206.19	99.28	26.28	33.97	-	177.17	48.40	236.95	39.42	276.37
1976	223.07	103.33	45.71	36.00	-	216.60	63.38	254.89	70.11	325.00

- Notes:**
1. Information for the years 1960-1969 pertaining to East and West Banks
  2. Information for the years 1970-1976 pertaining to East Bank only
  3. Consumption, was deflated by the cost of living index
  4. Gross fixed capital formation, change in stock, imports and net income from abroad were deflated by the imports price index.
  5. Exports of goods and services were deflated by the exports price index
  6. Calculations made by SMS.

Table 9

Gross Domestic Product by Sector of Production 1960-1975  
(in million at current prices)

Year	Agriculture	Mining & Manufacturing	Electricity, Gas & Water	Construction	Trade & Services	Transport	Finance & Real Estate	Community Services	G.D.P. at Factor Cost	Indirect Taxes	G.D.P. at Market Price
1960	14.62	6.89	0.69	4.50	27.83	11.12	8.00	15.79	89.44	8.86	98.30
1961	25.30	8.83	0.67	4.50	32.91	12.64	9.28	16.74	110.87	9.27	120.14
1962	20.90	8.06	0.64	6.15	33.14	12.53	10.04	17.06	108.62	10.28	118.90
1963	22.08	10.62	0.93	6.12	36.80	12.77	10.74	17.61	117.67	11.39	129.06
1964	34.14	12.53	1.03	5.45	39.20	12.03	11.44	19.70	135.52	13.43	148.95
1965	34.11	16.22	1.68	7.87	44.26	12.60	12.80	21.41	150.95	16.66	167.61
1966	27.65	17.27	2.26	9.28	42.86	14.42	13.97	22.03	149.74	20.89	170.63
1967	38.74	17.50	1.78	8.69	54.25	14.84	15.30	26.01	177.11	17.60	194.71
1968	27.53	20.05	2.27	9.83	45.71	14.55	15.30	33.25	168.49	18.42	186.91
1969	36.34	23.12	2.09	10.89	56.63	16.01	16.98	36.28	198.34	21.35	219.69
1970	21.00	17.00	1.50	6.00	42.00	13.00	14.00	37.94	152.44	20.30	172.74
1971	23.90	17.70	2.20	7.30	47.90	14.60	13.90	38.70	166.20	20.20	186.40
1972	21.70	19.80	2.50	9.20	52.60	17.30	14.70	40.50	178.30	24.40	202.70
1973	17.60	22.60	2.80	15.20	56.30	18.00	15.40	41.00	188.90	29.40	218.30
1974	38.50	43.10	3.50	17.00	65.00	21.00	16.00	45.00	251.10	33.00	284.10
1975	28.00	50.00	4.50	22.00	85.00	26.00	22.00	55.00	292.50	46.00	338.50
1976	41.00	56.30	4.80	27.00	104.00	30.00	26.00	64.00	353.10	58.00	411.10

Source: 1. Department of Statistics, National Accounts Reports

2. National Planning Council, Five Year Plan

3. For the years 1974-1976, estimates made by SMS

Notes:

1. Information for the years 1960-1969 pertain to the East & West Banks of Jordan

2. Information for the years 1970-1975 pertain to East Bank only.

Gross Domestic Product in the Form of Production, 1960-1975  
(at 1960 Market Prices) in US Million

Year	Agriculture	Mining and Manufacturing	Electricity Gas and Water	Construction	Traffic & Rest. Conf. Hotel	Transport & Storage	Finance & Real Estate	Community Services	G.D.P. at Factor Cost	Indirect Taxes	G.D.P. at Market Prices
1960	19.80	9.30	0.90	6.10	37.70	15.00	10.80	21.40	121.00	12.00	133.00
1961	33.80	11.80	0.90	6.00	43.90	16.90	12.40	22.30	148.00	12.40	160.40
1962	27.50	10.60	0.80	8.10	43.70	16.50	13.20	22.60	143.00	13.60	156.60
1963	29.30	14.10	1.20	8.10	48.80	16.90	14.30	23.40	156.10	15.11	171.21
1964	44.40	16.30	1.30	7.10	51.00	15.60	14.90	25.60	176.20	17.56	193.76
1965	42.11	20.00	2.10	9.71	54.61	15.51	15.81	26.42	186.27	20.61	206.88
1966	34.50	21.30	2.70	11.50	52.90	17.80	17.00	27.20	184.90	25.89	210.79
1967	43.60	19.70	2.00	9.70	61.00	16.70	17.20	29.30	199.20	19.92	219.12
1968	31.00	22.50	2.60	11.60	51.10	16.40	17.20	37.10	189.50	20.92	210.42
1969	37.90	23.90	2.20	10.90	58.90	16.60	17.60	37.70	205.70	22.04	227.74
1970	21.00	17.00	1.50	6.00	42.00	13.00	14.00	37.94	152.44	20.30	172.74
1971	23.60	17.50	2.20	7.20	47.10	14.40	13.70	38.20	163.90	19.90	183.80
1972	20.20	18.20	2.50	8.60	48.90	16.10	13.70	37.70	165.90	22.80	188.70
1973	15.80	20.00	2.70	13.70	50.50	16.20	13.80	36.70	169.40	26.30	195.70
1974	29.65	33.19	2.70	13.09	50.05	16.17	13.86	34.65	193.36	25.41	218.77
1975	19.60	35.00	3.15	15.40	59.50	18.20	15.40	38.50	204.75	32.20	236.95
1976	25.42	34.91	2.98	16.74	64.48	18.60	16.12	39.68	218.83	35.96	254.89

- Notes:**
1. Calculated by SMS
  2. From 1960-1969 for East and West Banks
  3. From 1970-1976 for East Bank only

Gross Output and Value Added in Mining & Manufacturing Industry at

Current Prices  
(in 000)

SIC Code	Type of Industry 1/	1960		1962		1964		1965		1966		1970		1972		1974		1975		1976	
		D.O.	V.A.	D.O.	V.A.	D.O.	V.A.	D.O.	V.A.	D.O.	V.A.	D.O.	V.A.	D.O.	V.A.	D.O.	V.A.	D.O.	V.A.	D.O.	V.A.
2	Mining & quarrying	1872	977	2279	1346	2422	1696	3423	2492	4112	3141	4384	3332	3858	2932	13344	11203	19000	13000	17600	11000
311	Food manufacturing	3219	959	4289	1019	7297	1752	8969	2137	9287	2702	6407	1858	6879	1995	14456	5409	16000	6000	17800	6000
313	Beverage industries	369	189	477	221	570	225	539	250	759	435	454	465	716	401	1819	479	2500	1000	3000	500
314	Tobacco manufactures	2003	332	1789	351	2450	978	2573	799	3434	886	1860	635	2192	548	3424	1928	3500	2000	4200	2400
321	Manufacture of textile	374	207	310	108	1412	528	1897	604	2593	934	1764	377	2069	745	4009	2718	4500	3000	5500	3700
322	Manufacture of wearing apparel	1760	880	1036	1145	1161	578	1753	794	1840	892	769	128	888	435	2545	1626	3000	1800	4000	2000
323	Manufacture of leather & products	36	22	400	70	361	85	665	184	564	249	267	326	479	230	1034	880	1200	1000	1500	1300
324	Manufacture of footwear	-	-	-	-	1485	678	1355	583	1300	604	709	129	887	408	622	226	800	300	900	300
332	Manuf. of furniture and fixture	913	548	420	421	1853	845	2348	1074	2218	1114	1363	695	1676	855	2494	1079	3000	1300	3500	1500
341	Manufacture of paper and products	78	23	97	46	164	53	280	80	407	109	85	22	104	27	1002	335	1200	400	1400	500
342	Printing and publishing	323	132	385	222	524	261	661	340	1281	663	714	350	849	416	1182	547	1500	600	1700	800
351	Manufacture of industrial chemicals	215	80	450	125	1299	362	1690	684	2365	1042	1761	775	2279	1003	3816	2171	4400	2400	5200	2900
353	Petroleum refinery	-	-	3071	1070	4210	1458	4639	1976	5220	2355	4172	1860	6889	3100	9286	4810	11500	6000	17100	8800
355	Manufacture of rubber products	297	89	115	30	44	30	53	39	62	48	51	39	50	39	27	8	-	-	-	-
36	Manufacture of non metallic minerals	2076	1552	1839	1356	2622	1574	3175	1901	3845	2602	2132	1450	5365	3648	6347	3265	6900	3500	7500	3000
37	Basic Metal industries	686	355	462	234	1550	682	2266	1117	2987	1264	3929	1650	4502	1891	6364	4835	5000	6100	8600	6000
382	Manufacture of machinery except electrical	133	47	111	79	37	22	38	17	14	7	13	6	12	6	-	-	-	-	-	-
383	Manf. of elect. machinery	52	30	2	7	300	152	561	219	561	191	717	244	512	174	1252	712	1200	700	1500	500
384	Manf. of transport equip.	259	173	159	125	537	300	746	501	423	282	676	453	740	496	837	561	1000	800	1300	1000
385	Other industries	478	267	69	18	543	231	602	283	1061	370	540	189	611	214	779	321	1000	400	1200	1000
	TOTAL	15143	6862	17760	7998	30841	12494	38233	16074	44333	19890	32767	14983	41557	19563	74639	43113	71400	37000	86100	45300

Notes: 1. Information for the years 1960-1968 pertaining to the East and West Banks

2. Information for the years 1970-1974 pertaining to the East Bank only

Source: 1. Department of Statistics for the years 1960-1968 and 1974

2. SMS for the years 1970-1972, 1975 and 1976

1/ D.O. = Domestic Out-put

V.A. = Value Added

Table 12

Domestic Output, Imports, Exports and Apparent Consumption of Minor & Industrial Products  
 By Major Industrial Sectors in Jordan, 1960-1975 (Value in Jordanian Dinars)

I S I C CODE	1960				1965				1970				1975			
	Domestic Output	Imports	Exports	Apparent Consump- tion	Domestic Output	Imports	Exports	Apparent Consump- tion	Domestic Output	Imports	Exports	Apparent Consump- tion	Domestic Output	Imports	Exports	Apparent Consump- tion
Extr. of phosphate, natural	1639.0	-	304.5	334.5	1594.0	-	2430.3	-	3213.1	-	2236.7	-	17400.0	-	19554.5	-
Food manufacturing	3219.0	3307.8	86.7	6440.1	8969.0	4537.9	371.4	13153.5	11241.0	4196.3	321.2	15116.1	16000.0	18116.8	521.6	32665.2
Beverage industries	369.0	81.4	-	450.4	539.0	85.5	-	624.5	536.0	117.1	11.1	642.0	2500.0	485.7	239.4	2746.3
Tobacco manufactures	2003.0	440.4	57.4	2386.0	2573.0	704.7	425.6	2852.1	2240.0	649.5	519.0	2370.5	3500.0	780.0	765.6	3514.4
Manufacture of textiles	374.0	4471.2	33.3	4811.9	1897.0	6944.8	31.1	8810.7	1556.0	6084.3	202.6	7437.7	4500.0	13370.8	877.9	16932.3
Manuf. of wearing apparel	950.0	1003.3	1.0	1952.3	1753.0	1091.3	25.6	2818.7	1204.0	1540.1	29.6	2714.5	3000.0	6672.5	665.5	5007.0
Manuf. of leather and leather products	36.0	421.8	-	457.8	665.0	252.6	5.5	912.1	292.0	219.3	1.3	510.0	1200.0	588.2	355.8	1403.0
Manuf. of footwear	910.0	313.7	3.9	1219.8	1355.0	233.4	27.0	1561.4	1102.0	212.9	37.3	1277.6	800.0	1087.3	166.8	1720.5
Manuf. of furniture and fixture	913.0	90.6	6.7	996.9	2348.0	136.5	5.9	2478.6	2392.0	139.6	3.4	2528.2	3000.0	482.5	19.3	3563.0
Manuf. of paper and paper products	76.0	698.8	3.7	773.1	280.0	1350.0	45.8	1584.2	462.0	1427.7	149.9	1739.8	1200.0	4619.9	383.4	5436.5
Printing & publishing	323.0	-	1.3	321.7	661.0	-	5.8	655.2	980.0	-	-	980.0	1500.0	-	6.0	1494.0
Manuf. of industrial chemicals	215.0	1920.2	11.8	2123.4	1690.0	3560.0	82.7	5167.3	2318.0	4530.8	287.0	6561.8	2800.0	13348.4	2554.7	14193.7
Petroleum refinery	-	3319.3	-	3319.3	4639.0	3247.3	100.8	7785.5	3015.5	3705.0	8.3	6712.2	11500.0	24765.2	329.2	35556.0
Manuf. of rubber products	297.0	994.4	-	1291.4	53.0	1149.4	1.7	1200.7	78.0	863.4	1.0	940.4	60.0	3213.3	9.2	3264.7
Manuf. of non-metallic minerals	2076.0	1163.9	40.8	2199.1	3175.0	1116.3	113.6	4177.7	1546.0	1353.9	366.1	2533.8	1600.0	4168.5	1966.5	1900.0
Basic metal industries	686.0	7035.9	10.8	7711.1	2266.0	9401.5	11.6	11655.9	5360.0	11269.0	12.4	16636.6	6900.0	45773.3	961.6	51711.0
Manuf. of machinery except electrical	133.0	429.6	-	562.6	38.0	434.4	-	472.4	40.0	982.3	-	1002.3	8000.0	3300.6	-	11100.0
Manuf. of electrical machinery	52.0	1840.1	-	1832.1	561.0	2207.2	123.3	2044.9	623.0	2186.5	303.7	2795.8	1000.0	3022.3	230.0	13391.0
Manuf. of transport equip. Other industries	259.0	2239.6	76.1	2498.6	746.0	3707.7	-	4453.7	925.0	4902.9	-	5427.9	1300.0	17017.2	-	36819.2
Other industries	478.0	1555.0	76.1	1956.9	602.0	2736.1	81.5	3316.6	886.0	4793.2	46.6	5632.6	1000.0	4423.5	61.7	5361.8

Source: Jordan Department of Statistics, several External Trade Yearbooks & industrial survey reports.

Table 13

Domestic Output, Imports, Exports and Apparent Consumption for Selected Minerals and Manufactured Products in Selected Years

Commodity	Unit	1960 <sup>1/</sup>					1965 <sup>1/</sup>					1970 <sup>2/</sup>					1975 <sup>2/</sup>				
		Domestic Output	Imports	Exports	Apparent Consumption	Domestic Output	Imports	Exports	Apparent Consumption	Domestic Output	Imports	Exports	Apparent Consumption	Domestic Output	Imports	Exports	Apparent Consumption	Domestic Output	Imports	Exports	Apparent Consumption
Natural phosphate	1000 Ton	361.9	-	318.8	42.2	827.9	-	604.6	223.3	912.7	-	656.2	256.5	1352.5	-	112.0	240.5				
Cement	1000 Ton	164.8	53.4	1.5	216.7	305.0	5.4	11.2	299.2	377.5	5.7	55.7	327.4	572.2	7.9	73.5	506.6				
Petroleum Products	1000 Ton	-	212.5	-	212.5	379.4	39.3	15.3	403.4	440.1	45.6	1.0	484.7	756.1	10.9	16.7	750.3				
Tanned leathers	Ton	-	655.6	1.0	654.6	620.7	842.0	28.0	1434.7	374.3	445.6	1.0	818.9	660.6	905.9	571.9	991.6				
Soap	Ton	2928.0	461.0	35.0	3354.0	3390.0	1020.0	91.0	4319.0	2175.0	497.8	144.7	2527.9	4652.0	790.9	303.5	5155.4				
Cigarettes	Ton	946.1	-	35.0	311.1	1164.2	-	308.0	856.2	1609.8	13.4	333.3	1289.9	1998.0	27.3	39.5	1985.6				
Iron	1000 Ton	-	19.8	-	-	-	35.7	-	-	24.0	11.5	0.3	32.5	31.3	20.7	0.2	51.2				
Beverages	1000 Litres	529.7	380.6	-	910.3	1944.0	96.9	-	2040.9	2195.5	129.4	-	2324.9	5625.4	392.9	1245.1	4973.2				

1/ Figures for both East & West Banks of Jordan

2/ Figures for East Bank only

Source: Jordan Department of Statistics, several External Trade Yearbooks, and Industrial Survey Reports.

Table 14

Breakdown of Gross Fixed Capital Formation  
by Destination. Major Sectors of the Economy  
(In JDs Million)

I.S.I.C. Category	1960	1965	1970	1975
1. Agriculture	1.25	2.23	3.80	9.43
2. Mining & quarrying	0.28	1.55	4.30	5.20
3. Manufacturing	0.97	13.06	17.20	23.00
4. Construction	5.28	6.00	7.10	20.50
5. Transport, equipment, storage	3.79	4.41	2.40	7.40
6. Finance, real estate electricity, gas, water, whole sale and retail trade and restau- rants, and community services	8.45	9.93	12.36	29.47
Total	20.02	37.18	47.16	95.00

- Source: 1. Jordan Department of Statistics, National Income Accounts, several volumes.  
2. National Planning Council, Five Year Plan (1976-1980).



Table 15

Gross Fixed Capital Formation by Destination in  
Mining & Manufacturing  
(In Thousand Jds)

ISIC Code	Category	1965	1967	1968	1974
2	Mining	1549	3919	4068	8391
311	Food	1410	1613	1549	5817
313	Beverage	384	612	400	1252
314	Tobacco	350	535	401	2076
321	Textile	463	1050	1157	2225
322	Wearing	87	71	650	408
323	Leather	202	316	359	531
324	Footwear	108	226	674	51
332	Furniture	378	397	1314	731
341	Paper	71	520	590	677
342	Printing	447	242	625	880
351	Chemicals	890	956	1313	1810
353	Petroleum	2588	5246	5623	18841
355	Rubber	21	18	41	15
36	Non-metallic	3089	3566	1169	8917
37	Basic metal	647	879	998	1911
382	Non electrical	5	5	12	-
383	Electrical	176	311	267	738
384	Transport	172	229	215	269
385	Other	22	36	16	305
	Total	13059	20757	21441	56845

Source: Department of Statistics, Jordan.

Table 16

Imports by SITC Category in US \$ Million CIF (at current Market Prices)

SITC Code	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975
00	38.1	39.8	49.1	38.2	44.1	49.9	52.3	56.4	76.4	93.4	135.1	149.2
01	1.5	2.1	2.2	3.1	3.7	3.5	2.0	3.3	3.3	3.2	3.0	3.8
02	6.1	6.5	8.5	7.3	6.4	7.7	6.7	6.5	7.9	9.6	13.9	17.7
03	7.7	9.0	9.6	8.4	9.0	10.7	10.3	13.6	12.8	12.6	16.5	75.2
04	2.6	3.1	3.6	2.6	1.4	1.5	1.3	2.2	3.1	4.6	3.6	3.8
05	6.6	8.5	10.3	8.1	8.5	9.6	10.7	9.0	15.0	17.3	25.5	36.9
06	34.3	40.4	45.3	40.5	37.4	48.4	43.3	33.4	53.3	70.3	107.1	135.4
07	29.6	27.4	33.0	31.7	31.2	36.5	29.6	42.3	43.6	52.1	111.7	223.6
08	6.5	7.5	8.6	6.8	8.8	10.6	10.1	11.7	18.9	18.7	27.6	50.7
09	8.1	12.7	19.8	7.5	10.5	11.3	18.5	33.3	32.5	46.0	50.1	10.4
Total	141.1	157.0	191.0	154.2	161.0	189.7	184.8	214.7	266.8	327.8	494.1	706.7

Source: Central Bank of Jordan, Monthly Statistical Bulletin, several issues

The US \$ values were calculated on annual current exchange rate which is:

1964 - 1972 \$ 2.8 = 1 JD

1973 - 1975 3.1 = 1 JD

1976 3.0 = 1 JD

Table 17

Imports by SITC Category in U.S. \$ Million C.I.F.  
(At 1970 Market Price)

SITC Code	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975
0	42.3	42.3	51.2	37.5	43.9	43.5	52.3	58.1	67.3	81.3	89.9	101.9
1	1.7	5.2	1.9	3.1	4.0	3.7	2.0	3.0	2.9	3.1	2.8	2.9
2	7.3	7.7	10.0	8.0	21.0	8.4	6.7	6.3	7.1	7.2	8.0	11.9
3	8.4	9.8	10.3	8.9	9.1	11.4	10.3	10.2	12.8	12.1	14.2	20.6
4	3.2	4.1	3.5	2.6	1.1	1.2	1.3	1.5	2.0	3.3	2.1	2.1
5	6.2	8.1	8.3	7.1	6.2	9.9	10.4	8.3	14.2	13.7	18.2	20.3
6	37.9	44.1	50.0	43.6	40.3	67.4	43.3	31.1	31.1	67.1	75.9	54.1
7	47.1	37.5	48.7	45.7	29.8	38.1	29.6	46.6	18.4	61.1	90.4	188.5
8	7.9	6.9	9.9	7.7	10.9	16.1	10.1	11.6	18.6	19.6	22.4	32.0
9	10.2	15.1	22.8	8.5	11.8	19.5	18.5	33.3	29.6	48.5	38.1	2.4
<b>Total</b>	<b>172.2</b>	<b>180.8</b>	<b>216.6</b>	<b>172.7</b>	<b>178.1</b>	<b>219.2</b>	<b>184.5</b>	<b>210.0</b>	<b>204.0</b>	<b>317.0</b>	<b>362.0</b>	<b>436.7</b>

Calculations made by SMS.

Table 18

Exports by SITC Category in U.S.\$ Million FOB  
(At Current Market Prices) 1964-1975

SITC Code	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975
0	8.8	10.9	11.3	13.0	15.6	15.4	16.8	13.3	17.2	15.3	30.6	32.6
1	-	-	-	-	1.5	1.6	1.9	1.5	1.6	2.8	2.8	3.2
2	1.7	1.2	0.9	1.9	12.5	10.8	8.8	8.4	13.4	15.0	64.1	64.3
3	7.5	7.8	10.2	10.4	0.2	0.1	-	0.1	-	0.6	0.4	0.6
4	0.1	-	-	0.2	0.8	1.1	0.5	1.2	1.1	0.4	1.5	1.3
5	-	-	-	0.1	0.2	0.5	0.9	1.4	1.1	2.1	3.9	6.2
6	0.3	0.3	0.4	0.4	1.8	2.6	2.7	3.9	8.7	7.3	18.7	13.1
7	0.1	0.3	0.6	0.5	0.5	0.6	1.1	1.2	1.6	1.5	1.9	1.5
8	0.5	0.6	0.6	0.5	0.8	0.6	0.7	0.7	0.6	1.0	2.1	5.1
9	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	-	0.1	-	-
Total	19.1	21.2	24.1	27.1	34.0	33.4	33.5	31.8	45.3	46.1	126.0	127.9

Source: Central Bank of Jordan, monthly statistical bulletins.

Table 19

Exports by SITC Category 1964-1975 in US\$  
Million F.O.B. (At 1970 Prices)

ISIC Code	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975
0	5.6	23.2	35.7	27.5	29.2	27.3	15.3	24.7	24.5	5	46.4	70.6
1	1.6	1.1	0.8	1.7	1.2	2.0	1.2	1.1	1.0	2.3	2.1	2.8
2	6.4	6.7	8.6	8.9	10.6	9.2	6.6	6.6	9.5	15.5	16.2	12.5
3	0.1	-	-	0.2	0.2	0.2	0.1	0.1	-	0.4	0.3	0.7
4	0.6	0.4	0.5	0.9	0.8	0.8	0.9	1.1	0.9	0.3	1.0	1.0
5	-	-	0.1	0.1	0.2	0.7	1.1	1.0	0.7	1.7	3.0	5.5
6	0.3	0.3	0.3	0.4	1.5	3.2	3.0	2.8	5.5	5.8	13.8	11.5
7	0.1	0.3	0.3	0.4	0.4	0.5	0.9	1.2	1.4	1.3	1.4	0.8
8	0.4	0.6	0.6	0.5	0.6	0.8	0.5	0.5	0.4	0.8	1.7	4.5
9	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	-	0.1	-	-
Total	15.2	32.7	47.0	40.7	44.8	44.9	29.7	39.2	43.9	56.8	85.9	109.9

Value of Imports (CIF) of Selected Mining and Industrial Commodities  
(Thousand U.S.)

Commodity	1960	1961	1962	1963	1974	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975
15.7.X.2 Other vegetable oils (coconut oil) etc.	16	11	412	748	578	866	678	383	300	392	312	505	936	563	590	513
15.13.A Vegetable Ghee	555	102	27	30	17	-	57	73	84	32	21	-	61	33	101	704
16.2 Other prepared or preserved meat	-	-	174	125	160	233	219	267	357	446	343	433	626	566	687	420
16.4.B Prepared or preserved fish	159	159	195	201	158	207	161	272	91	115	171	237	218	270	403	418
17.1.B Refined sugar	1257	1159	1252	3112	1940	2037	1963	1520	1757	2144	2001	2084	5021	1604	6353	11156
17.4 Sugar confectionery not containing cocoa	82	88	76	85	61	50	80	64	76	75	102	102	153	137	286	331
20.2.A Tomatoes and tomato juice	-	26	15	23	-	45	22	14	45	13	12	-	-	60	211	242
21.6 Natural yeasts (active or inactive)	53	58	66	48	78	68	64	67	56	74	100	91	164	82	181	427
22.9.B.2 Whiskey - litre	40	43	46	62	55	55	94	95	149	113	77	106	134	137	174	306
23.4 Oil-cake and other residues	-	-	-	-	.45	52	-	71	-	70	209	299	416	814	1119	707
23.7.A.1 Concentrated materials used for preparation of forage	-	-	71	70	109	162	299	349	177	383	361	402	635	566	592	625
23.7.C Ready forage	-	-	-	-	-	-	-	-	-	-	-	-	-	84	284	408
24.1.B Tobacco leaves	43	321	577	343	419	571	574	905	1045	993	575	939	859	741	545	649
25.23.A Cement	397	154	211	82	66	62	286	252	60	125	71	47	70	101	185	205
27.9 Petroleum & shale oils crude	438	1072	1307	1704	1862	2130	2432	2150	2166	2619	2524	4137	3313	3335	3590	22794
27.10.E Lubricating oils and greases	321	289	446	387	444	450	471	441	42	641	497	413	979	717	1433	1773
28.8 Sulphuric acid, oleum	-	-	-	14	15	33	33	13	-	-	-	11	35	65	87	254
30.3.D.2 Other medicaments	413	424	507	594	678	914	22	1015	1071	1313	1052	806	1378	1477	1776	2338
31.2 Mineral or chemical fertilizers, nitrogenous	16	35	48	79	51	87	161	205	104	73	4	70	86	216	418	132
31.3.B Mineral or chemical fertilizers, phosphatic	55	12	52	37	24	19	13	14	62	59	49	-	-	65	164	245
31.5 Other fertilizers	-	-	-	-	-	-	25	16	-	-	-	67	166	124	1370	360
33.6.D Perfumery cosmetics	80	89	106	113	112	126	155	121	161	228	183	164	258	300	45	555
34.2.A Products used for washing preparations	-	-	156	-	-	-	32	62	71	80	97	76	114	99	395	557
38.11.B Disinfectants, insecticides	55	98	75	95	104	132	179	121	143	160	172	151	254	305	379	595

Table 20 (Contd.)

2.N.I.T Tariff	Commodity	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975
39.2.A	Liquides, pastes of polymerisa- tion for industry	-	-	56	17	116	108	105	67	120	182	181	135	220	199	413	524
39.3.C	Cellulose	-	-	38	45	94	110	138	50	67	39	46	93	193	171	226	242
40.11.A	Rubber tyres	837	33	802	1139	647	954	1094	737	826	919	623	543	896	925	1730	2416
41.1	Raw hides and skins	10	14	133	258	107	176	220	138	107	138	140	185	235	182	433	235
44.5.A	White timber wood	424	320	358	395	418	576	511	295	499	502	483	250	341	706	601	967
44.5.C	Beech wood	126	101	139	101	125	93	180	66	133	98	66	34	211	279	85	302
44.5.D	Pine wood	165	199	191	130	295	176	281	54	141	71	219	164	219	130	243	493
44.7	Railway sleepers of wood	-	-	-	-	-	-	199	805	-	-	-	-	-	-	-	838
44.15.A	Plywood, blockboard and veneered	147	160	175	203	207	267	262	161	170	112	58	239	209	431	508	253
44.15.B	Inlaid wood	-	-	-	-	-	31	35	41	35	21	216	55	175	355	259	556
44.21.B	Wooden packing cases, boxes, crates	50	39	18	66	44	16	151	91	85	70	98	85	15	79	250	230
48.1.D	Newsprint for publications	18	125	20	13	133	156	196	95	86	79	42	71	38	66	476	437
48.1.F.2	Other kinds of paper	-	-	45	60	68	91	124	165	204	113	156	151	425	413	930	750
48.15.B.3	Other kinds of paper other than 48.1.F.2	-	-	33	30	44	24	50	55	42	39	22	43	79	63	226	295
48.16.A	Paper bags for packing of cement	51	-	87	99	35	154	149	80	174	146	208	96	211	429	845	507
48.16.C	Other boxes and bags of paper	-	-	34	111	160	118	135	111	102	-	139	165	272	197	525	469
49.1	Printed books, booklets & leaflets	45	64	90	40	125	133	153	211	158	145	114	275	250	209	350	255
51.1	Yarn of man-made fibres	-	17	46	46	60	100	248	132	237	310	303	923	502	577	698	947
51.4.A	Woven fabrics containing 100 % of man-made	29	17	1386	1250	-	-	2048	1389	1245	1955	1812	1429	1658	1749	2343	2050
51.4.B.2	Other woven fabrics	-	1218	-	-	-	-	-	-	359	155	225	773	719	754	445	1455
53.7	Yarn of combed sheep wool	43	57	88	37	70	221	398	428	425	470	471	528	544	329	1468	1748
55.5	Cotton yarn not for retail	54	105	119	90	193	200	260	210	192	252	192	176	214	287	197	298
55.9.C	Woven fabrics of cotton	27	89	1760	1645	1936	2073	1739	1416	149	1345	1167	1119	1306	1271	929	1311
58.2	Other carpets and rugs	13	17	94	90	124	134	197	101	106	142	142	68	213	257	319	437
59.1.B	Wadding for cigarette filter tips	26	55	72	117	142	127	117	136	200	253	126	107	168	177	193	314
60.1	Knitted fabrics, not rubberised	-	-	-	-	-	24	31	18	28	14	50	204	335	363	295	180
60.4	Under garment not elastic nor rubberised	48	54	171	155	143	76	68	51	73	142	123	249	364	468	508	534

Commodity	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975
60.5.B Outer garment knitted not rubberized	27	26	132	137	134	160	192	145	209	303	294	479	708	618	801	1073
61.1.B Men's and boys' outer garments	19	11	61	72	32	67	40	61	128	165	65	176	113	100	107	3758
61.2 Women's, girls' outer garments	19	16	73	72	47	74	74	66	77	162	63	122	235	319	325	575
61.6.C Shawls, scarves veils and the like	97	12	174	137	-	84	78	45	85	164	145	144	165	153	139	285
62.2 Bed linen, table linen	16	43	60	65	83	71	67	73	89	161	174	157	195	230	212	405
63.1.B Clothing accessories and rugs	48	35	323	305	326	342	305	302	509	44	635	493	651	403	787	849
64.2.A Footwear with uppers of artificial plastic	-	88	26	85	22	46	68	24	59	41	-	45	55	75	50	484
64.2.B.2 Other kinds of footwear	-	-	32	61	-	-	15	22	23	95	187	143	199	46	95	301
69.8 Glazed setts, flags and paving hearth	35	35	28	84	48	70	74	49	48	62	103	54	54	133	257	328
69.10 Sinks, wash basins, bidets	41	30	46	45	49	58	73	57	40	82	84	45	63	130	234	250
69.11.A Table ware and kitchen appliances	63	62	62	32	94	152	85	92	47	880	66	69	159	200	263	343
70.5 Unworked glass	78	78	100	103	110	112	128	109	95	116	155	127	173	19	249	283
70.10 Carboys, bottles, jars, pots	38	26	-	62	40	40	65	86	65	136	107	157	150	232	204	423
70.13.A Glassware for kitchen & tableware	63	89	88	113	90	135	120	118	116	174	228	182	218	402	396	539
73.1 Pig-iron and cast-iron	-	-	17	-	-	-	-	123	21	158	-	-	26	1292	2776	822
73.7.A Blooms, billets, slabs and sheet bars	-	-	-	-	-	-	-	-	49	-	929	169	759	-	-	1802
73.9 Universal plates of iron or steel	166	150	185	132	104	169	136	136	217	284	309	200	232	499	966	1193
73.10 Bars and rods of iron or steel	839	887	778	940	1061	1290	1586	1274	516	799	601	210	814	1162	539	1746
73.11 Angles, shapes and sections of iron or steel	312	304	366	389	457	442	645	413	521	402	1069	234	597	949	881	821
73.13.B Other sheets and plates of iron or steel	79	60	126	241	92	244	151	178	340	227	179	84	283	481	285	374
73.16 Railway track construction materials of iron or steel	-	-	-	-	-	-	378	854	10	27	11	-	-	-	486	249
73.18.A Tubes and pipes, diameter 3 inches or more	171	301	261	394	199	264	293	499	128	271	186	151	188	228	350	2304
73.18.B Tubes and pipes, diameter less than 3 inches	203	138	144	202	232	255	281	291	237	221	361	192	362	491	1122	1114
73.20.B Tubes and pipe fittings	39	28	63	90	48	78	106	-	77	66	83	51	60	118	249	490



Table 20 (Cont'd)

B.N.T. Tariff	Commodity	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975
73.21.A	Doors and windows of iron or steel	10	10	193	47	35	27	40	76	41	11	39	-	-	-	15	474
73.21.B.2	Other structure of iron or steel	-	-	-	-	-	-	-	-	-	-	-	-	-	-	649	3001
73.23.C	Casks, drums, cans, boxes or iron or steel	-	-	10	15	15	61	74	23	45	12	49	39	135	167	96	274
73.24	Compressed gas cylinders	76	36	46	45	80	13	37	84	14	27	55	-	12	26	115	265
73.32.B	Bolts and nuts of iron or steel	38	45	60	69	40	43	69	53	89	65	85	66	92	93	280	280
73.36.C	Stoves, ranges, cookers	99	113	157	219	220	263	180	70	67	138	106	53	135	149	142	372
73.36.D	Stoves, boilers for central heating	-	-	-	-	-	-	52	47	117	107	94	120	139	215	131	396
73.37	Central heating boilers	23	42	47	39	56	122	96	91	102	129	119	69	73	159	509	340
73.38	Articles for domestic purposes of iron or steel	78	76	94	115	102	132	122	112	114	143	144	198	217	284	374	474
76.2	Wrought, bars, angles of aluminium	-	-	-	-	-	-	33	36	74	81	91	45	75	128	225	392
82.4.B	Hand tools used for builders	-	-	31	37	-	-	-	53	-	-	-	-	18	13	14	285
83.2	Base metal fittings and mountings	63	67	78	80	94	110	135	79	77	124	122	111	204	199	213	300
83.7.B	Lamps and lighting fittings	48	60	40	24	41	47	51	62	48	35	95	53	66	59	81	266
84.6.A.2	Internal combustion piston engines other than for vehicles or cycles	-	178	123	103	102	303	441	264	453	197	227	211	268	355	535	399
84.6.B.1.A	Parts and accessories for internal combustion piston engines for vehicles-	108	54	11	56	113	177	177	120	95	190	139	73	191	228	297	480
84.6.B.2	Parts and accessories for internal combustion piston engines other than vehicles	-	-	79	167	132	174	226	34	371	214	161	222	556	464	516	763
84.9.A	Mechanically propelled road rollers	15	28	44	43	22	31	65	10	37	33	48	15	25	12	24	280
84.10.B	Pumps (including motor pumps and turbo pumps) for liquids	233	190	123	179	181	110	194	168	110	160	239	146	189	187	301	525
84.11.C	Air or gas compressors	52	42	50	40	34	92	78	73	130	133	66	37	55	101	211	399
84.12	Air condition machines	20	42	51	55	35	156	37	106	106	49	128	54	89	51	92	303
84.17.A	Machinery, plant and similar laboratory	128	58	11	14	14	-	21	14	13	24	61	37	39	28	185	254
84.18.A	Oil filters and air purifiers for machinery	-	22	33	16	-	12	16	-	26	21	44	24	37	37	66	533
84.22.E.2	Lifting, handling, loading or unloading machinery other than for industrial use	50	41	22	19	23	14	73	45	46	24	30	15	43	52	77	233

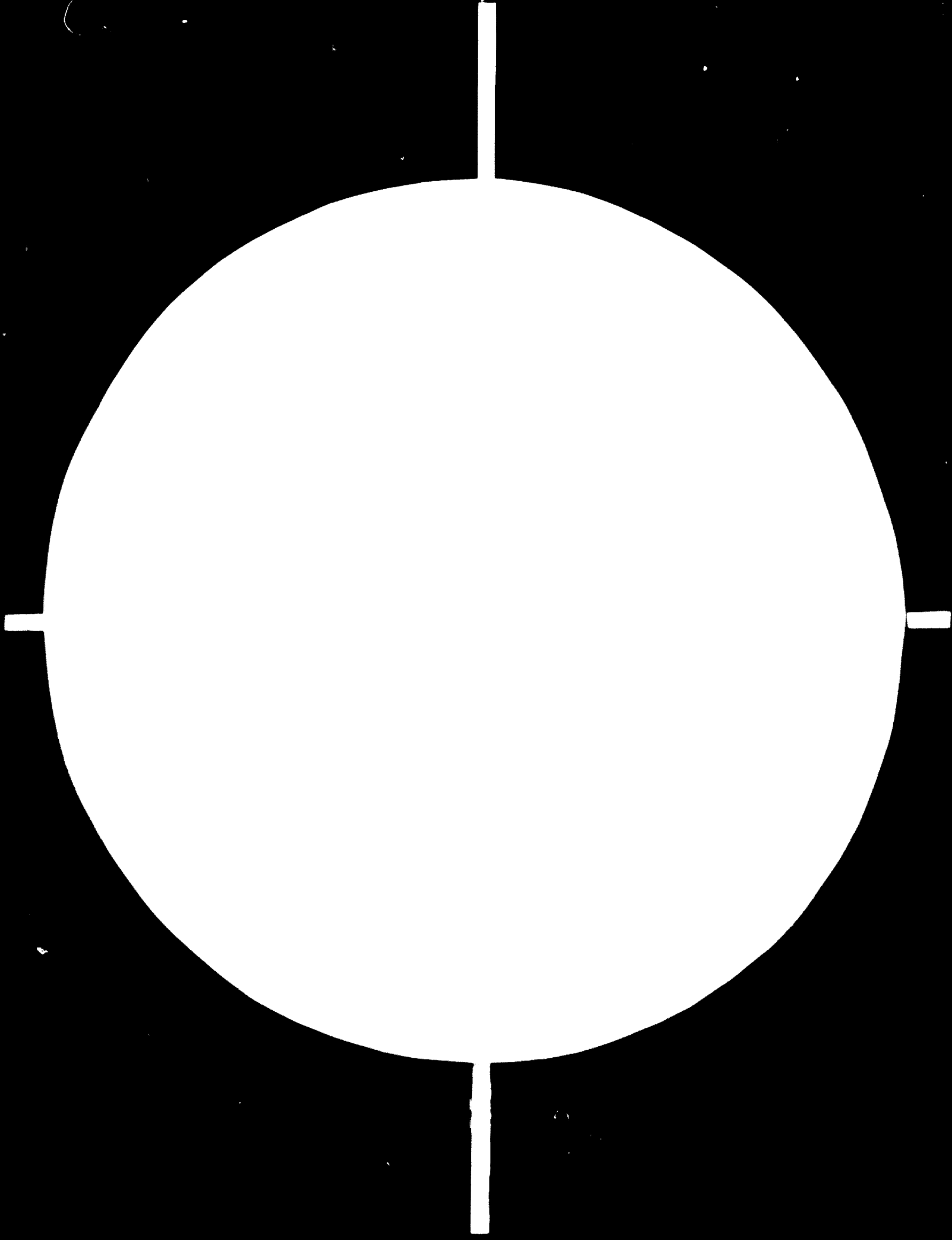
Table 20 (Contd)

E.N.T. tariff	Commodity	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975
84.23.A	Parts and accessories for excavating levelling	-	-	267	71	132	128	42	22	33	200	78	22	60	149	288	834
84.23.B	Excavating, levelling, boring and extracting machinery	199	269	57	72	373	215	349	358	372	554	312	221	439	842	1547	5109
84.28	Other agricultural and horticulture machinery	-	-	-	-	14	31	44	49	-	30	62	19	156	83	144	255
84.30.A	Machinery, not falling within any other heading of this chapter	32	41	99	154	42	37	25	16	-	88	-	31	-	195	36	287
84.37	Weaving machines, knitting machines and machines for making glumped yarn	24	38	50	37	58	136	56	20	41	53	74	43	121	72	559	520
84.40.B	Machinery for washing, cleaning, drying, etc.	78	83	100	126	107	118	139	86	54	161	115	62	155	192	283	583
84.45	Machines-tools for working metal or metallic carbides	236	82	125	129	69	105	82	71	130	62	16	17	121	107	193	626
84.46	Machines-tools for working stone, ceramics, concrete, etc.	-	12	-	-	10	69	-	28	-	26	-	-	33	23	33	899
84.56.A	Concrete mixtures and stone crushers	-	62	42	21	49	47	59	104	90	142	61	26	18	34	96	544
84.59.A	Other machinery for agricultural or industrial use or road building	90	78	182	134	137	122	65	113	204	94	139	25	84	165	623	1231
84.59.B	Other machinery other than for agricultural or industrial use	-	58	62	36	47	74	233	70	59	122	28	-	17	50	105	730
84.61	Taps, cocks, valves and similar appliances	208	50	68	83	85	151	120	85	127	194	180	132	168	278	503	494
84.65	Machinery parts, not containing electrical connectors	-	-	29	77	21	35	61	121	310	330	352	238	367	355	352	1355
85.1.A	Electrical goods, generators, motors weighing 10 kgs or less	216	-	15	18	25	4	25	18	18	40	64	30	118	46	167	377
85.1.B	Electrical goods, generators, motors other than weighing 10 kgs or less	-	-	333	270	153	424	554	392	495	501	193	291	613	747	993	3254
85.11	Industrial and laboratory electric furnaces and ovens	34	31	183	28	23	28	50	28	20	38	26	16	27	32	67	256
85.13	Electrical line telephonic and telegraphic apparatus	218	91	224	341	91	224	130	310	148	131	99	120	1037	388	531	749
85.15.A.1	Television sets	325	193	303	372	335	429	{ 173	81	425	454	320	230	346	391	703	1437
85.15.A.2	Radio sets	-	-	-	-	-	155	153	166	167	146	151	68	110	244	222	-

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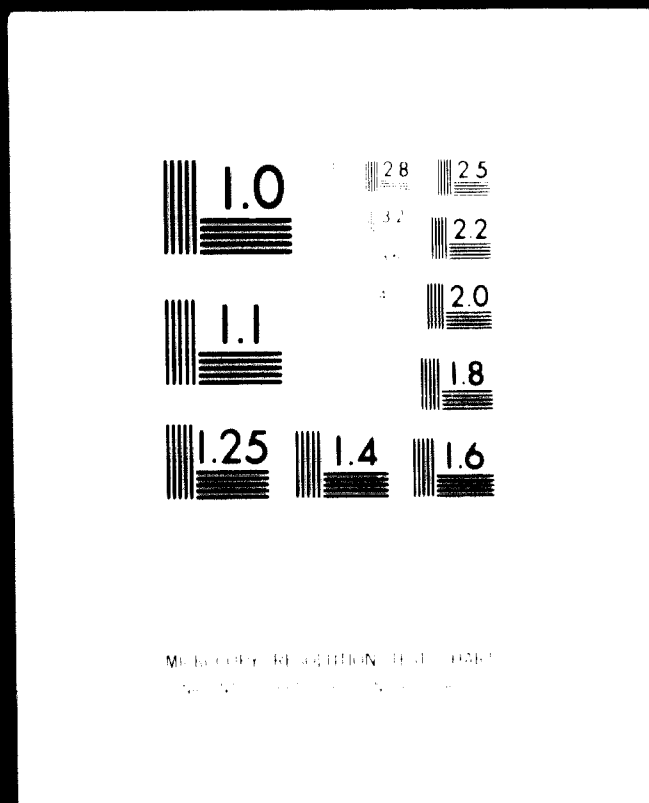


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Table 20 (Contd.)

Commodity		1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975
85.15.C.1	Other transmission and reception apparatus	35	52	17	15	268	216	12	49	42	25	80	163	225	145	402	769
85.15.C.2	Accessories and parts for the other transmission & reception apparatus	-	-	-	-	-	-	77	295	137	70	135	135	157	65	846	423
85.18	Electrical capacitors, fixed or variable	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	534
85.19	Electrical apparatus for making and breaking electrical circuits	306	262	141	213	141	183	173	333	259	371	307	230	503	585	835	1574
85.22	Electrical goods and apparatus	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	311
85.23.A	Insulated plastic wire the diameter of which is one millimeter or less	20	-	49	47	40	118	94	139	128	204	81	93	154	102	162	242
85.23.B	Insulated electric wire, cable, bars, strip and the like (including co-axial cable)	218	26	145	87	93	86	158	192	263	225	274	216	218	469	343	1368
86.3	Other rail locomotives	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2172
87.1	Tractors	120	410	503	268	458	656	647	265	467	582	211	213	216	346	402	893
87.2.A.1.A.3	Vehicles for public transport (buses) weighing more than 1500 kgs run by benzine	-	-	-	11	-	-	-	-	-	-	17	26	123	18	50	337
87.2.A.1.B.3	Vehicles for public transport (buses) run by other than benzine	-	-	-	-	-	-	-	-	50	13	-	10	7	18	85	2084
87.2.A.2.A.1	Motor vehicles for transport of passengers, weighing not more than 1000 kg run by benzine	-	-	-	-	-	15	1524	1129	-	314	271	299	366	628	749	1077
87.2.A.2.A.2	Motor vehicles for transport of passengers weighing 1000-1500 kgs run by benzine	629	642	834	924	1027	1032	-	-	1044	682	707	895	663	1331	1928	2885
87.2.A.2.A.3	Motor vehicles for transport of passengers more than 1500 kgs weigh, run by benzine	-	-	-	-	-	-	-	-	-	106	81	192	89	198	503	816
87.2.C.1.C	Motor vehicles for transport of goods more than 3000 kgs, run by benzine	173	166	205	445	2981	367	1374	731	-	41	88	296	143	141	73	293
87.2.C.2.C	Motor vehicles for transport of goods more than 3000 kgs other than benzine	-	-	-	-	-	-	-	-	398	699	149	48	105	282	320	2796

Table 20 (Contd)

E.N.T Tariff	Commodity	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975
87.2.D	Vehicles used for transporting prishable food stuff	-	-	-	-	-	-	-	-	-	148	262	205	33	221	1055	2670
87.3.C	Motor lorries and vans such as fire-escapes, crane lorries	28	-	19	13	16	62	-	-	86	133	16	93	18	29	29	1027
87.4.B.2.C	Motor vehicles chassis	71	41	80	21	-	-	-	-	-	39	-	23	-	-	-	305
87.6.A.1	Parts and accessories of motor vehicles	579	922	1210	1167	920	1049	1352	2271	1101	1417	1222	841	1271	1424	1965	3379
87.6.A.2	Parts and accessories for motor vehicles - second hand	-	-	-	-	-	-	-	-	-	56	53	22	121	133	321	485
87.6.B	Parts and accessories for tractors	53	92	-	-	-	-	-	-	-	350	255	84	58	214	475	525
87.14.C.1	Refrigerated trailers, for trans- porting prishable food	-	-	-	-	-	-	-	-	-	-	14	-	-	-	52	251
88.2	Flying machines	-	-	470	-	60	-	-	-	-	-	-	6667	1483	-	8382	11659
88.3	Parts and accessories of flying machines	117	53	28	59	497	355	432	622	937	760	655	949	1037	1044	989	1219
89.1	ships, boats	-	-	-	-	-	-	-	-	-	-	-	-	76	37	17	274
90.17	Medical instruments	34	43	45	43	35	48	73	192	113	107	202	330	1528	342	417	941
91.1	Watches (pocket, wrist)	97	113	116	103	108	113	155	126	172	231	178	163	196	277	390	634
94.3	Other furniture	16	34	82	52	107	82	78	26	71	79	99	279	56	116	153	410

Table 21

## Imports of Selected Mining and Industrial Commodities by Quantity

Unit of Measure	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975
15.7.K.2 Other vegetable oils (coconut oil, etc.)	172	112	4796	8387	7769	8126	7210	4874	2617	3907	3041	5610	8969	5139	4819	3712
15.13.A Vegetable ghee	4233	886	167	267	127	-	473	396	667	181	122	-	290	239	382	2107
16.2 Other prepared or pre- served meat	-	-	634	465	643	876	879	569	1537	1912	1678	1827	2030	1654	1022	1023
16.4.B Prepared or preserved fish	798	694	873	876	707	903	661	944	341	427	608	890	727	844	934	1031
17.1.B Refined sugar	35765	42126	51740	54038	35602	70346	85017	68809	72369	68114	54613	64732	65404	18371	46769	44570
17.4 Sugar confectionery not containing cocoa	312	371	335	365	251	187	325	235	282	319	396	494	746	649	1072	1029
20.2.A Tomatoes or tomato juice	-	251	136	224	-	187	207	133	462	137	88	-	-	351	563	1212
21.6 Natural yeasts (active or inactive)	178	193	330	294	443	416	413	408	360	433	518	461	692	329	571	559
22.9.B.2 Whiskey - litre	78	85	77	110	99	97	161	165	268	197	129	167	176	182	226	357
23.4 Oil-cake & other residues	-	-	-	-	-	1317	1657	-	1775	-	1597	4662	5422	7754	8320	10716
23.7.A.1 Concentrated material used for preparation of forage	-	-	1236	1175	1456	2040	3521	4492	2222	4125	3291	3113	5160	4028	3304	3437
23.7.C Ready forage	-	-	-	-	-	-	-	-	-	-	-	-	-	703	2563	2607
24.1.B Tobacco leaves	232	301	549	316	400	575	514	848	1119	1011	546	781	766	688	520	587
25.23.A Cement	53434	18249	30137	8202	4279	5379	42018	36511	5143	11698	5701	3152	4838	8412	7874	7906
27.9 Petroleum & shale oils crude	77	207	252	329	359	410	470	415	417	506	480	592	643	706	773	860
27.10.E Lubricating oils & greases	4582	3809	5927	4766	5869	5999	626	5433	1877	7878	5983	5308	5909	6753	10689	9716
28.8 Sulphuric acid, oilsum	-	-	-	500	688	112	1041	419	-	-	-	457	1397	2523	2903	1946
30.3.A Medicaments antibiotics	-	109	116	133	114	165	151	108	172	158	192	85	159	172	120	162
30.3.D.2 Other medicaments	359	360	483	563	622	817	13	621	728	603	678	466	802	755	777	1094
31.2 Mineral or chemical fer- tilizers, nitrogenous	818	1989	2670	4594	2563	3675	6949	9109	4229	3874	1877	3409	2999	6125	8185	1107
31.3.B Mineral or chemical fer- tilizers, phosphatic	2857	734	2254	1733	1291	574	504	643	3028	2736	2536	-	-	2609	2505	3163
31.5 Other fertilizers	-	-	-	-	-	-	1132	741	-	-	-	3228	7935	5456	2743	5855



Commodity	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1970	1971	1972	1973	1974	1975
33.6.D Perfumery cosmetics	107	145	171	187	171	201	247	137	278	363	232	230	336	304	72	571
34.2.A Products used for washing preparations	-	-	924	-	-	-	676	755	911	783	1360	792	1043	1003	3025	3094
38.11.B Disinfectants, insecticides	210	842	775	406	477	511	696	391	458	537	563	506	806	737	733	621
39.2.A Liquids, pastes for polymerisation for industry	-	-	315	111	714	744	773	491	891	1470	1470	1198	1974	1406	1496	2074
39.3.C Cellulose	-	-	88	139	254	314	425	169	179	142	189	371	806	645	713	654
40.11.A Rubber tyres	1625	74	1658	2192	1290	1973	2344	1610	1940	2195	1579	1325	1992	1865	2530	2143
41.1 Raw hides and skins	57	69	758	1185	513	842	808	402	488	510	446	648	684	400	1012	759
44.5.A White timber wood	23582	17855	21894	21962	24061	31902	29493	16860	28908	27842	21285	11592	15808	29104	13895	23928
44.5.C Beech wood	5148	4082	5932	4681	5944	4215	7579	2416	5294	3737	2388	1291	6817	6654	1517	5844
44.5.D Pine wood	8189	9859	9648	6465	14922	8216	12915	2458	7086	2748	9705	6409	8164	3635	5207	11723
44.7 Railway sleepers of wood	-	-	-	-	-	-	7131	28118	-	-	-	-	-	-	-	10374
44.15.A Ply-wood, blackboard & veneered	3046	3699	4009	4657	4943	6472	7247	4084	4321	2856	1222	4904	3752	5072	6768	3957
44.15.B In laid wood	-	-	-	-	-	381	588	634	512	2764	2511	582	2303	3103	2379	5352
44.21.B Wooden packing cases, boxes, crates	3665	4086	1797	3829	2944	259	11625	6539	590	4945	6714	5952	1696	4335	8266	6600
48.1.D News print for publications	281	1426	298	199	1738	1868	2120	1088	1020	979	448	737	414	478	1928	202
48.1.F.2 Other kinds of paper	-	-	467	750	748	1036	1387	1632	2254	1308	1868	1493	3791	3287	4015	3543
48.15.B.3 Other kinds of paper	-	-	222	77	184	126	284	363	286	197	150	265	419	345	739	928
48.16.A Paper bags for packing of cement	652	-	1325	1327	464	1880	2002	1194	2857	2267	2427	944	2071	3663	3007	1985
48.16.C Other boxes and bags of paper	-	-	220	870	1139	803	777	958	1089	-	745	1528	1770	873	1797	2074
49.1 Printed books, booklets and leaflets	101	166	182	210	233	341	448	666	361	581	494	760	707	630	676	401
51.1 Yarn of man-made fibers	-	14	35	41	47	87	236	123	252	282	283	413	443	518	526	838
51.4.A Woven fabrics containing 100% man-made.	38	21	1922	1823	-	-	2682	1791	1727	2552	2268	1775	2050	2133	2027	2276
51.4.B.2 Other woven fabrics	-	1681	-	-	-	-	-	-	405	169	207	408	796	753	393	1188
53.7 Yarn of combed sheep wool	30	43	65	47	56	147	315	337	462	446	439	460	516	212	617	825

Table 21 (Contd.)

Commodity	Unit measure	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975
55.5 Cotton yarn not for retail	Ton	112	208	243	68	446	412	588	446	425	538	555	321	353	413	214	361
55.9.C Woven fabrics of cotton	Ton	37	130	2950	2838	3291	3639	3161	2699	2878	2527	2130	2057	2273	2154	1353	1508
58.2 Other carpets and rugs	Ton	28	17	234	419	528	432	659	499	441	566	476	312	536	574	814	814
59.1.B Weaving for cigarette filter tips	Ton	30	73	95	141	178	169	157	194	294	378	203	169	230	215	254	223
60.1 Knitted fabrics, not rubberized	Ton	-	-	-	-	-	16	23	18	26	8	391	138	238	265	233	151
60.4 Under garment not elastic nor rubberized	Ton	22	27	130	122	108	59	34	39	51	110	120	204	255	326	289	344
60.5.B Outer garment knitted not rubberized	Ton	31	29	58	55	40	56	66	66	99	158	145	210	288	254	350	354
61.1.B Men's and boys' outer garments	Ton	35	8	64	81	36	76	36	100	174	314	59	191	71	89	55	390
61.2 Women's, girls' outer garments	Ton	4	5	29	28	21	33	258	37	50	89	28	84	116	177	136	349
61.6.C Shawls, scarves, veils and the like	Ton	107	10	170	55	-	79	46	40	40	87	75	78	71	67	57	104
62.2 Bed liner, table liner	Ton	34	78	129	111	132	111	103	155	202	320	298	244	270	291	218	435
63.1.B Clothing accessories and rugs	Ton	221	172	1896	1572	1721	2052	1867	1852	2827	319	2509	2175	2722	2318	3568	3236
64.2.A Footwear with uppers of artificial plastic	Ton	-	305	63	200	44	104	168	50	122	83	-	151	109	1454	81	177
64.2.B.2 Other kinds of footwear	Ton	-	-	45	95	-	-	15	30	27	147	256	212	266	56	84	77
65.9 Glazed setts, flags and paving hearth	Ton	605	632	491	1059	1044	1178	1227	813	861	1079	1724	677	864	1727	2679	2390
69.10 Sinks, wash basins, pids	Ton	293	243	345	283	443	476	548	332	299	661	620	253	356	747	968	762
69.11.A Tableware and kitchen appliances	Ton	442	678	443	184	502	806	581	541	317	567	456	377	910	998	1155	1299
70.5 Unworked glass	Ton	1665	1633	2094	2183	2401	2292	2607	2221	2060	2496	3095	2439	3196	35	2775	3127
70.10 Carboys, bottles, jars, pots	Ton	659	771	-	1102	852	926	1141	1630	1067	2006	1656	2190	1833	2882	1650	3326
70.13.A Glassware for kitchen and tableware	Ton	630	983	875	130	973	1681	1364	1233	1284	1759	2079	1624	1594	2546	1875	2211

Table 21 (Contd)

P.W.T. Tariff	Commodity	Unit measure	1960	1961	1962	1963	1964	1965	1967	1968	1969	1970	1971	1972	1973	1974
73.1	Pig-iron and cast iron	Ton	-	-	315	-	-	-	5199	325	4131	-	-	5060	26223	30654
73.7.A	Picoms, billets, slabs and sheet bars	Ton	-	-	-	-	-	-	-	2025	-	23676	5037	22412	-	-
73.9	Universal plates of iron or steel	Ton	2447	2727	4030	3938	1789	3944	3238	3749	5289	4846	3008	3641	5324	7623
73.10	Bars and rods of iron or steel	Ton	19819	22536	22625	28642	30854	35745	46785	37760	14415	11466	4501	17947	15460	22138
73.11	Angles, shapes & sections of iron	Ton	6485	6497	8604	9934	10896	10403	15626	9206	11084	8389	16429	4058	9693	11233
73.13.B	Other sheets and plates of iron or steel	Ton	1056	1023	2151	4638	1481	4418	2741	3291	4723	3600	2529	1326	4264	4878
73.16	Railway track construction materials of iron or steel	Ton	-	-	-	-	-	-	7833	6062	96	541	27	-	-	1678
73.18.A	Tubes and pipes, diameter 3 inches or more	Ton	2675	2241	4106	788	2871	3445	5077	8285	1673	3572	1805	2431	2203	2096
73.18.B	Tubes and pipes, diameter less than 3 inches	Ton	2168	1971	2023	3590	3402	3776	527	5096	3647	3825	5009	2678	5481	5259
73.20.B	Tube and pipe fittings	Ton	330	157	40	546	329	434	695	-	397	443	461	235	301	677
73.21.A	Doors and windows of iron or steel	Ton	49	71	2039	576	233	142	219	477	232	38	137	-	-	51
73.21.B.2	Other structure of iron or steel	Ton	-	-	-	-	-	-	-	-	-	-	-	-	-	1550
73.23.C	Casks, drums, cans, boxes of iron or steel	Ton	-	-	163	171	110	404	476	146	362	25	275	251	645	735
73.24	Compressed gas cylinders	Ton	447	244	350	315	508	77	277	770	107	218	434	-	84	133
73.32.B	Bolts and nuts of iron or steel	Ton	232	256	421	505	241	261	372	297	404	310	347	240	376	278
73.36.C	Stoves, ranges, cookers	Ton	228	298	369	548	537	665	497	214	175	363	249	125	316	307
73.36.D	Stoves, boilers for central heating	Ton	-	-	-	-	-	-	77	74	162	199	152	191	262	352
73.37	Central heating boilers	Ton	234	291	302	321	427	715	683	602	794	966	763	358	487	963
73.38	Articles for domestic purposes of iron or steel	Ton	424	482	481	636	509	715	639	590	535	809	761	550	834	1005
76.2	Wrought bars, angles of aluminium	Ton	-	-	-	-	-	-	79	57	197	152	143	135	146	266

Table 11 (Contd.)

B.N.T. Tariff	Commodity	Unit	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974
82.4.B	Hand tools used for builders	Ton	-	-	85	82	-	107	-	-	-	-	-	-	22	21	21
83.2	Base metal fittings and mountings	Ton	287	320	285	279	312	322	4.9	216	250	348	307	292	367	360	300
83.7.B	Lamps & lighting fittings	Ton	82	92	61	51	47	42	46	58	45	46	85	62	90	63	70
84.6.A.2	Internal combustion piston engines other than for vehicles or cycles	Number	-	431	204	335	355	313	435	301	261	225	655	136	221	167	310
84.6.B.1.A	Parts and accessories for internal combustion piston engines for vehicles	Ton	-	130	37	7	46	85	160	88	69	133	75	35	90	135	147
84.6.B.2	Parts and accessories for internal combustion piston engines other than vehicles	Ton	-	-	77	150	96	184	169	277	364	1.5	91	116	448	168	158
84.9.A	Mechanically propelled road rollers	Number	-	22	20	16	12	21	33	6	20	21	11	7	9	1	10
84.10.B	Pumps (including motor pumps and turbo pumps) for liquids	Ton	350	386	212	357	287	194	360	273	187	265	390	165	111	217	303
84.11.C	Air or gas compressors	Ton	69	69	136	101	70	192	216	138	193	227	118	77	102	87	222
84.12	Air condition machines	Ton	25	58	42	38	33	197	46	106	114	44	899	48	60	43	119
84.17.A	Machinery plant and similar laboratory	Ton	295	84	15	8	15	-	29	9	16	23	31	22	20	9	235
84.18.A	Oil filters and air purifiers for machinery	Ton	-	25	12	13	-	9	13	-	29	18	39	15	28	40	51
84.22.E.2	Lifting, handling, loading or unloading machinery other than industrial use	Ton	100	80	66	52	44	46	161	134	208	148	84	34	64	83	130
84.23.A	Parts and accessories for excavating levelling	Ton	-	-	578	169	186	351	81	24	20	145	86	16	31	46	151
84.23.B	Excavating, levelling, boring & extracting machinery	Ton	276	479	110	130	1436	488	563	808	766	897	555	312	532	937	1616
84.26	Other agricultural, and horticulture machinery	Ton	-	-	-	-	23	68	74	87	-	64	130	32	130	110	205
84.30.A	Machinery, not falling within any other heading of this chapter	Ton	47	44	103	214	34	28	78	15	-	105	-	60	-	129	17

Table 11 (Cont'd)

P.S.T. Tariff	Commodity	Unit measure	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975
84.37	Weaving machines, knitting machines & machines for making knitted yarn	Ton	26	135	65	64	105	192	36	28	33	61	70	35	67	30	205	334
84.40.B	Machinery for washing, cleaning, drying, etc.	Number	-	2816	2804	3599	3938	2946	4065	2334	1524	4766	3414	1684	3680	4490	6049	10901
84.45	Machine-tools for working metal or metallic carbides	Ton	528	101	162	234	144	164	164	127	437	100	49	22	151	171	345	358
84.46	Machine-tools for working stone ceramics, concrete, etc.	Ton	-	34	-	-	45	199	-	79	-	64	-	-	81	32	49	1739
84.56.A	Concrete mixtures and stone crushers	Ton	-	156	149	64	63	103	154	313	315	339	209	64	29	85	127	672
84.59.A	Other machinery for agricultural or industrial use or road building	Ton	97	164	362	89	151	96	65	142	159	86	140	15	69	112	391	701
84.59.B	Other machinery other than for agricultural or industrial use	Ton	-	95	120	38	107	66	327	80	187	105	22	-	9	47	82	510
84.61	Taps, cocks, valves and similar applications	Ton	198	87	143	125	134	265	207	139	203	247	197	152	241	346	412	302
84.65	Machinery parts, not containing electrical conductors	Ton	-	-	48	125	22	93	42	191	273	605	440	144	202	203	104	425
85.1.A	Electrical goods, generators, motors weighing 10 kgs. or less	Ton	324	-	24	32	42	61	53	33	33	65	149	46	102	76	246	342
85.1.B	Electrical goods, generators, motors weighing more than 10 kgs.	Ton	-	-	645	567	29	653	823	392	809	553	272	305	582	463	1068	2309
85.11	Industrial and laboratory electric furnaces & ovens	Ton	61	44	486	64	32	36	216	77	26	50	34	23	31	28	180	102
85.13	Electrical line telephonic and telegraphic apparatus	Ton	187	88	411	1528	54	149	155	470	58	131	298	83	623	110	252	130
85.15.A.1	Television sets	Number	-	-	-	-	-	-	3273	1495	10043	11350	7699	5541	5002	11281	12562	23248
85.15.A.2	Radio sets	Number	-	23131	40880	72874	104840	65517	50961	58062	65109	62097	58705	57011	21923	27661	60596	49102
85.15.C.1	Other transmission & reception apparatus	Number	-	19	-	-	88	63	41	71	177	66	41	213	182	99	184	305

Table 1 (Contd.)

B.M.2 Commodity	Unit measure	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975
85.15.C.2 Accessories and parts for the other transmission and reception apparatus	Ton	-	-	-	-	-	104	81	43	43	24	24	24	37	28	243	44
85.18 Electrical capacitors	Ton	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	565
85.19 Electrical apparatus for making and breaking electrical circuits	Ton	510	406	288	361	217	318	237	419	292	465	367	207	478	711	574	982
85.22 Electrical goods and apparatus	Ton	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	145
85.23.A Insulated plastic wire the diameter of which is one millimeter or less	Ton	38	-	170	146	127	315	231	408	462	798	189	209	310	192	299	428
85.23.B Insulated electric wire, cable, bars, strip and the like (including co- axial cable)	Ton	925	78	563	318	394	250	461	533	650	1023	733	505	554	1357	697	2291
86.3 Other rail locomotives	Ton	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1710
87.1 Tractors	Number	85	259	348	226	387	651	463	150	333	319	148	177	152	235	252	501
87.2.A.1.A.3 Vehicles for public trans- port (buses) weighing more than 1500 kgs. run by ben- zine	Number	-	-	-	-	-	-	-	-	-	-	19	11	26	8	10	48
87.2.A.1.B.3 Vehicles for public trans- port (buses) running other than benzine	Number	-	-	-	-	-	-	-	-	43	15	-	2	7	6	16	181
87.2.A.2.A.1 Motor vehicles for trans- port of passengers, weigh- ing not more than 1000 kgs running by benzine	Number	-	-	-	-	-	13	2663	2035	-	686	588	651	650	1080	1233	1603
87.2.A.2.A.2 Motor vehicles for trans- port of passengers weighing 1000-1500 kgs run by benzine	Number	995	950	1393	1552	1803	2675	-	-	2094	1196	1213	1423	967	1958	2832	3848
87.2.A.2.A.3 Motor vehicles for trans- port of passengers more than 1500 kgs weigh/run by benzine	Number	-	-	-	11	-	-	-	-	-	102	67	177	67	135	287	422
87.2.C.1.C Motor vehicles for trans- port of goods weighing more than 3000 kgs run by benzine	Number	170	166	243	327	2797	332	1298	500	-	16	36	57	57	26	12	10

Table 21 (Contd)

S.N.T Tariff	Commodity	Unit Measure	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975
87.2.C.2.C	Motor vehicles for transport of goods weigh more than 3000 kgs run other than benzine	Number	-	-	-	-	-	-	-	-	313	185	81	14	45	60	58	339
87.2.D	Vehicles used for transporting perishable food stuff	Number	-	-	-	-	-	-	-	-	-	15	30	16	3	15	64	132
87.3.C	Motor lorries and vans such as: fire-escapes, crane lorries	Number	9	-	8	8	13	19	-	-	21	15	2	24	4	3	4	124
87.4.B.2.C	Motor vehicles chassis	Number	34	23	63	17	-	-	-	-	-	29	-	6	-	-	-	37
87.6.A.1	Parts and accessories of motor vehicles	Ton	1035	1255	1558	1576	1745	1870	2731	2745	1123	1912	1149	683	978	966	1236	1729
87.6.A.2	Parts and accessories for motor vehicles - second hand	Ton	-	-	-	-	-	-	-	-	-	328	319	121	870	670	1588	1822
87.6.B	Parts and accessories for tractors	Ton	61	168	-	-	-	-	-	-	-	301	198	52	28	244	233	487
87.14.C.1	Refrigerated trailers for transporting perishable food	Number	-	-	-	-	-	-	-	-	-	-	5	-	-	-	3	27
88.2	Flying machines	Number	-	-	3	-	3	-	-	-	-	-	-	2	2	-	3	13
88.3	Parts and accessories of flying machines	Ton	104	18	5	6	304	31	23	431	204	123	73	83	77	77	81	121
89.1	Ships, boats	Number	-	-	-	-	-	-	-	-	-	-	-	-	12	10	22	18
90.17	Medical instruments	Ton	16	24	16	15	14	25	29	72	68	70	152	163	223	99	73	250
91.1	Watches (pocket, wrist, etc)	Number	-	47171	47766	44018	48558	54929	63647	56486	76886	89783	73512	60375	62935	64984	98968	105542
94.3	Other furniture	Ton	50	61	386	124	256	195	232	71	401	161	182	191	114	218	210	33

Exports of Natural Gasoline and Fuel Oil  
(Average Annual and a Quarterly Figures)

B.T.M. Tariff	Commodity	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1975	1974	1975
17.4	Sugar confectionary not containing cocoa	5	14	28	17	40	24	26	32	47	17	15	40	36	42	74	39
18.5.C	Chocolate & other food preparation with cocoa	-	-	-	-	-	44	39	28	21	5	2	9	24	27	22	33
19.3.A	Biscuits not stuffed	-	-	-	-	-	5	-	1	-	-	-	2	2	5	21	47
20.2.B	Olives preserved	30	18	44	50	40	-	43	66	77	88	78	118	99	39	192	161
20.2.C	Vegetables preserved	1	9	17	18	13	2	10	8	24	14	9	6	10	8	18	23
21.7.C	Dregs of sesame oil (Tarina)	2	18	27	38	34	34	39	42	39	30	10	32	25	17	2	25
22.3.A.1	Beer in bottles less than half litre	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6	84
22.3.A.1	Beer in bottles of half litre	-	-	-	-	-	-	-	-	-	-	-	14	-	-	3	96
22.3.B.1	Arak	-	-	-	-	-	-	-	-	-	-	-	6	-	1	10	20
22.9.B.4	Gin	-	-	-	-	-	-	-	-	-	-	-	6	-	5	17	-
22.9.B.5	Ethyl alcohol	-	-	-	-	-	-	-	-	-	-	6	-	-	-	-	10
23.7.A.1	Concentrated materials for forage	-	-	-	-	16	76	83	4	4	21	13	16	-	-	-	65
24.1.A	Tombac	4	3	5	7	8	8	7	10	8	13	-	14	13	14	8	14
24.2.C	Cigarettes	53	35	35	234	592	415	323	663	536	551	519	368	398	546	711	752
25.10	Natural phosphates	1305	1554	1456	1455	2364	2430	3127	3476	4212	3565	2237	2239	3471	4020	19531	19535
25.15.A	Marble (Raw or Squared)	7	12	25	20	23	15	26	24	26	17	6	4	15	23	46	146
25.23.A	Cement	14	64	53	45	70	67	61	62	419	484	320	471	1922	1296	4078	1655
27.10.D.1	Gas oil and diesel oil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	52	125
27.11	Petroleum gases (Hydrocarbons)	-	-	-	-	-	-	-	7	19	13	2	16	-	2	64	100
27.15	Bitument and asphalt natural	-	-	-	90	53	101	117	60	69	31	6	5	-	141	103	85
30.3.D.2	Human medicaments	-	-	-	-	-	-	-	1	53	132	210	269	255	549	901	1252
32.9.A	Varnishes for finishing tanning matter	-	-	2	-	-	-	-	-	-	-	-	19	-	-	-	141
32.9.B	Other kinds of varnishes	-	-	-	-	-	-	-	-	-	-	8	-	1	25	144	60
33.6.A	Shaving soap	-	-	-	-	-	-	-	-	-	1	-	-	-	-	6	10
33.6.B	Tooth pastes	-	-	-	-	-	-	-	-	-	-	-	2	-	-	7	14
33.6.D	Perfumery cosmetics	-	-	-	-	-	-	-	2	1	2	3	5	-	1	21	37
34.1.A	Ordinary soap	7	7	12	12	16	19	20	26	23	40	25	37	26	17	40	32



Imports (Contd.)

Commodity	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974
34.1.B.1 Toilet soap	-	-	-	-	-	-	-	-	3	2	3	19	16	30	34
39.2.A Liquids, pastes and blocks from the products of polymerisation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	23
39.3.C Cellulose	-	-	-	-	-	-	-	-	-	-	-	-	-	4	22
39.7.B Household articles of plastic	-	-	-	-	19	8	12	3	-	-	3	10	4	2	11
39.7.C Other articles of plastic	-	8	16	25	24	53	44	37	23	37	23	36	22	35	70
41.1 Raw hides and skins	-	61	136	183	186	169	224	159	184	146	166	65	130	261	273
41.2.A Tanned calf leather	-	-	-	-	-	-	-	-	-	-	-	-	-	12	-
41.3.A Softened leather of sheep	-	-	-	-	-	5	-	-	-	-	-	1	-	-	35
41.4.A Softened leather of goat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	30
41.8 Patent leather	-	-	-	-	-	-	-	-	-	7	-	-	-	-	15
42.2.C.2 Leather travel goods & hand-bags	-	-	-	-	-	-	1	1	-	-	1	6	3	10	6
48.1.B Craft paper for the manufacture of bags	-	-	-	-	-	-	-	2	3	91	123	95	99	143	195
48.5.B Paper and paper board	-	-	-	-	-	-	-	7	15	20	13	17	55	21	52
48.10.A Cigarette paper for manufacture form	-	-	-	8	-	-	-	5	13	43	-	-	55	89	70
48.10.B Cigarette paper not for manufacture	-	-	-	-	-	-	-	-	13	5	12	22	-	3	2
48.21.E Sanitary towels for women, of paper	-	-	-	-	-	-	-	7	25	41	68	36	6	12	19
48.21.H.1 Handkerchiefs, towels and napkins	-	-	-	-	-	-	-	4	101	53	23	56	61	54	81
51.4.A Woven fabrics	-	2	-	2	-	-	-	-	-	-	8	-	-	-	55
53.1 Sheep's or lambs' wool not carded	-	10	25	18	-	15	32	18	3	-	5	-	9	65	25
53.11 Woven fabrics of sheep wool	-	-	-	-	-	-	6	3	42	112	128	319	143	429	634
55.6 Cotton yarn	1	-	-	-	-	-	-	-	-	-	-	-	-	5	27
60.4 Under garment knitted, not plastic	-	-	-	-	-	3	24	32	59	59	44	15	3	25	19
60.5.B Outer garment knitted, not plastic	-	2	7	-	-	-	8	29	19	15	4	9	8	24	32
61.1.A ABAYAS (Cloaks)	-	-	-	-	1	-	-	-	-	-	-	-	-	15	10
61.2 Women, girls outer garments	1	1	2	3	3	3	6	10	7	10	6	-	8	14	34
61.3.A Men's and boys' shirts and pyjamas	-	2	6	10	16	7	5	5	2	4	3	2	5	6	11
61.4 Women's & girls under garments	-	-	-	-	2	2	-	2	12	7	9	18	7	9	27
62.1.A Rugs and blankets of wool	-	-	-	-	-	-	-	-	-	3	2	9	4	20	32
64.1 Footwear with outer soles and upper of rubber	-	2	2	6	2	27	1	-	11	7	27	51	27	21	40
64.2.A Footwear with uppers of plastic	-	-	-	-	-	-	-	-	3	3	2	-	27	18	19



Table 22 (Cont'd)

Commodity	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975
34.1.E.1 Toilet soap	-	-	-	-	-	-	-	-	3	2	3	19	18	30	34	65
39.2.A Liquids, pastes and blocks from the products of polymerisation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	23	50
39.3.C Cellulose	-	-	-	-	-	-	-	-	-	-	-	-	-	4	22	38
39.7.B Household articles of plastic	-	-	-	-	19	8	12	3	-	-	3	10	4	2	11	21
39.7.C Other articles of plastic	-	8	16	25	24	53	44	37	23	37	23	36	22	35	70	577
41.1 Raw hides and skins	-	61	136	183	186	169	224	159	184	146	166	65	130	261	273	116
41.2.A Tanned calf leather	-	-	-	-	-	-	-	-	-	-	-	-	-	12	-	305
41.3.A Softened leather of sheep	-	-	-	-	-	5	-	-	-	-	-	1	-	-	-	35
41.4.A Softened leather of goat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	30
41.8 Patent leather	-	-	-	-	-	-	-	-	-	7	-	-	-	-	-	15
42.2.C.2 Leather travel goods & hand-bags	-	-	-	-	-	-	1	1	-	-	1	6	3	10	6	11
48.1.B Craft paper for the manufacture of bags	-	-	-	-	-	-	-	2	3	51	123	95	99	143	195	293
48.5.B Paper and paper board	-	-	-	-	-	-	-	7	15	20	13	17	55	21	52	20
48.10.A Cigarette paper for manufacture form	-	-	-	8	-	-	-	5	13	43	-	-	55	89	70	38
48.10.B Cigarette paper not for manufacture	-	-	-	-	-	-	-	-	13	5	12	22	-	3	2	22
48.21.E Sanitary towels for women, of paper	-	-	-	-	-	-	-	7	25	41	63	38	6	12	19	44
48.21.H.1 Handkerchiefs, towels and napkins	-	-	-	-	-	-	-	4	101	53	23	56	61	54	81	50
51.4.A Woven fabrics	-	2	-	2	-	-	-	-	-	-	-	8	-	-	55	100
53.1 Sheep's or lambs' wool not carded	-	10	25	18	-	15	32	18	3	-	5	-	9	65	25	58
53.11 Woven fabrics of sheep wool	-	-	-	-	-	-	6	3	42	112	128	319	143	429	930	634
55.6 Cotton yarn	1	-	-	-	-	-	-	-	-	-	-	-	-	5	-	27
60.4 Under garment knitted, not plastic	-	-	-	-	-	3	24	32	59	59	44	15	3	25	19	66
60.5.B Outer garment knitted, not plastic	-	2	7	-	-	-	8	29	19	15	4	9	8	24	32	471
61.1.A ABAYAS (Cloaks)	-	-	-	-	1	-	-	-	-	-	-	-	-	15	10	15
61.2 Women, girls outer garments	1	1	2	3	3	3	6	10	7	10	6	-	8	14	84	21
61.3.A Men's and boys' shirts and pyjamas	-	2	6	10	16	7	5	5	2	4	3	2	5	6	11	15
61.4 Women's & girls under garments	-	-	-	-	2	2	-	2	12	7	9	18	7	9	27	16
62.1.A Bags and blankets of wool	-	-	-	-	-	-	-	-	3	2	9	2	4	20	32	38
64.1 Footwear with outer soles and upper of rubber	-	2	2	6	2	27	1	-	11	7	27	51	27	21	40	55
64.2.A Footwear with uppers of plastic	-	-	-	-	-	-	-	-	3	3	2	-	27	18	19	55

Table 21

## Exports of Selected Mining and Industrial Commodities by Quantity

B.T.N. Tariff	Commodity	Unit of Measure	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	
17.4	Sugar confectionary not containing cocoa	Ton	61	139	209	153	309	254	316	273	253	132	78	196	133	128	234	176	
18.6.C	Chocolate & other food preparation with cocoa	Ton	-	10	4	9	4	122	113	76	49	13	6	23	42	51	5	31	
19.8.A	Biscuits not stuffed	Ton	-	-	-	-	-	23	-	6	-	-	-	14	9	49	110	23	
20.2.B	Olives preserved	Ton	360	285	598	705	574	-	627	898	953	1063	769	1032	883	334	1206	1044	
20.2.C	Vegetables preserved	Ton	7	185	359	443	331	42	253	162	285	246	110	73	120	80	124	204	
21.7.C	Dregs of sesame oil (Tahina)	Ton	23	170	209	303	286	276	324	317	281	218	73	211	162	99	54	109	
22.3.A.1	Beer in bottles less than half litre	1000 Bottles	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	36	545
22.3.A.2	Beer in bottles of half litre	1000 "	-	-	-	-	-	-	-	-	-	-	-	253	-	-	-	30	545
22.9.B.1	Arak	1000 ltr.	-	-	-	-	-	-	-	-	-	-	-	27	-	3	36	50	50
22.9.B.4	Gin	1000 "	-	-	-	-	-	-	-	-	-	-	-	14	-	-	11	71	71
22.9.B.6	Ethyl alcohol	1000 "	-	-	-	-	-	-	-	-	-	-	39	-	-	-	-	-	13
23.7.A.1	Concentrated materials for forage	Ton	-	-	-	-	291	1699	2023	68	69	293	151	239	-	-	-	-	400
24.1.A	Tombac	Ton	6	4	8	10	11	11	10	11	8	12	-	12	12	13	7	12	12
24.2.C	Cigarettes	Ton	35	27	27	191	451	308	230	439	343	359	333	226	246	334	403	310	310
25.10	Natural phosphates	1000 Ton	318	383	358	357	627	604	755	882	1094	928	696	647	952	10686	1409	1112	1112
25.15.A	Marble, raw or squared	Ton	221	721	1251	921	1062	1312	810	1013	1222	1047	859	1327	5289	7795	19332	44300	44300
25.23.A	Cement	1000 Ton	1	8	8	7	12	11	9	9	65	93	56	90	299	196	209	73	73
27.10.D.1	Gas oil and diesel oil	Ton	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3845	4391	4391
27.11	Petroleum gases (Hydrocarbons)	Ton	-	-	-	-	-	-	-	457	1196	790	72	1814	-	77	2003	3442	3442
27.15	Bitument and asphalt natural	Ton	-	-	-	5240	6452	15278	20549	8110	8007	4923	967	462	-	15245	10715	8271	8271
30.3.D.2	Human Medicaments	Ton	-	-	-	-	-	-	-	2	41	112	177	270	273	378	506	654	654
32.9.A	Varnishes for finishing tanning materials	Ton	-	-	-	6	-	-	-	-	-	-	-	93	-	-	-	384	384
32.9.B	Other kinds of varnishes	Ton	-	-	-	-	-	-	-	-	-	-	35	-	12	133	504	103	103
33.6.A	Shaving soap	Ton	-	-	-	-	-	-	-	-	-	5	-	-	-	-	5	5	5

Commodity	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975
42.5.B Toilet pastes	-	-	-	-	-	-	-	-	-	-	3	-	-	3	8
42.6.D Perfumery cosmetics	-	-	-	-	-	-	3	6	10	12	17	-	7	29	35
43.1.A Ordinary soap	35	50	71	66	83	91	100	125	197	135	177	120	81	179	135
44.1.B.1 Toilet soap	-	-	-	-	-	-	-	7	8	9	56	49	84	78	169
44.2.A Liquids, pastes and blocks from the products of polymerization	-	-	-	-	-	-	-	-	-	-	-	-	-	-	116
44.3.C Cellulose	-	-	-	-	-	-	-	-	-	-	-	-	6	103	82
44.7.B Household articles of plastic	-	-	-	35	22	34	9	-	-	20	48	16	8	52	108
44.7.I Other articles of plastic	-	16	38	82	172	149	135	87	229	150	194	122	136	215	1156
44.1 Raw hides and skins	-	480	874	1101	798	839	1092	821	1106	1345	541	1062	1397	849	719
44.2.A Tanned calf leather	-	-	-	-	-	-	-	-	-	-	-	-	7	-	470
44.3.A Softened leather of sheep	-	-	-	-	28	-	-	-	-	-	0.6	-	-	-	87
44.4.A Softened leather of goat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13
44.8 Patent leather	-	-	-	-	-	-	-	-	3	-	-	-	-	-	5
42.2.C.2 Leather, travel goods and hand bags	-	-	-	-	-	-	4	1	-	3	14	6	9	5	7
42.1.B Craft paper for the manufacture of bags	-	-	-	-	-	-	-	43	43	1712	2123	1428	1603	2245	2676
42.5.B Paper and paper board	-	-	-	-	-	-	-	140	194	285	214	242	54	260	509
42.10.A Cigarette paper for manufacture	-	-	-	6	-	-	-	6	6	91	-	-	54	91	72
42.10.B Cigarette paper not for manufacture	-	-	-	-	-	-	-	-	45	7	54	100	-	5	4
42.21.E Sanitary towels of paper for women	-	-	-	-	-	-	-	27	101	144	244	140	23	50	43
42.21.H.1 Handkerchiefs, towels and napkins	-	-	-	-	-	-	-	15	43	198	80	215	228	197	250
51.4.A Woven fabrics	-	1	-	1	-	-	-	-	-	8	-	-	-	-	255
53.1 Sheep's or lambs' wool not carded	-	56	118	81	-	74	142	90	18	-	31	-	59	324	134
53.11 Woven fabrics	-	-	-	-	-	-	2	1	13	32	51	133	58	142	266
55.6 Cotton yarn	1	-	-	-	-	-	-	-	-	-	-	-	-	4	-
60.4 Under garment, knitted, not plastic	-	-	-	-	-	1	21	-	66	85	51	20	4	30	14



Table 21 (Contd.)

Commodity	Unit of measure	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975
84.18.A Oil filter and air purifiers for machines	Ton	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10
84.22.A Electric lifts	Ton	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	151
84.56.A Concrete mixtures and stone crushers	Ton	-	-	-	-	-	-	14	-	-	-	-	-	13	23	37	45
84.60.A Moulding boxes for metal foundry	Ton	-	-	-	-	-	-	-	-	-	50	-	-	3	1	6	15
85.3 Primary cells and batteries	Ton	-	-	22	9	11	-	2	3	2	-	-	-	-	-	-	140
85.4.B Electric accumulators, more than 6 volts	Ton	-	67	181	233	103	513	831	590	749	962	1521	2087	2446	2026	1952	241
85.27.A Bergman electric conduit tubing	Ton	-	-	-	-	-	-	-	-	-	-	-	-	9	125	177	332
87.13.A Baby carriages	Ton	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15
94.3 Other furniture and parts	Ton	9	19	94	81	70	36	45	15	35	34	17	21	23	17	46	83
96.2.C Brooms and brushes	Ton	-	-	-	10	11	-	-	-	-	-	-	-	-	-	-	2

Source: External Trade Yearbooks (1960 - 1975), Department of Statistics, Amman - Jordan.

Table 24

Direction of Trade for Selected Years: Total  
Imports (Current prices CIF)  
(In 000 JD)

Region of Origin	1960	1965	1970	1975
1. Latin America				
of which: Argentina, Brazil, Mexico	306.0	213.4	1088.8	293.5
: Other Latin America	-	-	-	9.4
2. Asia				
of which: Semi industrial Asia	181.7	1209.6	2239.6	6390.4
: Asian centrally planned economics	398.8	1316.4	1496.7	2695.3
: Rest of non-indust- rial Asia	572.7	868.1	287.1	2903.0
: Japan	1535.9	2536.1	3868.7	17104.4
3. Australia, New Zealand and Pacific Countries, South Africa	302.6	-	92.0	9511.0
4. Middle East Opec Countries and North Africa	9086.7	8589.1	12840.4	46264.7
5. Africa South of Sahara, excluding South Africa	88.9	479.5	269.5	1219.5
6. North America (Canada + U.S)	5353.4	8497.7	7632.5	24765.8
7. West Europe	16571.3	20338.8	23543.9	85577.6
8. European centrally planned Countries	2113.4	4026.7	4372.7	13832.0

Source: Jordan Department of Statistics,  
several External Trade Yearbooks.



Table 25

Direction of Trade for Selected Years  
Imports of Manufactured Goods  
(at CIF Thousand J.Ds.)

Region of Origin	1960	1965	1970	1975
1. Latin America	189	473	30	112
of which: Argentina, Brazil, Mexico	-	83	30	112
: Other Latin America	189	390	-	-
2. Asia	4266	5598	7701	2778
of which: Semi industrial Asia	980	1087	2156	5765
: Asian centrally planned economics	1100	1306	1371	2380
: Rest of non-indust- rial Asia	650	669	370	2555
: Japan	1536	2536	3804	17083
3. Australia, New Zealand and Pacific Countries, South Africa	-	-	-	9231
4. Middle East Opec Countries and North Africa	2812	3484	5639	14564
5. Africa South of Sahara, excluding South Africa	13	21	41	175
6. North America (Canada + U.S)	2993	7920	7074	22744
7. West Europe	20248	21484	26156	82716
8. European centrally planned Countries	4250	5060	5335	13317

Source: Jordan Department of Statistics,  
 several External Trade Yearbooks.

Table 26.

Direction of Trade for Selected Years  
Imports of Selected Manufactured Goods  
(CIF in thousand Jds.)

Region of Origin	1960	1965	1970	1975
1. Latin America	-	389.7	3.7	-
of which: Argentina, Brazil, Mexico	-	-	3.7	-
: Other Latin America	-	389.7	-	-
2. Asia	897.7	1224.8	2265.2	13419.4
of which: Semi industrial Asia	-	31.6	227.2	3260.9
: Asian centrally planned economics	90.4	174.6	210.0	317.5
: Rest of non-indust- rial Asia	261.2	288.5	52.1	-
: Japan	546.1	730.1	1775.9	9841.0
3. Australia, New Zealand and Pacific Countries, South Africa	5.2	-	4.5	5546.7
4. Middle East Opec Countries and North Africa	331.5	424.4	927.4	3096.8
5. Africa South of Sahara, excluding South Africa	-	0.8	-	1.4
6. North America (Canada + U.S)	845.2	1222.9	863.9	5388.8
7. West Europe	2798.3	9582.0	4610.5	19066.6
8. European centrally planned Countries	955.6	1596.1	1562.9	4783.1

Source: Jordan Department of Statistics,  
 several External Trade Yearbooks.

Table 27

Director of Trade for Selected Years  
Total Exports  
(F.O.B at thousand Jds.)

Region of Origin	1960	1965	1970	1975
1. Latin America				
of which: Argentina, Brazil, Mexico	0.1	-	-	-
: Other Latin America	-	-	-	-
2. Asia				
of which: Semi industrial Asia	288.1	656.5	376.2	1974.8
: Asian centrally plan- ned economics	-	-	201.4	0.1
: Rest of non-indust- rial Asia	0.1	56.6	-	2879.7
: Japan	-	135.5	17.4	1907.9
3. Australia, New Zealand and Pacific Countries, South Africa	-	-	-	-
4. Middle East Opec Countries and North Africa	2122.4	5357.1	7267.9	17992.6
5. Africa South of Sahara, excluding South Africa	-	-	-	49.5
6. North America (Canada + U.S)	18.1	33.8	2.1	30.2
7. W. Europe	667.6	749.7	1150.8	4142.6
8. European centrally planned Countries	2252.6	836.6	217.9	6885.1

Source: Jordan Department of Statistics,  
 several External Trade Yearbooks.

Table 28

Director of Trade for Selected Years  
Exports of Manufactured Goods  
 (FOB in thousand Jds.)

Region of Origin	1960	1965	1970	1975
1. Latin America				
of which: Argentina, Brazil, Mexico	-	-	-	-
: Other Latin America	-	-	-	-
2. Asia				
of which: Semi industrial Asia	-	-	-	-
: Asian centrally planned economics	-	-	-	-
: Rest of non-indust- rial Asia	-	-	-	-
: Japan	-	-	-	-
3. Australia, New Zealand and Pacific Countries, South Africa	-	-	-	-
4. Middle East Opec Countries and North Africa	331.0	1688.6	2682.9	11364.0
5. Africa South of Sahara, excluding South Africa	-	-	9.0	35.2
6. North America (Canada + U.S)	12.9	33.7	2.0	28.3
7. West Europe	15.2	13.7	15.7	1.3
8. European centrally planned Countries	-	-	-	334.8

Source: Jordan Department of Statistics,  
 several External Trade Yearbooks.

Table 29

Direction of Trade For Selected Years  
Exports of Selected Manufactured Goods  
(at current prices in 000 Jds.)

Region of Origin	1960	1965	1970	1975
1. Latin America				
of which: Argentina, Brazil, Mexico	-	-	-	-
: Other Latin America	-	-	-	-
2. Asia				
of which: Semi industrial Asia	-	-	-	0.4
: Asian centrally planned economics	-	-	-	-
: Rest of non-indust- rial Asia	-	-	-	-
: Japan	-	-	-	-
3. Australia, New Zealand and Pacific Countries, South Africa	-	-	-	-
4. Middle East Opec Countries and North Africa	96.9	704.0	1342.6	5043.1
5. Africa South of Sahara, excluding South Africa	-	-	-	-
6. North America (Canada + U.S)	-	-	-	28.2
7. West Europe	-	-	13.6	-
8. European centrally planned Countries	-	-	0.1	-

Source: Jordan Department of Statistics,  
several External Trade Yearbooks.

(JD million)

	1967		1968		1969		1970		1971		1972		1973		1974		1975		1976	
	Credit	Debit	Credit	Debit	Credit	Debit	Credit	Debit	Credit	Debit	Credit	Debit	Credit	Debit	Credit	Debit	Credit	Debit	Credit	Debit
A) Current Account	90.74	64.56	91.68	81.56	93.35	129.63	94.11	79.59	71.29	94.07	51.94	118.32	76.92	137.69	114.36	198.16	185.84	304.17	292.82	357.26
1. Goods	11.33	54.23	14.26	57.30	14.75	67.84	12.17	65.53	11.43	76.19	17.01	94.89	18.98	107.80	49.75	155.69	48.86	232.94	66.00	111.81
Net Monetary Gold	-	-	-	-	-	-	-	-	-	-	-	-	5.17	-	-	-	-	-	-	-
2. Services	25.46	10.33	22.94	24.26	31.26	42.09	31.23	25.06	23.16	17.61	34.93	24.04	52.67	29.82	64.61	42.48	136.96	71.23	223.93	91.06
Travel	6.79	5.29	4.60	7.00	4.53	7.98	4.22	9.35	3.10	7.71	8.30	11.27	10.71	11.28	17.29	17.43	35.72	33.76	52.15	37.19
Investment Income	4.44	0.83	5.85	0.93	6.85	0.81	6.77	0.65	5.75	0.95	4.39	1.05	6.34	1.25	8.81	2.11	11.33	3.30	16.89	11.74
Government	4.50	1.80	6.34	13.81	10.96	29.24	11.86	12.25	3.67	5.12	1.40	5.28	2.03	10.26	2.02	12.65	5.91	14.54	5.87	27.57
Other services	9.75	2.41	6.15	2.52	8.92	4.06	8.44	3.77	10.64	4.04	20.64	6.44	33.59	7.02	36.49	10.29	66.77	3.81	144.11	23.56
3. Unrequited transfers	53.93	-	54.48	-	47.34	-	40.65	-	36.61	-	68.29	-	54.60	-	86.65	0.11	140.36	0.54	126.06	1.30
Private	2.35	-	1.41	-	1.55	-	1.57	-	1.12	-	2.33	-	3.51	-	2.42	0.11	2.35	0.56	1.59	1.30
Central Govt.	51.58	-	53.07	-	45.79	-	39.08	-	35.49	-	65.96	-	51.09	-	84.43	-	138.01	-	126.47	-
F) Allocation of SDPs	-	-	-	-	-	-	0.96	-	0.88	-	0.88	-	-	-	-	-	-	-	-	-
C) Capital	3.01	1.03	6.04	1.08	5.34	-	1.61	1.35	9.85	3.11	6.31	-	6.45	-	10.88	-	44.11	-	-	24.42
D) Monetary Sector	1.40	34.59	0.50	16.83	10.92	-	5.25	3.73	12.86	1.04	-	6.71	-	12.46	-	6.74	-	50.74	2.34	-
E) Net errors and omissions	5.03	-	1.25	-	0.02	-	3.74	-	3.40	-	-	1.79	2.23	-	-	7.08	-	14.84	-	5.94

Source: Central Bank of Jordan.

Table 31

Data on Price Movements 1960-1975

Series	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975
Cost of living index	MA	MA	MA	MA	MA	MA	MA	MA	MA	MA	MA	MA	MA	MA	MA	MA
Whole sale price index	101.3	87.7	84.7	93.1	MA	MA	MA	MA	MA	MA	MA	MA	MA	MA	MA	MA
Price index for investment goods																
Import Price Index	101	103	100	101	101	101	104	109	110	113	122	130	130	144	177	189
Export Price Index	97	96	100	97	99	105	103	116	125	129	112	101	113	113	243	262
Implicit deflator of G.N.P.																
Wage Index: General																
Manufacturing	MA	MA	MA	MA	MA	MA	MA	MA	MA	MA	MA	MA	MA	MA	MA	MA
do, skilled labor																
do, unskilled labor																
agricultural labor																

Source: Statistical Yearbooks, Department of Statistics - Jordan.

- Notes : 1) Cost of living index for the city of Amman, only (Base Year 1967 = 100)  
 2) Imports price index for all products (Base Year 1962 = 100)  
 3) Exports price index for all products (Base Year 1962 = 100)  
 4) Wholesale price index for all products in Amman (Base Year 1953 = 100 for the period 1960-1963)

Table 32

Exchange Rates in the Period 1968-1975  
(In Jordanian Pils)

Currency	1968	1969	1970	1971	1972	1973	1974	1975
<u>At the end of the period:</u>								
U.S. Dollar	Selling	359.0	359.0	359.0	359.0	330.0	316.0	331.0
	Buying	357.0	357.0	357.0	357.0	328.0	314.0	329.0
Sterling Pound	Selling	857.0	859.0	857.0	912.0	843.0	746.0	674.0
	Buying	854.0	856.0	854.0	909.0	838.0	740.0	668.0
D. Mark	Selling	89.9	97.1	98.1	109.0	111.7	132.0	126.4
	Buying	89.7	96.9	97.9	108.8	111.5	131.6	126.0
Swiss Franc	Selling	83.5	82.9	83.0	91.3	94.9	125.8	126.3
	Buying	83.3	82.7	82.8	91.1	94.7	125.4	125.9
French Franc	Selling	72.6	64.3	64.9	68.5	70.0	71.2	74.2
	Buying	72.4	64.1	64.7	68.3	69.8	70.9	73.9
Italian Lire (per 100)	Selling	57.7	57.0	57.5	60.2	61.5	48.8	48.5
	Buying	57.5	56.8	57.3	60.0	61.3	48.6	48.3

Source: Central Bank of Jordan; several monthly bulletins.



## ELECTRIC ENERGY

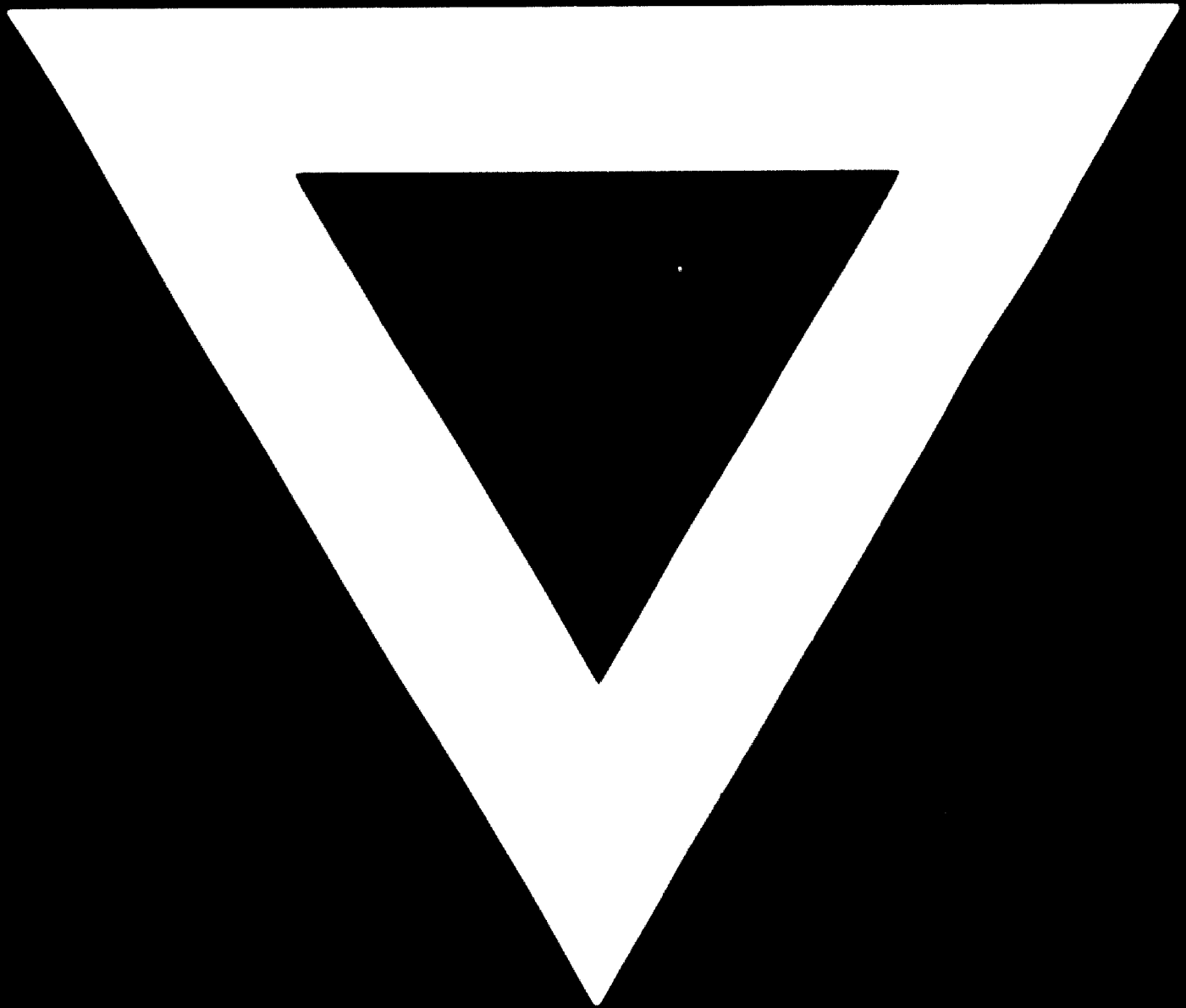
	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975
<u>INSTALLED CAPACITY (000Kw)</u>																
I: Industrial Establishments Generate for their own Use	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	23568
P: Enterprises Generate for Public Use	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	126422
<u>T O T A L</u>																<u>132057</u>
<u>PRODUCTION (MILLION Kw)</u>																
I: Industrial Establishments Generate for their Own Use	N.A.	25.1	32.9	33.7	39.2	43.3	39.2	39.2	39.6	67.6	55.0	60.9	73.6	80.7	76.2	149.5
P: Enterprises Generate for Public Use	24.5 <sup>1/</sup>	30.3 <sup>1/</sup>	78.5	80.6	112.0	116.8	132.5	118.2	116.0	132.2	132.4	149.2	175.3	199.8	233.7	258.7
<u>T O T A L</u>	24.5 <sup>1/</sup>	30.3 <sup>1/</sup>	103.6	113.5	145.7	155.0	175.8	157.4	155.6	199.8	187.4	210.1	248.9	260.5	269.9	407.2
<u>CONSUMPTION (MILLION Kw)</u>	21.6 <sup>1/</sup>	25.7 <sup>1/</sup>	90.9	100.9	119.7	137.9	154.0	136.9	136.8	177.6	163.9	186.9	221.1	248.9	271.6	355.5
Of which Consumed by Manufacturing Industries	N.A.	24.9	32.8	33.5	38.9	43.1	39.0	39.4	27.2	54.5	60.3	73.2	80.4	76.1	96.9	

<sup>1/</sup> Figures are for Amman District only.

Source: Department of Statistics, Several Statistical Yearbooks

We regret that some of the pages in the microfiche copy of this report may not be up to the proper legibility standards, even though the best possible copy was used for preparing the master fiche

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