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**INDUSTRIAL DEVELOPMENT AND STRUCTURE IN THE ARAB WORLD
PRESENT AND FUTURE SCENARIOS FOR THE YEAR 2000**

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1. INTRODUCTION

Arab industrial developmental objectives and strategies have to be considered within the context of a dynamic and changing world that needs to be constantly reviewed with the view of adjusting these objectives and strategies and deriving benefits from these changes. Thus industrialization strategies in the Arab world should have as a starting point the reality of the existing Arab industrial development and structure and that of the world economy based on the present international division of labour.

The world economy in general and that of the Arab world are experiencing rapid and dramatic changes making it imperative to monitor and analyse these changes and their effect and impact on Arab economic development in general and in particular on Arab industrial development. It is important in this context to differentiate between short term cyclical economic fluctuations that the world economy are subjected to from time to time, and the longer term changes that introduce basic structural changes into the economy. The current international economic crisis is a combination of cyclical fluctuations and structural changes.

2. WORLD INDUSTRY IN PERSPECTIVE

The world economy today is experiencing a grave economic crisis almost matching in its impact and depth the great depression that prevailed in the industrial world during the 1930's. The current economic crisis, that prevailed with only some interruptions since the early 1970's, in contrast with other crisis during the forties through the seventies, is not purely a short term cyclical phenomena. It has brought about basic economic structural changes. To illustrate from the field of industry, most industrial activities which were until recently considered areas of expansion and dynamism such as iron and steel, have become instead areas of contraction and slow growth. New industries 'sunrise industries', emerged to provide the dynamics to industrial growth; namely the advanced technologies industries including micro-electronics. Additional to changes in the area of technology, this period witnessed new and basic developments in world monetary and trade systems.

The world has experienced some important changes in the global distribution of industrial activity. The present analysis distinguishes between three economic groupings: the developed market economies, the centrally planned economies, and the developing countries. Summarising the changes that have occurred in the pattern of world MVA during the period 1938-1982, the following picture emerges:

1. The share of the developing countries in world industry showed a continuous and modest rise during the period 1963 to 1978. Late in the seventies gains have been fluctuating. Throughout the period 1963-1982 the share of the developing countries increased respectively from 8.1 per cent of world MVA to 11 per cent; in contrast the centrally planned economies corresponding figures were 14.6 per cent and 25 per cent. The relative decline in the share of the developed market economies has been gradual and consistent since 1940 although such a decline was accelerating since 1974. Thus, the share of this group of countries in world MVA decreased from a level of more than 77 per cent in 1963 to 65 per cent in 1980.

The emerging picture shows the continuing dominant role, the developed economies still play in industrial development, accounting for more than two-thirds of world MVA. However, one should also point out the fact that during the first quarter of this century only a small number of developed countries accounted for more than 95 per cent of world MVA, while most developing countries remained merely 'observer', rather than participants in world industrial development.

2. Historically the group of industrially developed countries has initially included only a small number of countries, that expanded over time to include eventually a big number of relatively "equal" industrial powers. This state of affair has consequently produced a multipolar form of industrial power centres, which brought about, inter alia, a relative increase in the importance of the world market at the expense of the domestic markets and promoted competition among the developed countries on the world market particularly the markets of developing countries. These developments have introduced risks and instability in the process of taking international economic action and in developing new world economic relations.

TABLE NO. 1: GROWTH RATE OF MANUFACTURING VALUE ADDED IN 95
DEVELOPING COUNTRIES, BY INCOME GROUP,
1963-1980

Income	GNP per capita (current US dollars) 1978	Growth rate of MVA for the group	Group share in population of the developing countries 1980	Number of countries in group
Low	295	4.9	50.7	28
Lower middle	295-600	7.3	18.2	21
Intermediate middle	600-1320	8.6	15.7	24
Upper middle	1320-2415	6.6	12.3	11
High	2415	5.8	3.1	11

Source: Industry in a changing world. United Nations Publications,
(Sales No. E83.II.B.6), p. 36.

3. Long-term employment in a number of developed countries, indicate declining trends in the share of the manufacturing sector in total employment. Furthermore until recently a built in mechanism for transfer of the labour force among economic sectors, from agriculture to manufacturing, and then to service as well as within the manufacturing sector, have been attained through the market mechanism and government intervention. This mechanism does not seem to be functioning adequately and great difficulties have been encountered especially in the transfer of labour from manufacturing to the tertiary sector. The rigidities in employment transfer have been an important contributing factor to the current economic phenomena of stagflation. They have induced some governments to intervene and limit the rate of structural changes, thereby limiting the restructuring process.

4. Developing countries have followed different industrial patterns and growth paths. Thus, most low-income developing countries have not really attained significant developments in industry and have indeed recorded low rates of growth, thus leading to a widening in the economic gap between this grouping of countries and other developing countries; additional to widening further the gap that exists with the developed world. It is to be noted that this low-income group of countries represented in 1980 more than one-half of the total developing countries' population.

With respect to developing countries that have recorded a noticeable progress in their industrial development they mostly fall in the middle income groups of countries ranging from a low average per-capita income of \$600 to \$1,320 and an upper level ranging between \$1,320 and \$2,415. This small group of countries accounted for 28 per cent of the total population of developing countries in 1980. In the least developed countries, the relative economic conditions have been deteriorating during the period 1938-1982, and more significantly since the depression period 1974-1982, which recorded a slow down in their rate of growth averaging 3 per cent per annum compared to an average of over 5.8 per cent for the period 1963 and 1973 (see table No.1). It is no wonder that these countries accounted for not more than 0.2 per cent of world MVA during the period 1963-1980.

TABLE NO. 2: KENDALL'S COEFFICIENT OF CONCORDANCE(a) BETWEEN THE COUNTRY RANKINGS OF 28 INDUSTRIAL BRANCHES (VALUE ADDED)(b)

Sample group (number of countries)	Year		
	1970	1975	1979
Developed market economies (17)	0.803 (65.218)	0.807 (66.902)	0.794 (61.670)
Developing countries (32)	0.541 (36.538)	0.567 (40.594)	0.562 (39.776)

Source: Some Trends in World Industrial Development (UNIDO/ID/WG. 391/8, 30 March 1983).

Note: For a definition of adjusted coefficient of concordance, see A.E. Maxwell, Analysing Qualitative Data (London, Methuen, 1967), pp. 117-121.

(a) F values are given in parentheses.

(b) Calculations were in constant United States Dollars

5. The composition of industrial output in developed countries have been changing, yielding greater homogeneity in production patterns. In developing countries, the changes in industrial composition and structure of output, differed among these countries due to the fact that they have different industrial experiences and followed different industrial development paths. All this has important implications on patterns of industrial investment and industrial trade. In developed market economies greater homogeneity in composition of manufacturing production may contribute to increasing competition among these countries and to comparable trends in productivity, investment rate of return, and patterns of industrial demand. Differences in composition of output among developing countries may open the way for creating greater opportunities in trade, additional to enriching their diversified industrial experiences (see table No.2).

6. The magnitude and scope of the structural change that took place can be measured by comparing the share of expanding and contracting industries. During the period 1963-1973, the relative magnitude of these structural shifts was greatest in the developing countries, being equivalent to 12.2 per cent of MVA. In developed market economies, it amounted to only 6.3 per cent compared with about 11.2 per cent in centrally planned economies. The extent of the structural change during the seventies was noticeably less in all three economic groupings. In the period 1973-1979 in the developing countries, structural shifts were equivalent to only 5.0 per cent while comparable figures for market economies and centrally planned economies were respectively 3.0 per cent and 6.7 per cent.

7. Employment in both developed market economies and centrally planned economies expanded at a much lower rate than output. Indeed during 1973-1980, employment declined in developed market economies while output continued to expand. An inverse situation is recorded in the developing countries. Thus, the growth of employment exceeded gains in productivity for all major industrial groups. In fact during the seventies several major groups, including important industries like textile clothing - experienced a decline in productivity in the 1970s (see table No.3).

8. An important policy consideration concerns the elements and sources of industrial growth and their relative importance. Conceptually, the sources of industrial growth can be divided into three components: (i) production for export; (ii) production in response to growing real demand within the domestic economy; (iii) production to meet existing demand formerly satisfied by imported goods (import-substitution industrialization).

In spite of the emphasis often given to trade-related strategies for present and future industrialization, reference is made to the concluding results of a study covering the period 1940-1980, which indicates clearly that domestic demand stands in the forefront of the industrial growth process. However, the relative importance of the

components of growth differs in different industries. Thus, in the case of non-durable consumer goods, the relative importance of export expansion was the highest, whereas the highest (positive) values for import substitution are mainly observed in capital goods and consumer durables.

An important observation to be noted here is that expansion in exports does not particularly suggest an "export led" growth, and the share of total exports in total industrial MVA for the 28 countries in the sample did not exceed 6 per cent. For the majority of the countries in the sample, however, the range was between zero and 6 per cent. Expansion through exports has been observed in only few cases, and in the majority of cases, exports played a supplementary role rather than an alternative to the local market. Therefore, the strategic "option" between import substitution and promotion of exports is not a real one, since both are complementary components of growth (see table No. 4).

9. Per capita income growth rates in developing countries ranged between minus 0.7 per cent in Uganda and 3.7 per cent in China during the period 1960-1980. The top three countries in growth rates among the low income country groupings were China 3.7 per cent, Pakistan 2.8 per cent, and Sri Lanka 2.4 per cent. In the middle income sub-groups, the highest growth rates recorded were in Rumania 8.6 per cent, South Korea 7.0 per cent, and Yugoslavlia 5.4 per cent. It is to be noted that the developing countries that recorded highest rates of growth are those that allocated a high proportion of their income to investment, increasing in the case of Sri Lanka to 36 per cent and 31 per cent in China, (the two low income sub-group), where the proportion of investment to income reaches the level of 35 per cent in Yugoslavia, 34 per cent in Rumania, and 31 per cent in South Korea.

The industrial experiences of the developing countries has indicated that among the low income countries, China, Pakistan, and Sri Lanka, were the most advanced in industrial development, while in the middle income countries, the most advanced were Rumania, South Korea, and Yugoslavia. These are the developing countries that have allocated high proportion of their income to investment, and were noted for giving emphasis and priority to industrial development (see Table No. 5).

TABLE NO. 3: GROWTH RATES OF MANUFACTURING EMPLOYMENT AND PRODUCTIVITY
BY MAJOR GROUPS, 1963-1973 and 1973-1980

Branch	ISIC	Developed market economies				Developing countries				Centrally planned economies									
		Output		Employment Productivity		Output		Employment Productivity		Output		Employment Productivity							
		1963-1973/ 1973-1980	1963-1973/ 1973-1980	1963-1973/ 1973-1980	1963-1973/ 1973-1980	1963-1973/ 1973-1980	1963-1973/ 1973-1980	1963-1973/ 1973-1980	1963-1973/ 1973-1980	1963-1973/ 1973-1980	1963-1973/ 1973-1980	1963-1973/ 1973-1980							
Food, beverages and tobacco	31	3.7	2.6	0.6	-0.0	3.1	2.7	5.7	4.7	3.4	5.7	2.2	-0.9	5.7	3.6	2.5	1.0	3.2	2.5
Textiles	321	3.9	0.1	-1.2	-3.0	5.2	3.2	4.7	2.1	2.6	2.2	2.0	-0.1	6.3	4.2	1.4	0.4	4.8	3.8
Wearing apparel, leather and footwear	322-324	2.1	0.3	0.9	-1.4	1.2	1.7	3.9	2.9	4.1	5.7	-0.2	-2.6	7.6	4.9	3.3	0.7	4.2	4.2
Wood products and furniture	33	4.5	0.9	1.2	-0.9	3.4	1.7	4.7	5.1	5.0	3.7	-0.3	1.4	6.5	4.5	1.2	0.0	5.3	4.5
Paper, printing and publishing	34	4.6	2.4	1.0	-0.0	3.6	2.4	8.7	2.9	4.5	3.3	4.0	-0.3	7.8	4.1	3.0	0.8	4.7	3.3
Chemical, petroleum, plastic products	35	8.1	3.6	1.9	0.1	6.1	3.5	10.1	4.8	5.5	5.2	4.4	-0.4	10.5	6.8	3.6	1.5	6.6	5.2
Non-metallic mineral products	36	4.9	1.9	0.5	-1.1	4.3	3.1	7.8	6.1	4.9	4.9	2.7	1.2	8.3	4.9	3.4	1.1	4.7	3.7
Basic metal industries	37	4.8	-0.1	0.2	-2.0	4.6	1.9	7.7	6.9	6.3	5.2	1.3	1.7	6.7	4.3	2.0	0.9	4.7	3.4
Metal products, machinery and equipment	38	5.9	2.8	2.1	0.1	3.7	2.8	10.6	6.7	5.9	4.1	4.4	2.4	11.2	9.1	3.6	2.0	7.3	7.0
TOTAL MANUFACTURING	300	5.2	2.3	1.2	-0.5	4.0	2.8	7.1	5.0	4.2	4.2	2.8	0.7	8.9	6.7	3.0	1.4	5.7	5.2

Source: Some Trends in World Industrial Development (UNIDO/ID/WG.391/8, 8 March 1983).

TABLE NO. 4: SOURCES OF GROWTH BY END-USE IN SELECTED DEVELOPING COUNTRIES IN THE 1970s
(percentage)

Country	Basic consumer goods			Intermediate industries			Capital goods and consumer durables						Total
	Domestic demand	Export expansion	Import substitution	domestic demand	Export expansion	Import substitution	domestic demand	Export expansion	Import substitution	domestic demand	Export expansion	Import substitution	
Libyan Arab Jamahiriya	150.9	2.0	-52.5	109.0	-	-9.0	134.1	1.3	-35.4
Iraq	154.8	-1.9	-52.9	260.9	9.7	-170.6	275.0	0.1	-175.1	221.2	2.9	-124.1	
Tunisia	103.2	34.7	-37.9	115.4	18.5	-33.9	149.3	2.6	-51.9	114.2	19.0	-33.2	
Jordan	181.0	15.5	-96.5	112.2	17.8	-30.0	131.2	16.0	-47.2	
Egypt	83.4	17.7	-1.1	81.9	8.2	9.9	58.2	0.7	41.1	77.5	10.0	12.5	
Iran	111.5	19.1	-30.6	96.4	1.3	2.3	97.8	1.5	0.7	100.2	4.3	-4.5	
Brazil	92.4	8.6	-1.0	100.7	2.6	-3.3	-	-	-	99.3	3.4	-2.7	
Cyprus	38.7	50.1	11.2	27.0	29.0	44.0	5.4	19.6	75.0	37.8	32.9	29.3	
Turkey	91.9	8.6	-0.5	106.5	2.2	-8.7	109.0	1.0	-10.0	102.9	3.3	-6.2	
Colombia	84.4	16.5	-0.9	95.7	13.9	-9.6	64.5	3.1	32.4	84.6	10.3	5.1	
Republic of Korea	71.9	18.1	10.0	85.7	10.4	3.9	52.4	15.1	32.5	76.2	13.2	10.6	
Philippines	86.3	8.8	4.9	103.9	7.4	-11.3	98.2	1.3	0.5	99.0	6.6	-5.6	
Thailand	57.6	0.2	42.2	91.1	8.2	0.7	42.0	0.5	57.5	57.1	1.6	41.3	
Sri Lanka	69.7	3.5	26.8	25.9	8.7	65.4	33.1	2.1	64.8	39.8	6.5	53.7	
Indonesia	80.9	1.0	18.1	113.3	1.6	-14.9	49.7	0.8	49.5	78.8	1.2	20.0	
India	88.1	11.7	0.2	94.5	2.6	2.9	76.7	4.5	18.8	88.2	5.2	6.6	

Source: Some Trends in World Industrial Development (UNIDO/ID/WG.391/8, 30 March, 1983)

TABLE NO. 5: NATIONAL PER CAPITA INCOME, INVESTMENT ALLOTMENTS, AND THE SHARE OF INDUSTRY IN GROSS DOMESTIC PRODUCT FOR SELECTED DEVELOPING COUNTRIES

Country	National per capita income		Investment allotments	Share of industry in GDP
	Dollar value 1980	Growth (%) 1960-1980	(%)	(%)
Low income				
Bangladesh	130	1.3	17	13
Ethiopia	140	1.4	10	16
Nepal	140	0.2	14	13
Burma	170	1.2	24	13
Afghanistan	-	0.9	14	-
Zaire	220	0.2	11	23
Mozambique	230	(-)0.1	10	16
India	240	1.4	23	26
Sri Lanka	270	2.4	36	30
Tanzania	280	1.9	22	13
China	290	3.7	31	47
Pakistan	300	2.8	18	25
Uganda	300	(-)0.7	3	6
Sudan	410	(-)0.2	12	14
Middle income				
Ghana	420	(-)1.0	5	21
Kenya	420	2.7	22	21
Egypt	580	3.4	31	35
Thailand	670	4.7	27	29
Philippines	690	2.8	30	37
Morocco	900	2.5	21	32
Peru	930	1.1	16	45
Colombia	1,180	3.0	25	30
Turkey	1,470	3.6	27	30
South Korea	1,520	7.0	31	41
Malaysia	1,620	4.3	27	37
Brazil	2,050	5.1	22	37
Mexico	2,090	2.6	28	38
Chile	2,150	1.6	18	37
South Africa	2,300	2.3	29	53
Romania	2,340	8.6	34	64
Argentina	2,390	2.2	-	-
Yugoslavia	2,620	5.4	35	43

Source: The World Bank, World Development Report 1982.

3. CURRENT STATE OF ARAB INDUSTRY

The period covering the years 1970-1980 may be considered by far the most important in contemporary Arab history, when countries of the region acquired substantial economic and financial capabilities which enabled them to record progress at unprecedented rates of growth. It introduced important changes in the economic, institutional and social structures of member countries, and in the patterns of economic development, composition of production, consumption and investment. These developments differed from one country to another with the greatest impact felt by the Arab oil countries and countries directly affected by their economies.

The following highlights the main conclusions and developments during the period under consideration:

1. Oil exporting countries achieved control over the oil industry through complete national ownership of oil production and resources and developing independence in their management including decision related to price policies and production. It is for the first time in contemporary history that a group of developing countries were able to restore complete economic control over their own natural resources. This has resulted in dramatic increases in oil revenues and to accumulating huge resources in foreign exchange thus enabling member countries to increase manyfold their import.

2. The oil-exporting countries allocated huge amounts of investments for building up their basic economic infrastructures with the consequent dramatic increases in the construction activities that recorded an exceptionally high and unprecedented growth.

3. Investments in infrastructure was not initially matched by investments in the productive sectors, resulting in serious imbalances in the economic structure of the oil-exporting countries. It increased the current and capital costs needed for building infrastructure and burdened further Arab economies with high maintenance costs without building up productive sectors capable in the longer run to carry such burden.

4. A clear recent trend is discerned in the oil producing countries leading to an increasing investment in the productive sectors, mainly in economic activities that the oil economies enjoy comparative advantages namely oil, energy, and petrochemicals. Most of these investments are linked to the international markets, and the derived production is mostly export oriented.

5. The recently established Gulf Co-operation Council (GCC) started a new era in Arab economic co-operation. Member states in the GCC aim at establishing a common market, unified customs union, and policy co-ordination in the fields of finance, manpower, petroleum and industry, reaching at an intermediate stage of an advanced level of co-operation that will ultimately lead to full economic integration. Although there are no indications at present that GCC may expand to include other Arab countries, some believe that in the longer run this is possible. They draw a parallel experience namely that of the EEC that started initially with the smaller group of countries of the Benelux.

6. The impact of oil had not been all positive and a number of serious negative effects have been discerned that include inflation, imbalances in prices and cost structures, extremely widening the gap between rapidly increasing consumption and local production, and the phenomena that individual private consumption may not necessarily be linked to income derived from the actual participation in the production process. The increases in oil prices and the consequent accumulation of foreign exchange surpluses and their utilization in expansion of import, had additional negative effects on the agricultural sector; a reduction in local production, and rapid immigration of labour from rural to urban countries. Furthermore, the share of investment in agriculture has been decreasing from 14 per cent of total planned investment during the period 1970-1975 to less than 9 per cent during the period 1976-1980; although in absolute terms, investment has increased respectively from US\$ 8 billion to US\$ 25.5 billion (see table No. 6). Thus the share of the agriculture sector in GDP recorded a decline from 16.8 per cent in 1970, to 6.1 per cent in 1980 for all Arab countries. For ECWA member countries the relative share of agriculture in GDP has fallen respectively from 13.5 per cent to 4.8 per cent during the same period.

TABLE NO. 6: THE SHARE OF AGRICULTURE IN PLANNED INVESTMENT
IN ECWA REGION AND THE ARAB WORLD (VALUES IN
MILLIONS OF DOLLARS; PERCENTAGES)

	1970-1975		1976-1980	
	Values	Percentages	Values	Percentages
ECWA region(a)	3,865	15.3	14,544	8.4
Arab World	8,023	14.0	25,501	9.0

Source: The Secretariat of the Arab League and other Arab Organizations. Unified Arab Economic Report, 1981.

(a) Including Egypt.

TABLE NO. 7: THE SHARE OF THE PRODUCTION SECTORS IN GDP AND IN NON-OIL GDP IN ECWA REGION AND THE ARAB WORLD (PERCENTAGES)

	ECWA region			Arab world		
	1970 (a)	1980	1982	1970	1980	1982
Share of production sectors in GDP						
Agriculture	13.5	4.9	5.7	16.8	6.1	6.6
Mining industries	24.4	52.3	41.8	22.9	48.3	38.4
Manufacturing industries	11.7	6.2	8.2	11.9	7.0	8.6
Share of production sectors in non-oil GDP						
Agriculture	17.9	10.0	9.8	21.8	11.7	10.7
Manufacturing industries	15.5	13.0	14.2	15.5	13.6	13.9

Source: Secretariat of the Arab League and other Arab Organizations, the Unified Arab Economic Report, issues of 1980, 1981 and 1983.

(a) UN, ECWA, National Accounts Statistics, 1981, No. 4, and UN Yearbook of National Accounts Statistics 1980 and 1981.

7. The share of mining industries in Arab GDP has increased from 22.9 per cent in 1970 to 48.3 per cent in 1980, declining to 38.4 per cent in 1982. Because of the fluctuations in the oil sector and in order to capture a clearer picture of developments in non-oil sector, parallel analysis is carried using non-oil GDP (see table No. 7). Thus the relative share of the agricultural sector in non-oil GDP showed a decline from 21.8 per cent to 1970 to 11.7 per cent in 1980, reaching a low level of 10.7 per cent by 1982. Similarly, for ECWA countries, agricultural share declined from 17.9 per cent of GDP in 1970 to 10 per cent in 1982. As to Arab manufacturing sector, its share in non-oil GDP has almost maintained its level of 14-15 per cent during the period under review. If oil activities were included, this share would decrease significantly from 11.9 per cent in 1970 to 7 per cent in 1980, though slightly increasing in 1982 to 8.6 per cent. In ECWA countries, similar trends are observed, where the share of the manufacturing sector in GDP fluctuated from 11.7 per cent in 1970 to 6.2 per cent in 1980 rising again to 8.2 per cent in 1982. At the country level, however, individual experiences in manufacturing differed where the relative shares of manufacturing in GDP has ranged in 1980 between 1 per cent (0.9 per cent in 1982) in Oman, to 17.5 per cent (1982) in Morocco. These differences are in fact due to the different role and stage of industrial development in the individual countries. The manufacturing sector playing a greater role in non-oil countries that include Morocco, Lebanon, Egypt, Tunisia, and Jordan. In the Arab oil exporting countries Bahrain and Algeria may be singled out having a relatively high share of manufacturing activity in GDP reaching a level of 16.3 per cent in Algeria in 1980, decreasing though to 12.6 per cent in 1982. In Bahrain the figures were around 12.6 per cent in 1980 increasing to 20.6 per cent in 1982. If oil activities were excluded, in Algeria the share of manufacturing value added in non-oil GDP is recorded at 26.8 per cent in 1980, and 17.4 per cent in 1982.

In Arab least developed countries, the share of manufacturing in GDP ranged between 14.6 per cent (1980) and 11.2 per cent in 1982 in Democratic Yemen to 6.4 per cent (1982) in Gibuti.(1)

As summarized in table 8, the rates of growth of manufacturing value added were relatively high which was due to the low level in the base year especially in oil producing countries and to the increasing amounts of investment allocated to the manufacturing sector.

(1) Secretariat of the Arab League and other Arab Organizations, Unified Arab Economic Report 1981 and 1983.

8. The Arab manufacturing sector by and large suffers from distinct weaknesses in its lack of a strong backward linkages; there is an almost complete absence of basic industries, local raw materials are generally exported without processing, and an increasingly high dependence on imported manufacturing products has been evolving overtime. The bulk of capital goods and heavy engineering products are imported including even those requiring the least sophisticated production methods. On the other end of the industrial spectrum there is a grave imbalance between the local production and demand for food processing and there is an increasing dependence of these industries on imported raw materials including cereals, oil and sugar.

9. Most Arab industries produce for final consumption, including food processing, clothing, leather, or intermediate goods for exports, fertilizers, petrochemicals and metal products. Arab industry suffers from grave weaknesses attributed mainly to the smallness of the size of the individual country markets and to weakness of local technological capabilities. These constraints could only be resolved through markets and resources integration either at the Arab regional level or at the sub-regional levels.

TABLE NO. 8: AVERAGE ANNUAL RATES OF GROWTH OF MANUFACTURING VALUE ADDED IN ECWA REGION AND THE ARAB WORLD (PERCENTAGES)

	ECWA region		Arab world current prices
	Current prices	1970 constant prices	
1960-1970	7.6	7.4	8.5
1970-1979	20.5	10.7	19.9

Source:

1. United Nations Yearbook of National Accounts Statistics, 1981.
2. World Bank, World Development Report 1982.

10. Average annual growth of manufacturing productivity was lower than the corresponding figures for the economy as a whole, thus limiting the manufacturing sector's contribution to economic growth. Manufacturing productivity varied among various Arab countries, reaching a high rate of 40.7 per cent in the case of Qatar during the period 1975-1980, as compared to negative growth rate that was recorded by the Yemen Arab Republic during the same period.

11. Chemical industries, though still in its early stages of development, has been the major contributor to manufacturing value added. In absolute terms, chemical industries' value added reached \$8.5 billion in 1980, representing around 32.7 per cent of total MVA. Saudi Arabia's share was the highest contributing around half of Arab total value added in chemicals. Food industries takes the second place, recording value added of about \$4.8 billion in 1980 and representing around 19 per cent of Arab MVA. The food industries have been concentrated mainly in Algeria, Egypt, Morocco, Iraq, and Syria, representing collectively around 76 per cent of Arab total of value added in these industries. The relative importance of food industries differs greatly among countries. In Mauritania, VA in food sub-sector, contributed around 85 per cent total MVA in the year 1980, Yemen 50 per cent, Somalia 48 per cent, Egypt 31 per cent, and each of Algeria, Lebanon, and Morocco, 28 per cent. In contrast the corresponding figures for Kuwait, 4.8 per cent and United Arab Emirates 5.8 per cent.

To highlight the problem of food industries in the Arab countries, one may compare for selected products their share and that of other developing countries in total world production. Thus flour mills in the Arab region produce around 5.5 per cent of total world production against 20 per cent produced in the developing countries; in vegetable oil, they produce 0.4 per cent compared to 60 per cent produced by the developing countries; and in sugar 0.6 per cent as compared to 55 per cent in developing countries. These low ratios reflect the inherent weaknesses in the production capacities of the region in this important manufacturing sector.

Textiles industries ranked third in its contribution to Arab MVA. In 1980 the share of textiles in total MVA was around 14 per cent and the majority of these industries concentrated mainly in Egypt, Algeria, Syria, Morocco, Iraq and Tunisia.

Other manufacturing activities including capital goods and engineering industries' contributions to total MVA have been limited and available data does not lend itself to further analysis.

This quick review of the map of manufacturing activities in the Arab region shows that the manufacturing industries are

still at initial stages of development. If one excludes chemicals and petrochemicals, food and textiles industries remain to be the dominant manufacturing industries that are usually associated with the infant stages of industrial development.

Should the present structure of the Arab manufacturing industries remain unchanged, the Arab region would continue its dependence on foreign markets to meet its needs for basic manufactured products including capital goods and other high technology industries and in the future the region shall face a grave situation arising from rapidly increasing pace of dependence on the international economy and its international division of labour.

4. ARAB INDUSTRY AND FUTURE PROSPECTS

The crucial changes that took place in the Arab World in the 1970s brought about by the rise in oil revenues, put at the disposal of Arab countries, the economic and financial capabilities that enabled them to expand greatly the level of investment and its distribution. The increase in the share of investment allocated to building the economical infrastructure of oil countries has been most pronounced. Thus infrastructure developments in member countries included the construction and extension of airport roads, buildings, hospitals and schools. While these investments provide the needed base and are a pre-condition for an accelerated economic development, their effectiveness are of a longer term nature and depend greatly on adequate and timely linkage with the future development in the productive economic sectors. Without development in the latter sector, contribution of the developed infrastructure shall be limited and shall constitute a burden on the economy. Taking these important factors into consideration one set of projected future scenarios have predicted radical changes in the economic structure with emphasis on the rate of the productive and dynamic sectors.

Future projections may be based on the historical trend or alternatively on planned course to overcome the historical pattern and to chart new paths for economic and social development. In the scenarios developed in this section the two approaches are applied. In the first set of projections it is assumed that the historical trend in the economy shall continue into the future and accordingly the economic structure is determined, particularly the share of the industrial sector in GDP. The second set of projections assume radical changes, giving the industrial sector a fundamental role in the national economy.

Since historical trends and planned projections will depend on the availability of economic resources, we have linked these two sets of projections to three assumptions concerning future growth in GDP. In the first, it is assumed that for oil countries, oil prices will remain low until 1987, and later will

rise slowly maintaining their real value until the year 2000. In the second, it is assumed that an increase in real oil prices shall start in 1985 until year 1990, at a rate of 2 per cent and at 3 per cent between 1990 and 1995, and at 4 per cent through the year 2000. In non-oil countries, the historical trend has been projected on the basis of a more optimistic trend. The third alternative GDP growth assumes for oil and non-oil countries a modest rate of growth which is lower than the growth depicted by historical trends (see table No. 9).

The following summarizes the main results and conclusions of the projected scenarios:

According to most of the projected scenarios the manufacturing sector is called upon to grow at an exceptional high rate of annual growth ranging between 14 to 18 per cent. The low rate of growth of about 11 per cent was projected only for the pessimistic scenario. Thus analysis of the scenarios depicting the historical pattern of industrial growth reveal that the average annual growth rate required from the industrial sector will be between 14 to 15 per cent. These scenarios assume a modest change in the economic structure, the share of manufacturing rising from 9 per cent recorded in recent years to 13 per cent by the year 2000. Where planned increase is assumed in the share of the industrial sector to GDP that is higher than that depicted by the historical trend, the industrial sector is called upon to grow at even a much higher annual growth rate of between 17 to 18 per cent. This scenario assumes that the share of MVA to GDP for all Arab countries shall increase from about 9 per cent reaching 17 per cent by the end of the century. These scenarios are not intended to reflect actual performance, the attainment of which would depend on availability of resources for development in general and specifically for the industrial sector and the implementation capability of individual countries, but rather to stress the order of magnitude and the challenge imposed on member states in order for them to be able to catch up industrially with the rest of the world. Unless a dramatic change is introduced in the developmental policies and strategies strongly emphasizing the two main commodity producing sectors namely industry and agriculture, member states shall be facing not in the too distant future serious economic crisis, signs of which have already been showing. In most member countries, the basically service oriented economies with a weak and fragmented industrial structure shall not be able to meet the rapidly growing needs in industrial products that have so far been met mainly through import. Most member countries shall be facing balance of payment problems that were met until recently from oil revenues which are expected for the rest of the century to be at best moderate.

It is imperative that member governments adopt new orientation in their industrialization strategies and policies intro-

ducing drastic policy measures for their implementation. It should aim at a balanced industrial development whereby metal, engineering and capital goods industries that have been relegated to a minor or second role by most member countries should be called upon in the future to play an important role in the process of industrial development.

Regional industrial co-operation shall constitute an important dimension and essential element in any drive aiming at the development of a dynamic and integrated industrial growth. Few countries in the region have, individually, the economic structure and adequate resources for attaining an integrated and balanced industrial development. However, at the regional and sub-regional levels, they combine the required market, economic, financial and manpower resources needed for its realization. The newly formed GCC should go a long way towards reducing the fragmentation of the Arab market. However, this should be taken as a time-phase to be followed by a broadened regional arrangement ultimately leading to integration at the Arab national level. Because of the limited natural resources base in GCC countries, industrial development shall be still oriented primarily to an export strategy which cannot sustain a viable integrated industrial development as indicated in the study on the subject mentioned above. There is a need for a captured diversified internal market that can be secured only through a broader Arab market.

Another set of conclusions that need to be emphasized relate to an increasing imbalance in industrial location among Arab countries; demonstrating again the essential need for a regional orientation in industrial development. For purposes of analysis, Arab countries were distinguished into three groups (see table No. 10). These data reveal a continued trend that started in the 1970's in favour of oil producing countries. The data indicate that the share of Group B representing oil countries with small population, have increased rapidly from a low level of 12.5 per cent in 1970 to 33.7 per cent in 1980. Projecting into the future, the various scenarios depict a continuing trend although at a slower pace reaching by the end of the century between 64-66 per cent of total MVA in the Arab countries. The next highest share going to the other two oil producing countries that have more diversified resources and are relatively more densely populated namely Iraq and Algeria. They recorded in the past an increase in their share from 23.8 per cent in 1960 to 28.0 per cent in 1980. However, their future share is projected to suffer a decline reaching in the year 2000 between 17.4 to 26.7 per cent depending on the various scenarios.

Turning to the third group of countries which includes the non-oil Arab countries their share in total MVA which declined from 63.7 per cent in 1970 to 38.3 per cent in 1980 shall continue to record a rapid decline reaching between 9.0 per cent to

16.6 per cent of total MVA by the end of the century. To demonstrate the seriousness of this dramatic shift in industrial concentration one needs to point to the corresponding distribution pattern of population by the three country groups. The non-oil countries estimated to have 65 per cent of the total Arab population, and the Group B-oil countries with thinly populated countries sharing about 12 per cent of the total by the year 2000 (see table No. 11).

Finally the data reveal that at the world level the share of ECWA and Arab countries in world MVA that is expected to increase into the future shall still constitute a small share of world output. Historically the share of Arab countries in total world MVA was maintained at about 0.6 per cent in the decade of the 1960's, their share was rising to 0.9 per cent by 1980. ECWA region's respective share increased from 0.35 per cent in the 1960's to 0.7 per cent by 1980. When compared to total MVA in developing countries, the total Arab countries' share has declined from 10.4 per cent in 1960, to 9.3 per cent in 1970 and 8.4 per cent by 1980. MVA share of Arab countries has been consistently lower than the share of the region in world and developing countries' GDP. Taking the world total, the share of Arab countries was rising from 1.3 per cent in 1970 reaching 3.3 per cent in 1980. As percentage of total developing countries GDP Arab countries' share increased from 9.3 per cent in 1960 to 10.6 per cent in 1970 reaching 1/5 of total developing countries' GDP in 1980. As for future scenarios, total Arab countries' share in total world MVA is estimated to rise respectively to 1.6 per cent and 2.1 per cent in the year 2000, depending on the historical trend or accelerated growth scenarios. The corresponding figures for ECWA country's are respectively 1.0 per cent and 1.4 per cent.

TABLE NO. 9: PROJECTED SCENARIOS IN THE ARAB COUNTRIES: GDP AND MVA AND THE SHARE OF MANUFACTURING VALUE ADDED IN GDP (1980-2000) (VALUES IN MILLIONS OF DOLLARS - PERCENTAGES)

	All Arab countries				ECWA countries			
	GDP	MVA	Share of MVA in GDP (%)	Share of MVA in GDP (%)	GDP	MVA	Share of MVA in GDP (%)	Share of MVA in GDP (%)
1980	402,271.0	28,342.5	7.0	299,975.0	18,624.9	6.2	5.2	6.2
1982	392,246.2	33,633.4	8.6	288,969.3	23,827.7	8.2	8.2	8.2
1. Optimistic forecasts of GDP growth and manufacturing structural changes								
1985	663,431.8	58,692.0	8.8	510,195.4	41,836.0	8.2	8.2	8.2
1990	1,234,436.5	153,545.0	12.4	963,803.6	11,656.4	12.0	12.0	12.0
2000	4,097,602.1	684,125.2	16.7	3,155,339.7	504,854.4	16.0	16.0	16.0
2. Best forecasts of GDP growth and manufacturing structure based on historical trends								
1985	642,898.9	49,951.2	7.8	500,005.7	35,000.4	7.0	7.0	7.0
1990	1,074,722.9	97,032.1	9.0	839,486.2	68,837.9	8.2	8.2	8.2
2000	3,049,231.6	391,524.7	12.8	2,304,540.3	287,554.1	12.5	12.5	12.5

TABLE NO. 9 (CONT'D)

	All Arab countries				ECWA countries			
	GDP	MVA	Share of MVA in GDP (%)	GDP	MVA	Share of MVA in GDP (%)	GDP	Share of MVA in GDP (%)
3. Best forecasts of GDP growth and manufacturing structural changes								
1985	642,898.9	56,718.8	8.8	500,005.7	41,000.5	8.2		
1990	1,074,722.9	133,671/4	12.4	839,486.2	100,738.3	12.0		
2000	3,049,231.6	512,349.8	16.8	2,354,540.3	368,726.4	16.0		
4. Pessimistic forecasts of GDP growth and manufacturing structure based on historical trend								
1985	544,708.8	50,695.4	9.3	406,190.6	28,433.3	7.0		
1990	1,071,524.0	125,386.7	11.7	799,037.9	65,521.1	8.2		
2000	1,875,052.1	241,534.7	13.0	1,398,171.1	174,771.4	12.5		

Source: ECWA estimates.

TABLE NO. 10: DISTRIBUTION OF MANUFACTURING VALUE ADDED BY THE THREE ARAB COUNTRY GROUPINGS (PERCENTAGES)

	Year	Group A	Group B	Group C	Total
	1970	23.8	12.5	63.7	100
	1980	28.0	33.7	38.5	100
Optimistic forecasts of GDP growth and manufacturing structure based on historical trends	1990	21.2	61.6	17.2	100
	2000	22.8	65.2	12.0	100
Optimistic forecasts of GDP growth and changes in manufacturing structure	1990	18.2	61.2	20.6	100
	2000	17.4	66.0	16.6	100
Best forecasts of GDP growth and manufacturing structure based on historic trends	1990	23.2	62.5	14.3	100
	2000	26.7	64.3	9.0	100
Best forecasts of GDP growth and manufacturing structural changes	1990	19.9	62.6	17.5	100
	2000	20.5	66.5	13.0	100

Sources:

1. For the years 1970-1980: Secretariat of the Arab League and other Arab Organizations, the Unified Economic Report, issues of 1980 and 1981.

2. For the years 1990-2000: ECWA estimates.

Note:

Group A: Iraq and Algeria

Group B: Saudi Arabia, UAE, Kuwait, Qatar, Lybia, Bahrain and Oman

TABLE NO. 11: DISTRIBUTION OF POPULATION BY THE THREE ARAB
COUNTRY GROUPINGS (PERCENTAGES)

	1980	1990	2000
Group A	21.8	22.7	23.6
Group B	10.6	11.3	11.8
Group C	67.6	66.0	64.6
Total	100	100	100

Source: United Nations Demographic
Indicators of Countries: Estimates and
Projections as Assessed in 1980. New York; 1982.

Note:

- Group A: Iraq and Algeria
- Group B: Saudi Arabia, UAE, Kuwait, Qatar,
Lybia, Bahrain and Oman
- Group C: Syria, Egypt, Morocco, Sudan,
Tunisia and Jordan.

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