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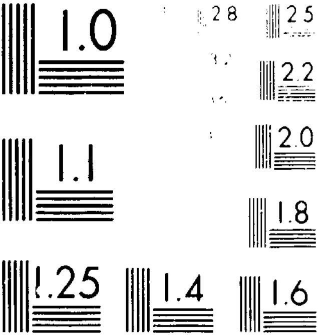
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THE POOR FALL BEHIND:

AN ASSESSMENT OF INDUSTRY IN THE LEAST DEVELOPED COUNTRIES*

Prepared by the

Division for Industrial Studies

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Explanatory Note

This paper has been prepared by the UNIDO Secretariat for the United Nations Conference on the Least Developed Countries (Paris, 1 - 14 September 1981). It is intended to provide, for the manufacturing sector, "a substantive analysis by sector or region, of the problematique of least developed countries" (see Report on the Third Interagency Consultations on the Comprehensive New Programme of Action for the Least Developed Countries, para. 20). As such, it aims at complementing other papers being submitted to the Conference. It does not cover general economic or social aspects (except where specifically linked to manufacturing), technical assistance (a separate UNIDO paper is being prepared) or, to any great detail, trade and employment aspects of industrialization (covered in UNCTAD and ILO papers). Also, it should be noted that the data base for the least developed countries is particularly weak, so that data presented here, especially for individual countries, tend to be incomplete, both in country coverage and over time and are subject to revision.

Further, much more detailed information is provided for most of the least developed countries in studies in the UNIDO/IS programme of country profiles/briefs/long-term prospects (completed or available shortly: Afghanistan, Bangladesh, Botswana, Ethiopia, Haiti, Laos, Mali, Nepal, Niger, Somalia, Yemen Arab Republic, Yemen People's Democratic Republic) and surveys of industrial resources and development in the least developed countries (under preparation: Botswana, Burundi, Gambia, Lesotho, Mali, Rwanda, Somalia, United Republic of Tanzania).

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ABSTRACT

The paper, focused on manufacturing, is intended as an input to the United Nations Conference on the Least Developed countries. The problem of extreme mass poverty is regional (Sub-Sahara Africa, South Asia) and reflects low ratios of natural resources and human physical capital *per capita*. Compared to other developing countries the situation in the LDCs has, with few exceptions, worsend in the 1970s, and this trend is likely to continue without much greater international help and internal reforms designed to integrate manufacturing investments within a coherent development package revolving around agriculture and other natural resources, basic needs, education and employment, and greater savings, foreign exchange and infrastructure. Policy changes and a minimum MVA growth rate of 8 per cent to the year 2000 are suggested.

INTRODUCTION

Several rather simple but very important points need to be kept in focus when discussing industrial development in the 30 least developed countries.1/ First, underdevelopment may be briefly defined as the prevalence of low ratios per capita of natural resources and human and physical capital.2/ Second, the regional nature of underdevelopment, mainly concentrated in Sub-Sahara Africa, with 20 least developed countries (1977 population: 128 million), and South Asia, with 5 least developed countries (1977 population: 112 million) should be recognized, along with differences between these areas. Third, most of these countries suffer not only from small internal markets, because of low incomes and (generally) small population, but also from weak transport and communication links with major trading countries (20 of the least developed are land-locked or islands). Fourth, these countries have failed, in relative terms at least, to participate in the acceleration of industrial and economic growth of the developing countries since the end of World War II. The "trickle-down" effect has not worked for these countries. Fifth, disastrous economic and social conditions (the "vicious circle") now prevail in many of the least developed countries and on the basis of present trends the prospects for the 1980s and 1990s are dismal indeed. Sixth, only a massive and well-conceived programme of assistance to these countries combined with certain internal reforms seems likely to achieve a significantly more favourable pattern of development in the future. Seventh, such a programme will need to be broadly based, so as to increase the linkages between and accelerate the development of key sectors, especially agriculture, manufacturing, infrastructure (e.g. transport, communications, energy supply) and education and other productive social services.

1/ The Committee for Development Planning has recently recommended that Guinea-Bissau (1977 population: 0.5 million) should be added to the list of least developed countries (E/AC, 54/XVII/CRP.1, 27 March 1981). Statistical data of the type presented in this paper are not available for Guinea-Bissau however, so further reference is omitted.

2/ The combination of these productive factors is important. For example, Japan is relatively weak in natural resources per capita but compensates through physical and (especially) human capital. Nevertheless, having natural resources helps.

A STATISTICAL REVIEW OF INDUSTRIAL PROGRESS IN THE 1970s

In this section the development of the manufacturing sector in the least developed countries (and, for reference, other developing countries) during the period 1970-1977 (and, for reference, the 1960s) is examined, with coverage extended through 1979 for the African least developed countries for certain data series.

In their efforts to develop the manufacturing sector the least developed countries face serious constraints on both supply and demand sides. Internal demand is very much affected by the small market size (as measured by GDP) of these countries, which limits the possibility of developing industries which, because of the technology involved, require large-scale production. Moreover, the extremely low income per capita in these countries means that only the most basic and cheap industrial products are likely to be purchased, except by the wealthy few, so that production of a diversified range of manufactured goods becomes difficult.

Table 1 reveals the scale of these market limitations to expanded manufacturing production. GDP per capita in the least developed countries in 1977 averaged US$ 148 (1975 prices), less than one-third that for other developing countries. In the 1960s the average annual growth rate in GDP per capita in the least developed countries was only 0.35 per cent, as compared with a growth rate of 3.17 per cent for other developing countries. During the period 1970-1977 the difference in growth rates between the two groups narrowed, with a rate of 1.27 per cent for least developed countries and 2.89 per cent for other developing countries, so that the decline in the least developed country share in total GDP of the developing countries continued, but more slowly than in the previous decade.

By 1977 the share of the least developed countries in total GDP of the developing countries had fallen to 3.45 per cent. Of this, almost three-quarters was accounted for by Afghanistan, Bangladesh, Ethiopia, Sudan, Uganda and the United Republic of Tanzania. Only Botswana, Malawi and the United Republic of Tanzania increased their share in total GDP of developing countries during the 1960s and 1970-1977, while Cape Verde,

Table I. Population, GDP per capita and shares in GDP of all developing countries - for least developed countries, by country and group, other developing countries and all developing countries, 1977, with rates of change 1960-70 and 1970-77

Country or country group	Population (millions)	GDP per capita (1975 US$)	Share in GDP of developing countries (%)	Rates of change, trend (%): Population 1960-70	Population 1970-77	GDP per capita 1960-70	GDP per capita 1970-77	Share in GDP of develop. countries 1960-70	Share in GDP of develop. countries 1970-77
	1977								
Afghanistan	20.3	98	0.20	2.14	2.61	-0.13	1.68	-3.49	-1.09
Bangladesh	77.6	129	0.99	2.84	1.84	-0.14	3.54	-2.83	-0.05
Benin	3.2	160	0.05	2.43	2.76	0.84	-0.67	-2.28	-3.25
Bhutan	1.2								
Botswana	0.7	536	0.04	2.00	2.39	4.77	4.16	1.11	1.10
Burundi	4.0	100	0.04	1.37	2.48	-3.86	0.04	-7.79	-2.82
Cape Verde	0.3	300	0.01	2.9"	1.88	5.70	-3.41	2.92	-6.72
Cent. Af. Rep.	1.9	207	0.04	1.98	2.14	0.00	-3.34	-3.51	-6.40
Chad	4.2	168	0.07	2.04	2.04	-2.55	1.68	-5.92	-1.64
Comoro Islds.	0.3	196	0.01	2.12	2.55	4.03	-2.94	0.51	-5.65
Ethiopia	29.3	93	0.27	2.19	2.40	2.25	-0.43	-1.15	-3.35
Gambia	0.5	222	0.01	1.70	1.95	3.83	3.21	-0.10	-0.25
Guinea	4.6	174	0.08	2.11	2.44	-2.08	0.31	-5.40	-2.59
Haiti	4.7	207	0.10	1.55	1.50	-0.54	2.48	-4.44	-1.39
Laos	3.5	65	0.02	2.41	2.27	-5.95	-7.38	-8.87	-10.21
Lesotho	1.2	135	0.02	1.65	2.01	4.23	3.24	0.24	-0.17
Malawi	5.2	138	0.07	2.30	2.45	3.40	4.06	0.08	1.07
Maldives	0.1								
Mali	6.0	93	0.06	2.12	2.48	-2.41	0.38	-5.71	-2.48
Nepal	13.2	109	0.14	2.05	2.26	0.44	0.52	-3.02	-2.56
Niger	4.8	192	0.09	3.29	2.74	3.02	0.35	0.68	-2.27
Rwanda	4.4	141	0.06	3.02	2.74	1.75	1.11	-0.82	-1.53
Somalia	3.3	157	0.05	2.27	2.66	-1.72	1.52	-4.90	-1.21
Sudan	19.5	265	0.51	2.92	3.11	-1.65	0.63	-4.24	-1.63
Uganda	12.1	255	0.31	2.64	3.01	3.03	-2.52	0.06	-4.81
Untd. Rp. Tanz.	16.4	175	0.28	2.80	3.10	4.16	2.44	1.30	0.11
Upper Volta	6.3	91	0.06	2.05	2.31	2.37	-1.38	-1.17	-4.34
West. Samoa	0.1								
Yemen, A.R.	5.5								
Yemen, P.D.R.	1.8								
Least Devd. countries	256.2	148	3.45	2.52	2.36	0.35	1.27	-2.67	-1.80
Other developing countries[a]	1778.6	546	96.55	2.60	2.67	3.17	2.89	0.14	0.07
All developing countries[a]	2035.0	499	100.00	2.59	2.64	3.04	2.85		

[a] In this and all other references in this paper to other or all developing countries, some countries are excluded because of lack of data (the main omission is China).

Source: UNIDO data base. Information supplied by the United Nations Office of Development Research and Policy Analysis, exept for population for Bhutan, Maldives, Yemen P.D.R West. Samoa and Yemen A.R., supplied by World Bank sources (these countries are omitted from aggregate data for least developed and developing countries in the table) the Comoros, Lesotho, Niger and Uganda showed an increase in the earlier period only. Overall, the share of the least developed in total GDP declined at a rate of 2.67 per cent in the 1960s and of 1.30 per cent in 1970-1977.

Two widely used general indicators of level of industrial development are the share of manufacturing value added (MVA) in GDP and MVA per capita. For inter-country comparison the latter has the advantage that it does not reflect variation caused by level of development of other sectors. The discovery of oil, for example, will raise a country's GDP and thus lower the MVA/GDP ratio without necessarily affecting the level of MVA or MVA per capita.1/ The MVA/GDP ratio (expressed in current prices) is more useful in showing the relative importance of manufacturing within a country at a given point in time.

Table 2 shows the development of MVA per capita up to 1977, in which year the average for the least developed countries was only US$ 12.6 (1975 prices), down slightly from 1976 and only about US$ 5 above the 1960 figure. In comparison, MVA per capita in other developing countries rose from US$ 49.6 in 1960 to US$ 106.4 in 1977. Thus, in the least developed countries, MVA per capita was not much more than one-tenth than that for other developing countries. During the 1960s, the growth rate in MVA per capita in the least developed countries, 4.88 per cent, was somewhat higher than that for other developing countries (4.44 per cent), but whereas growth in the other developing countries continued at the same rate during the period 1970-1977, growth in the least developed countries dropped to 3.16 per cent. During the 1960s, Benin, the Comoros, Lesotho, Malawi, Rwanda and Somalia all had MVA per capita growth rates of over 10 per cent, and only Laos and Haiti showed negative growth rates. During 1970-1977, however, only Bangladesh and Lesotho had MVA growth rates in excess of 10 per cent, and 12 countries showed negative growth rates. Thus, it seems clear that only the high weight of Bangladesh in the MVA of the least developed countries (see table 6) prevented an even sharper decline, as compared to the 1960s, in the average growth rate of MVA per capita in the least developed countries.

1/ The discovery may of course cause resources to shift out of manufacturing and into oil production, but this would be reflected by a decline in MVA per capita. On the other hand, the additional oil production could be achieved through use of idle or foreign resources, or resources drawn from sectors other than manufacturing.

Table 2. MVA per capita - for least developed countries, by country and group, other developing countries and all developing countries, 1960 and 1970-77 with growth rates, 1960-70 and 1970-77

country or country group[a]	MVA PER CAPITA (in 1975 US$)									growth rate (trend, in per cent)	
	1960	1970	1971	1972	1973	1974	1975	1976	1977	1960-70	1970-77
Afghanistan	7.5	12.2	11.0	10.4	10.9	11.4	10.7	11.1	11.1	4.00	-0.55
Bangladesh	5.1	5.5	2.8	4.8	5.5	8.7	9.2	9.6	10.1	2.19	16.27
Benin	6.0	12.2	12.2	12.8	12.3	13.5	15.9	14.5	13.7	10.21	2.93
Botswana	26.4	28.5	27.8	31.3	31.9	34.6	41.3	40.4	41.9	3.05	6.75
Burundi	7.1	13.3	13.9	13.8	13.8	15.4	14.4	16.2	16.9	0.21	3.28
Cape Verde Islds.	2.4	4.7	4.1	4.5	5.1	4.0	4.0	3.8	5.1	4.74	-0.40
Cent. Af. Rep.	14.8	28.4	29.2	24.2	20.4	25.0	23.8	17.7	17.4	5.52	-6.64
Chad	10.5	14.2	16.6	14.2	15.0	16.0	18.3	16.8	16.6	4.55	2.37
Comoro Islds.	4.9	17.2	18.0	19.0	17.1	18.6	18.4	17.3	17.4	11.14	-0.11
Ethiopia	5.8	10.3	11.1	10.9	11.0	10.7	10.6	10.0	10.1	6.57	-0.93
Gambia	2.8	5.3	4.5	3.2	6.6	4.0	3.6	3.6	3.5	7.92	-4.92
Guinea	15.0	14.2	15.7	16.6	17.3	17.4	15.1	11.5	11.9	0.01	-3.60
Haiti	18.0	17.0	17.4	18.6	19.0	20.6	19.5	24.2	26.3	-1.28	6.04
Laos	13.1	8.4	8.7	8.3	9.1	8.5	9.4	7.3	5.8	-5.34	-3.66
Lesotho	0.0	4.0	2.6	3.8	4.7	5.3	5.6	5.9	5.9	28.03	10.37
Malawi	3.4	12.5	12.0	12.8	15.4	16.1	17.8	16.4	17.1	14.33	5.85
Mali	8.1	12.3	11.9	13.0	13.2	11.2	12.2	12.2	12.5	5.98	-0.09
Niger	8.2	13.4	12.7	13.9	15.8	12.2	13.0	12.8	12.6	7.38	-1.03
Rwanda	2.9	13.1	13.5	15.1	17.5	16.6	17.1	16.9	17.1	13.50	4.00
Somalia	4.4	10.5	12.5	13.6	14.7	14.4	14.8	14.7	15.0	11.12	4.35
Sudan	10.5	16.6	15.2	15.0	19.8	17.5	18.2	20.0	17.7	6.73	2.75
Uganda	15.0	24.1	24.5	23.5	21.0	20.1	17.0	16.0	11.9	5.37	-9.13
Untd. Rp. Tanz.	6.2	14.8	15.6	16.8	17.8	18.0	17.4	18.2	18.5	9.62	2.96
Upper Volta	6.0	11.3	10.6	10.7	10.7	10.2	10.8	10.8	8.8	6.38	-1.87
Least Developed countries	7.3	11.1	10.2	10.9	11.8	12.6	12.7	12.8	12.6	4.88	3.16
Other Developing countries	49.6	78.2	82.7	88.0	94.6	97.7	98.3	103.5	106.4	4.44	4.43
All Developing countries	44.5	70.2	74.1	78.9	84.9	87.7	88.3	92.9	95.4	4.46	4.44

a/ Data not available for Bhutan, Maldives, Nepal, Yemen P.D.R., West. Samoa and Yemen A.R.,

Source: UNIDO data base, information supplied by the United Nations Office of Development Research and Policy Analysis.

Table 3 shows that the share of MVA in GDP (expressed in current prices) rose from an average for the least developed countries of 5.29 per cent in 1960 to 7.41 per cent in 1970 and to a peak of 8.81 per cent in 1975, after which the MVA share declined to 8.47 in 1977. Of the twenty African least developed countries, the MVA share continued to decline in 13 countries in 1978 and in 10 countries in 1979. For other developing countries, the MVA/GDP ratio also peaked in 1975 (at 19.99 per cent), as compared to a share of 16.92 per cent in 1960 and 18.98 per cent in 1977 (more than twice the average MVA share in the least developed countries).

The growth of real MVA (at 1975 prices) in the least developed countries declined from an average rate of 7.53 per cent in the 1960s to 5.59 per cent during 1970-1977 (see table 4). In comparison, the growth rate for other developing countries was slightly lower in the 1960s and considerably higher during 1970-1977 than the least developed countries. Despite the considerably increased MVA growth rate for Bangladesh (the country with the greatest weight - see table 6) in the period 1970-1977 (reflecting mainly results in 1972 and 1974), only four other countries increased their MVA growth rates, whereas growth rates were negative for five countries during 1970-1977. MVA growth rates of over 10 per cent were achieved by Bangladesh and Lesotho during 1970-1977; during the 1960s Benin, the Comoros, Lesotho, Malawi, Niger, Rwanda, Somalia and the United Republic of Tanzania all achieved rates in excess of 10 per cent. On an annual basis MVA growth for the least developed countries during 1970 and 1971 was negative, whereas growth rates in the three following years were over 9 per cent, falling to over 3 per cent in 1975 and 1976 and to 0.88 per cent in 1977. For the African least developed countries, growth rates for 1978 and 1979 were both below the 1970-1977 average for 9 countries and were above for 8 countries. Only one country (Mali) had a growth rate above 10 per cent in 1978 and one (Upper Volta) in 1979.

The difference between real growth of MVA and GDP is shown in table 5. In both the least developed and other developing countries MVA grew more rapidly on average than GDP in the 1960s and 1970-1977, although GDP growth exceeded that for MVA in the least developed countries in 1971 and 1975-1977 and in 1977 for the other developing countries. In 1978 GDP growth exceeded MVA growth in 11 of the 20 African least developed countries and in 1979 GDP grew more rapidly than MVA in 7 countries. In the 1960s the excess of MVA growth over GDP growth exceeded 10 per cent in Lesotho, Malawi, Rwanda and Somalia; during 1970-1977 only Bangladesh recorded a difference in excess of 10 per cent.

Table 3. Share of MVA in GDP - for least developed countries, by country and group, other developing countries and all developing countries, 1960 and 1970-77 (1970-79 for African least developed countries)

Country or country group b/	Share of MVA in GDP (%, based on current prices) a/										
	1960	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979
Afgahnistan							11.35	10.65	10.88		
Bangladesh	5.73	5.86	4.26	6.59	6.11	6.72	7.63	8.25	7.79		
Benin	2.70	8.19	8.69	8.25	8.27	9.36	9.28	8.10	(6.70) 7.39	(6.52)	(6.39)
Botswana	8.68	5.44	4.87	5.29	5.02	7.17	7.57	7.02	(7.08) 8.22	(6.83)	(6.94)
Burundi	3.01	8.61	9.38	10.94	10.44	13.74	15.54	17.46	(12.34) 17.67	(11.77)	(11.51)
Cap Verde Islands	1.43	1.64	1.55	1.91	2.43	2.01	1.88	1.67	(6.00) 1.83	(5.74)	(5.56)
Central African Republic	5.99	11.16	11.40	10.43	9.01	10.23	10.91	8.25	(12.61) 1.93	(13.95)	(13.88)
Chad	3.17	5.49	6.28	6.08	7.79	8.29	10.59	11.18	(10.84) 10.83	(9.92)	(9.50)
Comoro Islands	2.57	6.70	7.27	7.49	6.21	6.73	8.05	8.75	(8.72) 8.74	(8.62)	(8.61)
Ethiopia	6.10	8.92	9.52	9.96	10.02	9.87	11.16	10.54	(10.88) 9.95	(11.10)	(10.81)
Gambia		(2.18)	(1.71)	(1.43)	(2.51)	(1.61)	(1.73)	(2.30)	(1.80)	(1.10)	(0.98)
Guinea	6.54	1.94	8.94	10.13	10.86	10.30	9.05	6.54	(6.72) 6.31	(6.59)	(6.29)
Haiti	10.16	9.93	9.89	10.64	10.71	11.31	10.80	12.19	12.70		
Lesotho		2.70	2.79	2.09	2.65	4.16	4.47	4.17	(2.77) 4.11	(2.73)	(2.95)
Malawi		13.13	11.41	12.63	13.01	12.05	13.23	13.57	(14.37) 15.10	(15.40)	(15.58)
Mali	5.63	10.54	9.92	10.63	13.86	13.77	13.69	13.06	(13.21) 12.65	(14.17)	(14.13)
Nepal		8.90	9.07	9.51	8.53	9.89	9.76	9.76	10.33		
Niger	4.87	6.04	5.82	5.87	8.22	6.93	8.10	6.09	(5.22) 5.22	(5.23)	(5.34)
Rwanda		(3.47)	(3.87)	(4.05)	(4.01)	(3.74)	(4.24)	(4.62)	(4.17)	(4.57)	(4.58)
Somalia	2.35	6.49	7.74	8.85	9.98	9.95	9.56	8.80	(8.25) 8.26	(7.99)	(8.36)
Sudan	3.34	6.09	6.07	6.00	5.82	6.31	6.52	5.93	(6.17) 6.17	(5.80)	(6.20)
Uganda	9.13	9.16	8.28	7.76	6.79	7.94	6.34	6.11	(4.73) 4.98	(4.71)	(4.76)
United Republic of Tanzania	2.96	10.08	10.69	11.40	10.97	10.58	10.45	10.07	(9.27) 9.61	(9.32)	(9.92)
Upper Volta	6.25	10.57	10.20	10.18	10.42	11.13	10.71	10.89	(13.58) 9.54	(13.10)	(13.82)
Least Developed countries	5.29	7.41	7.43	8.01	7.60	7.91	8.81	8.70	8.47		
Other Developing countries	16.92	19.25	19.38	19.67	19.93	19.61	19.99	19.53	18.98		
All developing countries	16.38	18.69	18.91	19.71	19.38	19.09	19.56	19.13	18.60		

Source: UNIDO data base, information supplied by the United Nations Office of Development Research and Policy Analysis, except as noted in footnote a/

a/ Data for African countries for 1978 and 1979 (and all years for Gambia and Rwanda) are based on information supplied by ECA, and thus are not comparable with those for other years; to bridge the two sets, for 1977 the UNIDO and ECA figures are shown (ECA data in brackets).

b/ Data not available for Bhutan, Laos, Maldives, Yemen P.D.R., West Samoa and Yemen A.R.

Table 4. MVA growth rates for least developed countries, by country and group, other developing countries and all developing countries, 1960-70 and 1970-77 (1970-1979 for African least developed countries)

(Percentage, based on prices in 1975 US dollars)

Country or country group a/	Trend		Annual change									
	1960-70	1970-77	1970	1971	1972	1973	1974	1975	1976	1977	1978 b/	1979 b/
Afghanistan	6.22	2.03	25.30	-7.54	-3.11	8.11	6.68	-3.45	6.46	2.75		
Bangladesh	5.09	18.41	-17.49	-47.07	72.29	15.37	59.31	8.52	6.87	7.37		
Benin	12.89	5.77	-10.98	2.69	7.99	-1.62	13.52	20.52	-5.96	-3.42	3.65	2.20
Botswana	5.12	9.31	-7.62	-0.46	15.11	4.20	11.03	22.41	0.34	6.71	1.94	2.86
Burundi	1.59	5.85	141.69	6.62	1.27	2.95	13.98	-3.76	15.65	7.02	3.24	2.24
Cape Verde Islands	7.79	1.48	25.98	-10.91	12.69	14.27	-18.67	1.45	-3.87	36.31	0.00	7.14
Central African Republic	7.61	-4.64	18.90	5.08	-15.56	-13.73	24.82	-2.45	-24.17	0.70	3.99	0.70
Chad	6.68	4.46	-19.71	19.49	-12.58	7.35	9.14	16.23	-6.29	1.37	-6.88	-7.88
Comoro Islands	13.50	2.44	63.37	7.31	7.78	-7.44	11.38	1.99	-3.63	3.15	0.00	4.55
Ethiopia	8.90	1.45	7.95	9.82	0.26	3.58	-0.66	2.26	-3.53	2.79	4.79	3.05
Gambia	9.75	-3.07	-13.14	-13.74	-26.51	107.91	-38.14	-8.40	2.67	-2.55	-20.00	0.00
Guinea	2.11	-1.25	-7.93	13.07	8.57	6.87	2.61	-11.11	-21.82	6.03	2.90	1.61
Haiti	0.25	7.64	2.57	3.94	8.16	3.73	10.09	-3.89	26.02	10.58		
Laos	-3.06	-1.48	10.41	8.79	-2.05	12.88	-4.94	11.82	-20.24	-18.49		
Lesotho	30.30	12.59	16.62	-33.37	47.63	26.84	16.34	7.70	7.34	2.59	4.17	4.00
Malawi	16.96	8.45	20.18	-1.34	9.02	23.53	6.62	13.46	-5.31	6.41	5.86	6.55
Mali	9.25	2.39	3.66	-0.85	11.94	4.14	-13.13	11.58	2.68	5.43	12.58	3.63
Niger	10.91	1.67	3.45	-2.03	12.08	16.42	-20.19	8.87	1.44	0.68	9.16	8.03
Rwanda	16.93	6.84	18.66	5.50	14.94	16.70	-2.16	5.87	1.19	4.31	8.89	8.16
Somalia	13.65	7.12	23.17	22.06	11.82	10.74	0.55	5.95	2.05	4.60	0.00	1.71
Sudan	9.84	5.95	-14.33	-5.29	1.64	35.76	-8.56	7.03	13.45	-8.82	5.83	4.93
Uganda	8.15	-6.40	3.60	4.67	-1.24	-7.97	-1.08	-13.30	-2.65	-23.17	0.51	1.02
United Republic of Tanzania	12.68	6.14	1.02	8.17	10.99	9.09	4.61	-0.63	8.27	4.74	4.43	5.88
Upper Volta	9.07	0.40	12.19	-3.81	2.78	2.34	-1.84	8.45	2.24	-16.43	4.75	10.74
Least developed countries	7.53	5.59	-0.10	-5.56	9.51	9.94	9.66	3.28	3.75	0.88		
Other developing countries	7.16	7.22	8.57	8.58	9.19	10.39	5.99	3.34	8.16	5.57		
All developing countries	7.17	7.19	8.40	8.32	9.19	10.38	6.05	3.34	8.08	5.50		

Source: UNIDO data base. Information supplied by the United Nations Office of Development, Research and Policy Analysis, except as noted in b/ for 1978 and 1979.

a/ Bhutan, Maldives, Nepal, Yemen P.D.R., West. Samoa and Yemen A.R. not included.

b/ Data for 1978 and 1979 based on 1970 US dollar (factor cost) supplied by ECA - thus not strictly comparable with other years.

Table 5. Excess of MVA growth rate over GDP growth rate - for least developed countries, by country and group, other developing countries and all developing countries, 1960-70 and 1970-77 (plus 1978-79 for African least developed countries)

Country or country group a/	Trend 1960-70	Trend 1970-77	Annual 1970	1971	1972	1973	1974	1975	1976	1977	1978 b/	1979 b/
	MVA growth rate - GDP growth rate (%, based on prices in 1975 US dollars)											
Afghanistan	4.22	-2.30	23.20	-2.54	-1.23	-3.31	-0.82	-6.33	0.18	-0.39		
Bangladesh	2.39	12.97	-9.15	-31.06	61.25	6.48	58.49	-5.55	2.50	-0.31		
Benin	9.60	3.70	-12.50	-4.30	-1.84	-2.38	3.24	29.67	-4.89	-3.49	-1.71	-1.96
Botswana	-1.76	2.66	-36.93	-25.97	6.78	-2.97	8.85	14.18	-0.56	4.13	-3.12	-5.12
Burundi	4.13	3.33	132.76	0.30	7.89	1.38	6.09	-2.23	8.11	1.22	-5.28	0.34
Cape Verde Is.	-0.99	3.07	13.86	1.48	25.08	15.58	-4.17	-4.89	-10.97	0.98	-2.54	2.59
Central African Republic	5.63	-3.37	14.79	2.95	-8.01	-8.34	10.78	5.77	-20.22	-2.52	3.45	1.04
Chad	7.25	0.71	-10.02	17.63	-5.28	12.51	-5.10	-1.66	-5.11	-1.81	-3.98	-4.26
Comoro Islands	7.27	2.91	60.83	-2.74	6.51	-7.83	-1.70	13.86	7.74	1.61	-1.82	3.12
Ethiopia	4.42	-0.51	5.18	4.72	-0.62	2.19	-2.49	-1.25	-3.62	0.69	1.99	-0.44
Gambia	4.16	-8.29	-26.03	-17.48	-14.59	67.23	-39.64	-7.63	-3.56	3.36	-55.06	-2.95
Guinea	2.13	-4.01	2.02	7.16	8.67	1.16	-4.25	-5.49	-25.96	0.49	-0.63	-1.69
Haiti	-0.75	3.62	0.90	-0.46	7.67	0.94	5.79	-4.87	14.80	04		
Laos	0.62	3.80	8.99	-0.58	-0.66	10.39	7.02	11.82	-4.18	-3.74		
Lesotho	24.35	7.28	15.45	-41.36	51.30	17.67	6.26	5.57	0.35	-1.46	0.27	3.06
Malawi	11.18	1.83	19.64	-16.53	4.46	14.81	-0.71	8.08	-8.65	2.22	0.47	0.34
Mali	9.59	-0.48	-4.88	-5.03	8.84	11.25	-13.74	-1.26	-2.33	0.56	6.61	0.00
Niger	4.50	-1.42	-9.44	-3.54	9.54	31.06	-34.29	9.11	-15.71	-7.54	0.91	3.57
Rwanda	12.10	2.97	8.14	0.30	13.57	17.30	-2.87	-3.67	-5.12	0.63	6.24	1.07
Somalia	13.12	2.91	16.24	14.20	5.00	5.92	-1.42	2.34	-0.80	0.85	-2.70	-0.44
Sudan	8.62	2.18	-14.68	-14.34	7.09	12.72	-6.89	8.59	2.90	-0.13	1.83	[illegible]
Uganda	2.40	-6.81	3.46	0.39	-1.49	-7.99	-1.86	-12.07	-2.45	-21.67	-0.29	[illegible]
United Republic of Tanzania	5.51	0.54	0.68	5.49	2.56	1.93	0.43	-4.78	1.20	0.27	-1.12	2.99

Table 5 (continued)

Country or country group a/	1960-70	1970-77	1970	1971	1972	1973	1974	1975	1976	1977	1978 b/	1979 b/
Upper Volta	1.61	-0.51	16.32	-4.52	-2.45	7.03	-5.08	4.90	-2.37	-6.14	1.60	5.85
Least developed countries	4.65	1.94	1.31	-4.71	6.96	2.92	7.33	-1.26	-1.08	-1.38		
Other developing countries	1.31	1.59	1.10	2.48	2.94	2.96	0.70	0.19	1.99	-0.04		
All developing countries	1.46	1.63	1.31	2.49	3.09	2.97	0.87	0.14	1.97	0.00		

a/ Bhutan, Maldives, Nepal, Yemen P.D.R., West. Samoa and Yemen A.R. not included

b/ Data for 1978 and 1979 based on 1970 US dollars (factor cost) supplied by ECA - thus not strictly comparable with other years.

Source: UNIDO data base. Information supplied by the United Nations Office of Development Research and Policy Analysis, except as noted in b/ for 1978 and 1979.

The shares of the least developed countries in total MVA of the developing countries, i.e. their weights in total MVA (and MVA growth averages), is shown in Table 6. As of 1977 the least developed countries accounted for only 1.64 per cent of total MVA of developing countries, as compared to 1.56 per cent in 1960 and 1.87 per cent in 1970.[1/] Six countries - Afghanistan, Bangladesh, Ethiopia, Sudan, Uganda and the United Republic of Tanzania - accounted for 65 per cent of MVA in the least developed countries in 1977. As the table shows, the considerable changes in the share of Bangladesh, still the largest producer of manufactures among the least developed countries as of 1977 but showing a general decline in relative importance, influenced greatly the yearly changes in average MVA growth in the least developed countries.

The process of industrial development depends largely on the size and technological mix of resources made available, as well as the efficiency with which such resources are used. It is sometimes argued that relatively underdeveloped countries should utilize more labour intensive technologies than more developed countries, but this must be qualified where human skills, not widely available in the least developed countries, are required. In general the arguments are not based on empirical analysis because of the lack of reliable and detailed data on usage of labour and capital in the least developed countries.

An attempt is made in table 7 to provide, for illustrative purposes only (since the data is incomplete and probably not entirely accurate and likely to vary widely from year-to-year because in many cases the addition of a single large establishment can have a great effect on the data base), some indications for 1970 and 1975 of the relationships between output and labour and capital inputs in the manufacturing sector of selected least developed countries, and this is compared with data for a group of more advanced developing countries. One measure of labour productivity is the ratio of MVA to employment in manufacturing. MVA per employee varied widely among the least developed countries for which data is available. In Bangladesh MVA per employee was only US$ 1,814 in 1970 and US$ 2,017 in 1975, whereas in Upper Volta the comparable figures were US$45,918

1/ The figure would be even lower if China (and some other countries not included in the developing country totals because of lack of data) had been included among the other developing countries.

Table 6. Shares in total MVA of developing countries - for least developed countries, by country and group, other developing countries and all developing countries, 1960 and 1970-77

Country or country group[a]	Shares in total MVA of developing countries (%, based on current prices)								
	1960	1970	1971	1972	1973	1974	1975	1976	1977
Afghanistan							0.12	0.16	0.16
Bangladesh	0.66	0.54	0.20	0.44	0.49	0.69	0.40	0.31	0.29
Benin	0.01	0.03	0.03	0.03	0.03	0.03	0.03	0.02	0.02
Botswana	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.01	0.02
Burundi	0.02	0.03	0.03	0.03	0.02	0.03	0.03	0.04	0.04
Cape Verde Islds.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cent. Af. Rep.	0.02	0.03	0.03	0.03	0.02	0.02	0.03	0.02	0.02
Chad	0.02	0.03	0.03	0.03	0.03	0.03	0.04	0.04	0.04
Comoro Islds.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ethiopia	0.19	0.23	0.24	0.24	0.21	0.18	0.18	0.17	0.17
Guinea	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.03	0.03
Haiti	0.09	0.06	0.06	0.06	0.05	0.05	0.05	0.07	0.08
Lesotho	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Malawi		0.06	0.06	0.07	0.06	0.05	0.05	0.05	0.06
Mali	0.02	0.04	0.04	0.04	0.05	0.04	0.04	0.04	0.04
Nepal		0.11	0.10	0.11	0.07	0.08	0.08	0.07	0.07
Niger	0.04	0.03	0.03	0.04	0.04	0.03	0.04	0.03	0.03
Rwanda	0.00	0.01	0.01	0.01	0.01	0.01	0.04	0.05	0.05
Somalia	0.01	0.02	0.02	0.03	0.03	0.03	0.03	0.03	0.03
Sudan	0.15	0.19	0.20	0.19	0.22	0.18	0.20	0.20	0.19
Uganda	0.17	0.17	0.16	0.14	0.11	0.12	0.11	0.11	0.10
Untd. Rp. Tanzania	0.05	0.19	0.19	0.21	0.18	0.16	0.16	0.15	0.16
Upper Volta	0.04	0.05	0.04	0.04	0.04	0.03	0.04	0.04	0.03
Least developed countries	1.56	1.87	1.53	1.79	1.74	1.82	1.74	1.64	1.64
Other developing countries	98.44	98.13	98.47	98.21	98.26	98.18	98.26	98.36	98.36
All developing countries	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

a/ Bhutan, Gambia, Laos, Maldives, Yemen P.D.R., West. Samoa and Yemen A.R. not included.

Source: UNIDO data base, information supplied by the United Nations Office of Development Research and Policy Analysis.

Table 7. Key structural indicators for the comparison manufacturing sector - for selected least developed countries, and comparism with a group of higher income developing countries (unweighted average), 1970 and 1975[a]

Country or country group	MVA per employee (75US$) 1970	MVA per employee (75US$) 1975	Ratio, GFCF/MVA, current prices (%) 1970	Ratio, GFCF/MVA, current prices (%) 1975	Ratio, GFCF/wages and salaries, current prices (%) 1970	Ratio, GFCF/wages and salaries, current prices (%) 1975	average employment per establishment 1970	average employment per establishment 1975	Share, manufacturing employment in total labour force (%) 1970	Share, manufacturing employment in total labour force (%) 1975	Share, manufacturing GFCF in total, current prices (%) 1970	Share, manufacturing GFCF in total, current prices (%) 1975
Afghanistan		6167.7						215		0.51		
Bangladesh	1814.4	2017.2					130	137	0.88	1.33		
Burundi	37368.9						50		0.07			
Cape Verde Is.		3835.5						19		0.41		
Central African Republic		6405.9		9.24		29.55		185		0.68		2.29
Ethiopia	5201.0	4952.0	13.99	6.22	58.25	28.35	103	138	0.45	0.50	7.11	4.63
Haiti	7693.1	5061.3					12	19	0.44	0.76		
Lesotho		3274.2		0.02		0.05		52		0.32		
Malawi	3084	3123.4	27.30	39.56	74.21	97.67	139	244	0.91	1.30	7.85	9.16
Niger	16248.0						61		0.25			
Rwanda	9319.7						89		0.25			
Somalia	5519.4	4957.9	5.00	52.98	17.51	134.91	29	33	0.49	0.76	2.06	8.51
United Republic Of Tanzania	4075.2		19.35		48.77		107		0.86		5.30	
Upper Volta	45918.3	18049.4					132	362	0.04	0.11		
Other developing countries[b]	7909.9	8978.2	14.86	17.89	57.71	69.11	54	82	3.44	3.94	9.15	9.53

a/ Because of various problems discussed in the text, the data presented here should be considered only as illustrative. In the first column MVA is taken from national accounts sources, while for other columns, values are based on data from the Yearbook of Industrial Statistics.

b/ Other developing countries (16) include: Barbados, Bolivia, Chile, Columbia, Dominican Republic, Ecuador, Fiji, Indonesia, Republic of Korea, Libya, Mexico, Panama, Philippines, Singapore, Tunisia and Turkey.

Source: UNIDO data base, information supplied by the United Nations Office of Development Research and Policy Analysis and the United Nations Statistical Office, with estimates by the UNIDO Secretariat.

and US$ 18,049 (1975 prices). Apart from a few such exceptions, MVA per employee in the least developed countries was well below the average for a group of other developing countries (US$ 7,909 in 1970 and US$ 8,978 in 1975). In the least developed countries no clear trend towards higher MVA per worker in 1975 as compared to 1970 emerges from the available data.

The ratio of manufacturing gross fixed capital formation to MVA was lower than in the group of other developing countries in two out of four least developed countries in 1970 and in three out of five least developed countries in 1975, i.e. investment per unit of output was less in these years than the average for developing countries. Comparisons for two years are not very meaningful, however, since annual fluctuations in gross fixed capital formation tend to be very wide.[1] Data on the ratio of GFCF to wages and salaries is similarly poor, but the ratio increased for two of the three least developed countries for which data is available for both years, and the ratio also increased for the group of other developing countries, indicating a tendency towards increasingly capital intensive technologies (or an increase in the price of capital goods relative to the price of labour).

The number of employees per establishment provides an indicator of general economic size of producers. In theory, it might seem that relatively small firms would be expected in the least developed countries, but the available data contradicts this. In 1970 seven out of ten and in 1975 six out of ten least developed countries had more employees per establishment than the group of other developing countries. This phenomenon may have several explanations: a) the very small establishments are not being picked up as completely in the data collection process in the least developed countries; b) manufacturing in the least developed countries may be limited to a small number of large scale establishments set up by the public sector or foreign investors; c) manufacturing in the least developed countries may be more inefficient and employ more non-productive labour. In all cases the number of employees per establishment rose from 1970 to 1975 probably indicating a general trend towards larger scale production, but possibly reflecting the factors just mentioned.

Employment in manufacturing accounts for a small but increasing proportion of the labour force in the least developed countries.

1/ Incremental capital output ratios (ICORs) were also calculated, but wide fluctuations in the basic data (including negative MVA growth rates) negated the significance of the ratios.

In 1970 manufacturing employment was less than 1 per cent of the total labour force in all least developed countries for which data is available, as compared to an average of 3.44 per cent for the group of other developing countries. In 1975 manufacturing's share rose in each case, and exceeded 1 per cent in Bangladesh and Malawi.

In comparison, the share of manufacturing gross fixed capital formation in total gross capital formation in all sectors was much higher than the proportion of the labour force accounted for by manufacturing in both least developed countries for which data are available and other developing countries, indicating the relative capital intensity of manufacturing activities. In 1975 the share ranged from 2.29 to 9.16 per cent for four least developed countries, as compared with an average of 9.53 per cent for the group of other developing countries.

The obvious potential importance for planning and policy making of data such as shown in table 7, and its actual poor quality and incompleteness, which greatly reduces its operational usefulness, suggests the need to strengthen statistics gathering and analysis in the least developed countries as an important requirement requiring priority action.

Table 8 shows by branch the 1970 and 1975 structure of MVA, gross fixed capital formation in manufacturing and manufacturing employment in 19 least developed countries for all branches accounting for 5 per cent or more of MVA in 1975 and, for comparison, the structure of MVA in the developing countries as a whole. By far the largest components of MVA in the least developed countries are food processing and textiles, although the share of these branches dropped (in current prices) in most of the least developed countries from 1970 to 1975 (and, on average, in the developing countries as a whole) as diversification increased. Still, food , beverages and tobacco, and textiles and textile products accounted, with one or two exceptions, for at least half of MVA in 1975 in all least developed countries; the much lower share of these branches in the MVA of the developing countries as a whole is shown in part B of the table. Thus the least developed countries continue to produce mainly basic necessities for small local markets on the basis of local supplies and relatively simple technologies.

The data indicate that employment in manufacturing is even more closely based on these major branches, whereas gross fixed capital formation is

Table 8. Branch shares in MVA, gross fixed capital formation in manufacturing and manufacturing employment, 1970 and 1975, for branches accounting for 5 per cent or more of country MVA in 1975 - for selected least developed countries (partA); branch shares in MVA only for all branches - for all developing countries (partB)

A. Selected least developed countries (by country)

ISIC	Share in MVA (%) 1970	Share in MVA (%) 1975	Share in gross fixed capital formation in manufacturing (%) 1970	Share in gross fixed capital formation in manufacturing (%) 1975	Share in manufacturing employment (%) 1970	Share in manufacturing employment (%) 1975	Notes [a]
			Bangladesh				
311	14.44	13.01			12.79	10.50	
314	12.47	14.10			2.03	1.64	
321	45.23	44.41			63.49	61.35	
352	7.27	10.90			6.54	7.89	
371	2.16	5.02			1.01	2.51	
			Benin				
311	48.33	48.95					
313	12.92	13.33					
321	10.05	19.05					
			Botswana				
311	65.50	56.97					
313	13.67	11.89					
381		11.07					
390	20.83	6.15					
			Central African Republic				
311B	27.74	43.75		48.12		15.75	311B: 311+313+314
321B	36.29	32.41		43.68		73.93	321B: 321+322+323
331	22.38	9.32		0.00		0.00	
			Chad				
311	22.36	31.53					
313	72.67	12.24					
321C		36.49					321C: 321+322+323+324
369		4.85					
381D		6.50					381D: 381+382+383+384+385

Table 8. (continued)

ISIC	Share in MVA (%)		Share in gross fixed capital formation in manufacturing (%)		Share in manufacturing employment (%)		Notes a/
	1970	1975	1970	1975	1970	1975	
				Ethiopia			
311	21.02	14.39	18.31	19.38	16.30	22.40	
313	5.53	7.09	15.84	6.52	6.15	5.12	
321A	31.69	34.34	31.38	29.97	43.82	39.60	321A: 321+322
331A	6.56	6.28	2.75	1.19	6.76	7.43	331A: 331+322
351E	3.60	5.89	8.35	12.30	5.03	6.41	351E: 351+352+353+354+355+356
362A	3.82	6.83	12.55	5.93	8.39	6.59	362A: 362+369
371AA	6.34	5.63	7.03	1.68	3.56	2.93	371AA: 371+372+381
390	8.01	9.81	0.00	0.00	0.00	0.00	
				Haiti			
311	28.52	32.11			36.27	28.61	
321	12.39	5.69			17.04	9.24	
322F	14.23	6.45			6.18	12.77	322F: 322+324
342	6.95	8.34			0.42	0.37	
369	4.57	8.60			4.11	2.90	
381	9.57	12.26			1.97	2.12	
3900S	9.68	11.69			6.62	18.20	390CS: 390+382+383
				Lesotho			
311	15.00	12.51		9.04		14.42	
321	20.00	17.87				34.80	
322B	10.00	7.15		21.45			322B: 322+323+324
332	15.00	12.51		12.06		22.46	
342	25.00	19.66		53.72		8.85	
361	5.00	7.95		1.60		2.43	
369		14.30		0.00		10.07	
390	10.00	7.15				4.60	
				Malawi			
311	27.17	31.54	22.00	38.92	32.60	30.65	
313	19.02	9.03	5.68	21.19	3.28	4.32	
314	6.17	8.91	5.20	3.38	22.95	19.20	
321	5.68	6.19	31.93	17.36	11.65	11.35	
322B	9.38	6.19	2.00	2.99	8.57	8.42	322B: 322+323+324
351A	4.94	9.03	9.09	4.03	4.14	3.64	351A: 351+352
369	3.95	5.57	10.31	2.63	1.29	6.18	
381C	7.66	9.15	5.34	2.92	4.42	6.22	381C: 381+382+383+384
				Mali			
311B	100.00	22.13					311B: 311+313+314
322B		56.54					322B: 322+323+324
351A		7.04					351A: 351+352
381		5.84					
390		8.45					
				Nepal			
311	54.46	54.16					
314	11.88	11.62					
321	11.88	11.93					
361B	5.45	5.57					361B: 361+362+369

Table 8. (continued)

ISIC	Share in MVA (%)		Share in gross fixed capital formation in manufacturing (%)		Share in manufacturing employment (%)		Notes a/
	1970	1975	1970	1975	1970	1975	
				Niger			
311	100.00	58.12			10.93		
321		6.32			44.85		
322		6.32					
381		8.48			9.21		
				Rwanda			
311B	79.00	60.26			52.55		311B: 311+313+314
321	5.02	9.93			0.00		
361B	4.11	7.95			0.00		361B: 361+362+369
381C	3.65	6.62			15.41		381C: 381+382+383+384
3900W	5.94	10.59			7.53		3900W: 390+322+324+342
				Somalia			
311	89.93	42.16	44.13	27.82	57.54	44.35	
313A	2.16	5.90	14.57	1.69	3.59	8.53	313A: 313+314
321	1.44	9.44	14.43	63.70	15.11	10.85	
342	3.60	19.39	2.46	4.14	4.74	7.13	
356		6.07		0.00		2.63	
				Sudan			
311	30.46	27.66					
313	8.03	11.96					
321	23.65	28.58					
353	6.71	6.95					
				Uganda			
311	19.87	9.74					
313	6.29	5.72					
321	20.68	8.98					
322	1.41	52.68					
				United Republic of Tanzania			
311	20.94	19.67	18.96		31.32		
313	9.44	5.08	7.09		1.41		
314	8.74	7.12	5.05		5.11		
321	22.19	16.87	26.71		32.00		
342	3.62	5.08	1.58		2.58		
351	0.66	6.54	1.26		0.90		
				Upper Volta			
311	100.00	71.48					
322B		12.74			10.37	5.00	322B: 322+323+324
351C		6.27					351C: 351+352+353+35.
				Yemen, P.D.R.			
314	0.00	10.09			0.00	1.82	
322	0.39	5.94			2.91	4.64	
332	0.15	8.31			1.09	0.50	
341A	0.39	5.93			50.84	28.64	341A: 341+342
353	74.19	38.59					

Table 8. (continued)

B. All developing countries, MVA only, all branches listed, with brief description

300	100.00	100.00	- manufacturing
311	14.90	13.87	- food products
313	4.44	3.29	- beverages
314	3.98	2.96	- tobacco
321	12.10	10.13	- textiles
322	3.13	3.31	- wearing apparel, ex. footwear
323	0.77	0.63	- leather products, ex. footwear and wearing apparel
324	1.49	0.99	- footwear, ex. rubber or plastic
331	2.21	2.12	- wood products, ex. furniture
332	1.16	1.11	- furniture, ex. metal
341	2.09	2.11	- paper and products
342	2.67	2.28	- printing and publishing
351	3.71	4.25	- industrial chemicals
352	5.30	5.56	- other chemicals
353	6.59	8.58	- petroleum refineries
354	0.60	0.69	- misc. petroleum and coal products
355	1.96	1.73	- rubber products
356	1.39	1.43	- plastic products
361	0.72	0.71	- pottery, china, earthenware
362	0.91	0.95	- glass and products
369	3.63	3.58	- other non-metallic mineral products
371	4.32	4.62	- iron and steel
372	2.37	1.84	- non ferrous metals
381	4.61	4.62	- fabricated metal products, ex. machinery and equipment
382	3.56	4.90	- machinery, ex. electrical
383	3.89	4.91	- machinery electric
384	5.36	6.87	- transport equipment
385	0.62	0.50	- professional and scientific equipment n.e.c.
390	1.51	1.46	- other manufactured products

a/ Combinations of ISIC branches are listed here as applicable. For short descriptions of ISIC codes see part B. Values in current prices.

Source: UNIDO data base, information supplied by the United Nations Statistical Office, with estimates by the UNIDO Secretariat.

much more diversified, reflecting the aim of most governments of the least developed countries to reduce their reliance on imported industrial products.

The least developed countries import far more manufactured products than they export, and the imbalance is much greater than in other developing countries. Table 9 shows that the export-trade ratio, i.e. the share of exports in the sum of exports plus imports, was only 4.6 per cent for trade in manufactures of the least developed countries for which data are available, down from 8.1 per cent in 1970.1/ This average reflects wide differences among the least developed countries, ranging in 1975 from less than 1 per cent (almost total import orientation) for Sudan and Gambia to 28.4 per cent for Haiti. As expected, the other developing countries had a much higher export-trade ratio than the least developed countries, 22.0 per cent in 1975 and 24.7 per cent in 1970. In both the least developed and other developing countries manufactured imports accounted for about two-thirds of their total growth in imports during the period 1970-1975. Manufactured exports, however, accounted for only 3.5 per cent of the total increase in exports in the least developed countries, as compared to a contribution of 18.1 per cent in the other developing countries. The share of the least developed countries for which data are available in both the manufactured imports and exports of the developing countries fell from 1970 to 1975, but with the export share decreasing (relatively) more sharply (from 0.97 to 0.46 per cent) than the import share (from 3.49 to 2.65 per cent).

For the same group of least developed countries manufactured imports accounted for about 73 per cent of total imports in 1970 and 69 per cent in 1975, slightly more in both years than other developing countries, and imports of manufactures grew at a rate of 19.4 per cent in current prices, somewhat lower than the growth rate in other developing countries (table 10). Manufactured exports, however, accounted for only about 7 per cent of total exports of these countries in 1970 and 6 per cent in 1975; growth in exports of manufactures over the period averaged only 5.6 per cent.

1/ In tables 9 and 10 trade in manufactures is defined as SITC 5-8.

Table 9. Manufacturing export-trade ratios, 1970 and 1975, contribution of manufactured imports and exports to growth of total imports and exports, 1970-75, and shares in manufactured imports and exports in totals for developing countries, 1970 and 1975 - for least developed, other developing and total developing countries

Country (group)a/	Manufacturing export-trade ratios (SITC 5-8) (%)b/		Contribution of manufacturing trade to growth of total trade 1970-75 (%)		Manufacturing trade shares in developing countries total (%)			
					Imports		Exports	
	1970	1975	Imports	Exports	1970	1975	1970	1975
	in per cent, based on current US$ prices							
Afghanistan	13.4	11.6	43.5	8.8	0.22	0.19	0.11	0.09
Central African Republic	34.9	16.8	82.6	-14.5	0.09	0.06	0.16	0.05
Ethiopia	1.3	1.8	63.0	12.3	0.51	0.25	0.02	0.02
Gambia	-	0.1	-	-	-	0.03	-	0.00
Haiti	-	28.4	-	-	-	0.09	-	0.13
Malawi	8.5	3.3	75.0	-0.3	0.23	0.18	0.02	0.02
Mali	12.1	3.7	60.2	78.5	0.09	0.13	0.04	0.02
Niger	2.0	12.4	25.8	11.4	0.15	0.06	0.01	0.03
Somalia	6.0	2.6	67.6	1.8	0.09	0.11	0.02	0.01
Sudan	0.5	0.5	80.7	2.2	0.76	0.84	0.00	0.00
United Republic of Tanzania	11.7	7.7	58.8	10.4	0.82	0.56	0.35	0.17
Uganda	16.2	7.6	138.2	-69.5	0.38	0.13	0.25	0.04
Upper Volta	2.6	2.6	68.4	7.6	0.11	0.12	0.01	0.01
West.Samoa	0.7	1.7	51.7	11.8	0.03	0.02	0.00	0.00
Least developed countries	8.1	4.6	66.2	3.5	3.49	2.65	0.97	0.46
Other developing countries	24.7	22.0	64.1	18.1	96.51	97.35	99.03	99.54
Total developing countries	24.2	21.6	64.1	18.0	100.00	100.00	100.00	100.00

a/ 16 least developed countries not included.

b/ Share of exports in sum of exports plus imports (thus 100 indicates complete export orientation, 50 indicates export-import balance and 0 indicates complete import orientation).

Source: UNIDO data base. Information supplied by UNSO.

Table 10. Share of manufactured imports and exports in total imports and exports, 1970 and 1975 and growth rates in manufactured imports and exports, 1970-75 - for least developed, other developing and total developing countries

Country or country group[a]	Imports			Exports		
	1970	1975	1970-75 growth rate[b]	1970	1975	1970-75 growth rate[b]
	in percent, based on current US $ prices					
Afghanistan	54.4	[illegible]6.9	22.4	10.9	9.6	18.3
Central African Republic	80.1	81.4	17.0	44.3	23.7	-3.7
Ethiopia	80.2	73.1	9.1	1.4	1.8	16.0
Gambia	-	61.9	-	-	0.1	-
Haiti	-	54.5	-	-	37.9	-
Malawi	72.0	73.8	20.9	3.2	3.5	28.9
Mali	55.7	59.2	35.2	9.6	11.7	4.5
Niger	74.3	54.4	4.4	2.7	8.4	54.7
Somalia	53.8	63.6	32.3	4.9	2.9	11.0
Sudan	67.1	76.3	28.5	0.1	0.1	22.7
United Republic of Tanzania	82.7	67.8	16.7	12.8	12.1	6.6
Uganda	86.8	89.7	1.9	8.8	3.6	-15.0
Upper Volta	64.9	67.3	27.4	4.5	6.5	28.1
West. Samoa	58.2	54.1	20.2	1.3	4.8	41.7
Least developed countries	72.7	68.7	19.4	7.2	5.7	5.6
Other developing countries	70.5	65.9	26.3	23.9	19.9	22.5
Total developing countries	70.6	66.0	26.1	23.4	19.6	22.4

a/ 16 least developed countries not included.

b/ componend growth rate.

Source: UNIDO data base; information supplied by UNSO.

In the other developing countries the share of manufactures in their total exports was much higher, about 24 per cent in 1970 and 20 per cent in 1975, and manufactured exports grew at a rate of 22.5 per cent.

These data clearly show the central problem with which the least developed countries are faced regarding trade in manufactures: even more so than in other developing countries, large amounts of scarce foreign exchange are being used to import manufactured products but hardly any foreign exchange is being earned through export of manufactures.

Expressing the problem in another way, the least developed countries are largely importing final industrial products, whereas they are exporting non-processed industrial inputs. It may be argued that they should aim at increased local processing of their exports and decreased foreign processing of their imports.

Table 11 presents the data on trade according to whether or not processed and whether or not for final use. The categories used are:

A - non-processed goods to be processed;
B - processed goods to be further processed;
C - non-processed goods for final use;
D - processed goods for final use.

Clearly it would be advantageous, in terms of additional industrial activity, to import type A goods and export type D goods (or, at least, to import and export B type goods).1/ The data indicate just the opposite, however, for the least developed countries. In 1975 about 76 per cent of the imports of least developed countries for which data are available were in category D and only 8 per cent in category A; on the export side, category D accounted for only about 6 per cent and category A accounted for 72 per cent of the total. Haiti and the United Republic of Tanzania show the most advanced trade structure in terms of industrial processing. These two countries had type A shares in imports of about 16 and 20 per cent respectively and type D shares in exports of about 34 and 11 per cent, well above average for the least developed countries. In comparison,

1/ Type B goods, processed in both exporting and importing countries, combine elements of types A and D, whereas type C goods, involving no industrial processing, are not considered further here.

for the developing countries as a whole, type A imports in 1975 accounted for about 19 per cent of the total (64 per cent for type D) and type D exports accounted for 27 per cent of the total (56 per cent for type A).

This gloomy picture is modified somewhat by examining growth rates, 1970-1975. Imports of non-processed goods to be processed (type A) increased at a rate (in current prices) of 32.4 per cent, much higher than the rate of increase in other import categories. Mali, Somalia and the United Republic of Tanzania recorded growth rates well above the average, which was slightly below the average growth rate for all developing countries. On the export side, type D exports, processed goods for final use, increased at a rate of 16.5 per cent, higher than in all other categories, with Niger and Sudan recording rates well above this average. Thus it appears that the existing structure of trade in manufactures is becoming somewhat less unfavourable to the least developed countries.

Table 11. Imports and exports classified according to whether or not processed and whether or not for final use - for least developed countries (by country and total) and developing countries (total), 1975 - and growth rates for imports and exports so classified, 1970-75 (current prices)

Country (group)	Imports								Exports							
	Class share in total, 1975 (%) b/				Class growth rate, 1970-75 (%) c/				Class share in total, 1975 (%) b/				Class growth rate 1970-75 (%) c/			
	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D
Afghanistan	2.1	17.3	9.4	71.2	(34.5)	(26.6)	(28.8)	(29.5)	38.1	13.3	38.9	9.7	(28.3)	(20.3)	(22.4)	(18.7)
Central African Republic	3.2	14.9	0.9	81.0	(8.9)	(17.4)	(4.0)	(17.1)	86.0	12.9	0.0	1.0	(7.6)	(39.1)	(-20.7)	(-17.6)
Ethiopia	5.1	12.8	1.0	81.2	(14.3)	(10.0)	(5.8)	(8.5)	70.6	4.0	17.6	7.9	(9.1)	(25.2)	(29.0)	(25.8)
Gambia	4.0	20.0	1.9	74.1	(-)	(-)	(-)	(-)	57.2	40.6	2.0	0.2	(-)	(-)	(-)	(-)
Haiti	16.3	13.6	1.4	68.7	(-)	(-)	(-)	(-)	41.2	22.5	1.9	34.4	(-)	(-)	(-)	(-)
Malawi	5.1	12.1	1.0	81.8	(1.1)	(18.5)	(16.3)	(22.8)	60.6	14.3	21.5	3.6	(25.3)	(80.7)	(17.5)	(19.8)
Mali	7.8	12.3	0.8	79.1	(42.3)	(34.7)	(0.6)	(33.4)	71.1	6.3	14.0	8.6	(1.2)	(8.1)	(2.1)	(2.1)
Niger	18.0	10.0	0.8	71.3	(41.6)	(-8.2)	(-2.5)	(12.4)	79.9	8.5	4.5	7.0	(24.3)	(21.3)	(6.7)	(42.5)
Somalia	13.0	14.3	1.3	71.4	(46.9)	(17.3)	(12.1)	(31.1)	75.1	0.0	15.1	9.8	(31.9)	(-10.1)	(2.9)	(22.8)
Sudan	3.5	16.1	1.6	78.8	(8.4)	(27.1)	(-2.9)	(27.4)	89.4	5.9	0.7	4.0	(7.0)	(7.9)	(-0.3)	(70.2)
United Republic of Tanzania	19.5	12.9	0.2	67.4	(86.7)	(26.3)	(8.3)	(15.4)	57.7	3.4	27.5	11.3	(5.5)	(2.9)	(15.0)	(7.5)
Uganda	2.3	12.6	0.1	84.9	(-6.4)	(3.2)	(-21.1)	(0.8)	89.5	4.2	6.3	0.0	(3.3)	(-16.9)	(3.6)	(-46.5)
Upper Volta	5.7	12.8	2.4	79.1	(16.8)	(20.0)	(35.5)	(28.5)	83.3	6.9	4.8	4.9	(18.7)	(47.0)	(6.9)	(20.2)
West. Samoa	0.3	3.5	18.0	78.3	(1.2)	(-7.4)	(64.9)	(21.3)	93.1	0.0	3.1	3.8	(13.4)	(-62.9)	(-22.3)	(-10.2)
Least developed countries a/	8.1	14.1	2.1	75.7	(32.4)	(20.7)	(13.7)	(20.1)	71.0	6.5	15.3	6.3	(9.4)	(10.0)	(15.8)	(16.5)
Developing countries total	18.9	14.9	2.6	63.6	(35.3)	(24.1)	(24.1)	(26.8)	55.2	11.5	5.1	27.2	(18.7)	(18.3)	(16.1)	(27.5)

Source: UNIDO data base. Information supplied by UNSO.

a/ Totals of above listed least developed countries excluding Gambia and Haiti.

b/ A = non-processed goods for further processing; B = processed goods for further processing; C = non-processed goods for final use; D = processed goods for final use.

c/ Compound growth rate based on current US dollar prices.

PROSPECTS AND INDUSTRIAL PRIORITIES FOR THE 1980s: AN ANALYSIS OF RESOURCES, CONSTRAINTS AND MARKETS

The previous section shows that the least developed countries fell behind other developing countries in their industrial and economic growth during the 1960's and 1970's and that even in absolute terms many of the least developed countries made little or inconsistent progress during this period. Furthermore, the evidence available suggests a continuation of this trend in the 1980's.

The basic problem, of course, is that these countries have few natural, human, technological and financial resources available to them. Also, they lack internal markets upon which to base industrial development and in most cases they face exceptional difficulties in reaching major world export markets. Thus the constraints on industrial development are greater than in other developing countries. To be realistic, industrial investment priorities will need to take this situation into account.

A few of the least developed countries have **substantial untapped mineral, forestry, fishery or hydro-elctric resources. Development of these resources would provide** the necessary inputs for processing- or energy-based industries. One or two others, like Bangladesh, have large supplies of unskilled labour available, which would allow expansion of labour-intensive industrial activities. The main resource of most of the least developed countries, however, is agricultural land. In these countries industrial development will need to be based initially on backward and foreward linkages with agriculture through establishment of food processing and natural fibre textile industries, and, in some cases, biomass processing, and, as industrial development advances, on manufacture of machines and chemicals for farm use.

The ratio of intermediate to final industrial production will therefore increase, thereby supplementing limited local markets for final products, and total agricultural production should rise because of additional industrial demand for agricultural outputs and improved supply of agricultural inputs from the industrial sector. Industry and agriculture will expand together in a linked and mutually re-inforcing development pattern, producing basic necessities for home markets growing because of additional earnings of a more productive work force **and a greater surplus for export.**

An additional advantage of industries such as food processing and textiles is that they require simple technologies and little skilled manpower. Consequently, they are relatively straightforward to establish and expand when necessary. Thus, in developing countries most grain-based products - crackers, biscuits, macaroni, etc - are manufactured by small-scale domestic producers.

The fact that there has already been some success in raising the degree of processing accorded to developing countries' foodstuffs before export points to distribution networks, trade barriers in other countries and other constraints not being insuperable. Between 1970 and 1975, in fact, the developing countries generally were able to increase the proportion of their food and beverage exports that was processed from 27.6 per cent of the total to 40.4 per cent.[1/]

Similarly in the textiles sector, where, despite the low growth prospects identified for some countries, the least developed countries expect to find a source of employment. The technological characteristics of this sector are comparable to those of food processing of the simpler forms, in that both can be initiated using relatively low-cost equipment and can be located in non-urban areas. The latter characteristic lends a useful locational dispersion to the sector.

Manufacturing the world over has been affected by the change in energy prices during the 1970's. While initially only the crude oil price changed, oil products prices rose shortly thereafter (so that fuel oil and electricity costs to industry rose). Later, largely as a result of policy decisions by Governments, other energy prices (for coal and gas chiefly) were increased also. Since they are all net oil importing countries, the least developed countries have not escaped these cost rises and industrial development has been adversely affected.

The share of all energy use accounted for by industry tends to rise with a country's level of income, in the initial stages of industrialization at least. Thus, in the developing countries in aggregate, industry is estimated to account for 35 per cent, on average, of all energy consumption. In the least developed countries, the share of industry is probably more typically closer to 15-25 per cent, and the share of households correspondingly higher, at around 75 per cent. Transport is estimated to account for 10-20 per cent

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1/ UNIDO, Industrial Development Survey, forthcoming, Table IV.17, p. 96.

in the least developed countries.[1] Estimates of energy use in least developed countries point to the bulk of energy being non-commercial in nature (e.g. animal dung and firewood). Moreover, estimates of per capita energy use (1978) suggest that low income countries' level is typically only around 18 per cent of the level of middle income countries' energy use, or 2.3 per cent of the industrialized countries' energy use.[2] Nevertheless, manufacturing relies on commercial energy, and, in the case of the least developed countries, imported energy. The result is use of scarce foreign exchange.

Cheap commercial energy supplies would help foster industrialization in the least developed countries considerably. There are signs that intensified energy exploration in the least developed countries is increasing. Data as of January 1980 had established only Bangladesh among the least developed countries as having proven oil reserves (of some 25 million barrels) and non-associated gas reserves, some 0.8 per cent of all developing countries' energy reserves.[3] No heavy oil or oil shale reserves have been discovered in any least developed country, but eleven are between them estimated to possess 103,127 million tons of coal equivalent. Of these reserves the bulk (97 per cent) is held by Botswana.[4] Hydro-electric potential, by contrast, is more equitably distributed, with 22 least developed countries sharing 24 per cent of the non-oil exporting developing countries' theoretical potential.

But industrial development is unlikely to take place in the least developed countries if reliance is placed solely on internal markets and sources of supply. Industrialization in these countries will need to be integrated into the system of world trade in manufactures and semi-manufactures. At present the least developed countries are severely handicapped by the physical and economic distance between them and the main world market and supplying countries. Measures need to be taken by the least developed countries themselves, in fostering an industrial structure capable of taking advantage of world trading patterns so that import of final manufactures can at least partly be replaced by import of semi-manufactures to be further processed locally, and by other countries reducing barriers - and not just tariff barriers - to industrial exports from the least developed countries. Co-operation between neighbouring

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1/ R. Goodman, "Managing the Demand for Energy in the Developing World", Finance and Development, December 1980, Vol. 17, No.4, pp. 9-13.

2/ IBRD, World Development Report 1980, p. 122-3 (based on figures expressed in kg of coal equivalent).

3/ IBRD, "Energy in the Developing Countries", (1980), p. 81. Bangladesh is endowed with proven natural gas reserves of 3,000 billion cubic feet; see UNCTAD, TD/B/C.6/‌1, p. 20.

4/ IBRD, "Energy in the Developing Countries", 1980, p.85.

countries will also prove beneficial in many cases and should therefore be carefully examined.

Perhaps the most important general constraint on industrialization in the least developed countries is the lack of human and physical infrastructure. Greater emphasis must be placed on education and training so as to develop a more highly skilled work force. This means improving both general levels of education and promoting the development of managerial and technological skills. Governmental planning and policy-making institutions, management of public enterprises and banking, insurance and similar services need to be strengthened. Physical infrastructure - transport, communication, energy generation - must be improved and expanded to meet the needs of industry and agriculture. Better facilities for identifying and implementing industrial projects - at present a great weakness limiting the absorptive capacity of the least developed countries - and for adopting foreign technologies and developing indigenous ones need to be established.

The mix of large, medium and small scale and public, private and foreign owned enterprises needs to be carefully considered. A strategy could be developed, for example, which promoted large-scale modern technology investments by public and foreign enterprises for export (local markets being limited and foreign exchange requirements great) along with promotion of small-scale rural labour-intensive investments by local enterpreneurs to provide basic needs goods for local markets and to act as sub-contractors to larger firms.

It should be noted that, although the least developed countries have many common features, they also have many differences. The least developed countries of Africa and South Asia, for example, face somewhat different sets of problems and aspirations. Some of these countries already have or will soon have the capacity to produce, to some extent at least, fairly advanced industrial products, such as machine tools, certain chemicals and electrical products, but for others the basis for producing such products is and will be lacking for some time. Any industrialization strategy for the least developed countries will need to take such differences into account.

In any case, a great deal of additional investment in manufacturing will be required. Estimates based on the United Nations Global Econometric Model illustrate the order of magnitudes involved. These are presented in table 12. The table shows that required annual investment in manufacturing in the least developed countries would increase from 0.3 billion US $ in 1980 to 0.4 billion in 1985 and 2.0 billion in 2000 if present trends continue.[1] If industrial production is to expand at a rate corresponding to (assumed) requirements for meeting the Lima target, however, investment will need to rise to 0.9 billion in 1985 and 7.5 billion in 2000. In this case, the share of investment in manufacturing in total investment would rise from 5.7 per cent in 1980 to 15.9 per cent in 2000. The share of the least developed countries in manufacturing investment in all developing countries would rise from 0.8 per

Table 12: Illustrative estimates of investment requirements up to the year 2000

	Manufacturing investment requirement (1974 US $ billion)	Share in investment in all sectors (%)	Share in total developing country manufacturing investment (%)	Share of foreign resources in manufacturing investment (%)	Contribution foreign resources to manufacturing investment (1974 US$ billion)
(Estimate) 1980	0.3	5.7	0.8	4.3	0.01
Trend scenario 1985	0.4	6.9	0.7	5.3	0.02
2000	2.0	11.2	1.0	7.3	0.15
Lima scenario 1985	0.9	7.3	1.3	12.3	0.11
2000	7.5	15.9	1.8	14.4	1.08

Source: UNIDO, based on "Major economic indicators showing projected development trends" (U.N. Department of International Economic and Social Affairs, PPS/QIR/6, New York, June 1980).

[1] Values in 1974 prices.

cent in 1980 to 1.8 per cent in 2000, still a very small proportion of the total. The share of foreign resources in manufacturing investment would rise from 4.3 per cent in 1980 to 14.4 per cent in 2000, and the actual contribution of foreign resources would rise from 0.01 billion in 1980 to 1.08 billion in 2000. These figures, being based on many assumptions, should not, of course, be taken as definitive, but they do indicate that transfer to the least developed countries of a very small part of world investment in manufacturing could make a very big boost to prospects for industrialization in those countries if adequate preparations, in terms of increasing absorptive capacity, are made.

To sum up, the least developed countries generally are still in a post-colonial situation reflecting weak political and social institutions and under-developed economies reliant on foreign trade, investment and technology. To break out of this vicious circle these countries will need to formulate and implement policies aimed at nation-building through increasing the level, growth and distribution of income, self-reliance and human development and participation. More specifically, in terms of economic structure such policies should promote

- efficiency to provide positive net capital flows (taking future prices into account as much as possible);
- saving and re-investment to provide growth;
- output mix of products fulfilling basic needs, foreign exchange earning or saving and strengthened forward linkages (intermediate and capital goods for priority sectors);
- input mix based on strengthened backward linkages and appropriate technologies using, within the available range of choice, abundant resources (unskilled labour) rather than scarce ones (capital, skills, foreign exchange);
- technological skills and entrepreneurial development;
- activity location in rural and other low income areas where justified by social-economic gain;
- pattern of ownership (public, small and large private, foreign) corresponding to maximum socio-economic gain;
- supporting physical and social infrastructure.

URGENT POLICY ACTION REQUIREMENTS, NATIONAL AND INTERNATIONAL

A coherent and effective programme of policy measures requires a development strategy aimed at increasing absorptive capacity in line with national objectives. The preceding analysis suggests, in conjunction with a strengthening of the system of national economic management, a set of linked and mutually re-inforcing investments in agriculture (including forestry and fishing where applicable), industry, physical infrastructure (transport, communications, energy production), social infrastructure (education and training, health) and, for the few least developed countries with substantial mineral deposits or other natural resources, their exploitation and processing.1/

Industrialization could proceed on the basis of integrated large modern and small traditional production, that is, promotion of large-scale modern technology investments by public and foreign enterprises, mainly for export and for use by local agriculture and industry (machinery, chemicals), along with promotion of medium- and small-scale, labour-intensive (and, where feasible, rural) investments by local entrepreneurs to provide, besides employment, basic needs goods (food, clothing) for the population, and also to provide, through subcontracting arrangements with larger firms, industrial inputs. The foreign exchange cost of imports could be reduced and export earnings increased not only through expansion of import-substituting and export industries, but also by shifting from import of final products to intermediates requiring further processing and by increasing the level of processing of exports.

Industrial investment plans should also reflect expectations of industrial development in other countries. The fact that industrial growth in the least developed countries has tended to be lower than in other developing countries is particularly significant in view of the Lima target for the year 2000. Achievement of this target implies an acceleration in the overall rate of MVA growth in the developing

1/ In referring to other natural resources, it ma[illegible]dded, for example, that the environment of some of the le[illegible]loped countries may be conducive to the establishment o[illegible]urism.

countries, from about 8 per cent based on historical patterns (extrapolation of past trends) to about 10.5 per cent.1/

For the least developed countries achievement of such growth will be difficult indeed. Without substantial increases in international assistance, the relative position of the least developed countries seems likely to deteriorate further during the 1980s and 1990s. To avoid, or at least ameliorate this situation, the international community will need to undertake a massive effort, in comparison to resources now being provided,2/ to increase industrial growth in the least developed countries, while at the same time these countries undertake to increase their absorptive capacity. It seems not unreasonable to suggest that a minimum target upon which assistance efforts should be based should be to increase the rate of MVA growth in the least developed countries to 8 per cent, i.e. to the average rate of growth expected in the developing countries as a whole on the basis of historical trends.3/

A number of policy actions aimed at development of industry in the least developed countries were proposed at the Third General Conference of UNIDO.4/ These are reproduced in the annex to this paper.

Besides these, some other aspects of policy may be of considerable potential importance. Because investment resources are in general fungible, i.e. they can be transferred from one sector to another, the overall level of foreign concessional aid is a significant factor determining the amount of industrial investment, even though most such aid is for activities other than industry. Thus industry in the least developed countries will benefit if the richer countries and international organizations can make the effort to massively increase their aid to other sectors of the economies of the least developed countries and improve the terms of such aid.

The richer countries, including the higher income developing countries in some cases, could also help by expanding industrial export

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1/ Estimates from UNIDO, World Industry since 1960: Progress and Prospects (E.79.II.B.3), pp. 51-59.

2/ Relative to GDP of the richer countries, however, such an undertaking will require only a very small proportion of resources available.

3/ The International Development Strategy for the Third United Nations Development Decade suggests targets of 9 per cent growth in manufacturing output and 7 per cent in GDP for the developing countries as a whole (A/35/464, 23 October 1980).

4/ New Delhi Plan of Action, paras. 290-308 and 344-346 (ID/CONF.4/22, 11 April 1980, or PI/72).

credits and providing guarantees and interest subsidies for commercial loans, which - unlike some of the higher income developing countries - the least developed countries have great difficulty in obtaining because of their weak financial positions. They could provide substantial relief to the least developed countries by offering debt cancellation, or at least a freeze on repayment.

The richer countries could help by providing freer access to their markets for industrial products, not only through measures such as excepting the least developed countries from some of the complications related to existing preferential tariff arrangements, but also by excepting these countries from non-tariff barriers, quotas under the Multiple Fibers Agreement, etc. Ways of reducing transport costs between the least developed countries and major world markets should also be investigated.

The least developed countries will need assistance in obtaining low-cost access to technologies, in training managers and technicians and in exploration for and exploitation of natural resources. Increased assistance in strengthening planning procedures, policy-making and project identification, evaluation and implementation, as well as help in improving economic statistics, will also be required if greater social returns to investment and improved absorptive capacity are to be achieved.

Finally, and most importantly, it must be stressed that statements of good intentions are not enough; the situation is extremely serious - deadly serious for millions of people - and the international community has a responsibility to take positive policy action, including specific long-term commitments, financial and otherwise.

ANNEX *

1. SPECIAL MEASURES FOR LEAST DEVELOPED COUNTRIES

290. In accordance with the commitment of the international community to take extraordinary measures to assist the least developed countries, implementation of this Plan of Action will pay special attention to the needs of these countries.

291. Early and full implementation of the Comprehensive New Programme of Action for the Least Developed Countries adopted at the fifth session of UNCTAD, relevant resolutions and decisions by the United Nations General Assembly, UNCTAD and other organizations within the United Nations system, and the Lima Declaration and Plan of Action, in favour of these countries.

292. A bigger share of UNIDF should be allotted for financing technical assistance activities in favour of the least developed countries, as compared to the situation prevailing so far.

293. Cancellation by developed countries, without any form of discrimination, of the debts of the least developed countries.

294. Take urgent and effective steps to strengthen their technological and productive capability, particularly through the provision of technology to meet their special needs especially in food processing, processing of minerals, alternative sources of energy, water extraction, building and construction and also small foundries.

295. Assess and increase their absorptive capacity through building up their infrastructure with special attention to their transportation and communications sectors and electrification.

296. Assist in the establishment of comprehensive inventories of their resources, particularly alternative energy sources, and prepare industrial surveys of these countries to support endogenous exploitation of their resources.

297. Promote cottage, small- and medium-scale industry in these countries, with particular emphasis on training, agro-based industry and integration of agriculture and industry.

298. Assist project identification, preparation and evaluation in these countries through the establishment of an industrial project preparation facility to generate viable industrial projects.

299. Strengthen import substitution processes in these countries and, in parallel with this, support the development efforts of these countries aimed at improving the export performance of their manufactures on the basis of dynamic comparative advantages.

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* From New Delhi Declaration and Plan of Action on Industrialization of Developing Countries and International Co-operation for their Industrial Development (UNIDO, PI/72, sections VIII A and E).

300. Constantly consider assistance to these countries as one of the priority areas of the UNIDO technical assistance programmes.

301. Support these countries in their full participation in the redeployment process and the System of Consultations, and finance their participation in Consultation meetings.

302. UNIDO to make active contributions to the preparation and work of the United Nations Conference on the Least Developed Countries in 1981 and that necessary human and financial resources be made available to the UNIDO Secretariat.

303. Call upon UNIDO to submit annual reports to the Industrial Development Board on the progress of industrialization of the least developed countries and on problems confronting them, and devise detailed remedial measures and programmes.

304. Set up and assist in setting up increasing number of pilot and demonstration production units in these countries and adapt appropriate technology and production process suited to the environment.

305. Urge a substantial increase of external financial flows, on highly concessionary terms, to the least developed countries. Such financial flows should be on a continuous, predictable and increasingly assured basis.

306. Call on UNIDO, UNDP, all other specialized agencies and donor countries to at least triple their resources of assistance to the least developed countries, to cater for their increasing difficulties.

307. Allocation of Senior Industrial Development Field Advisers to each least developed country.

308. Preferential treatment within the context of international agreements for industrial products and processed commodities from these countries as well as the setting up of joint enterprises under regional co-operation.

E. COMMON MEASURES FOR LEAST DEVELOPED, LAND-LOCKED, ISLAND AND MOST SERIOUSLY AFFECTED DEVELOPING COUNTRIES

344. At least one third of the North-South Global Fund mentioned in section II under "Industrial financing" will be allocated for the promotion of the industrialization of developing countries of these categories, due attention being paid to the specific requirements of each of these categories of countries arising from their industrialization needs.

345. A multilateral compensatory facility should be established to mitigate the negative effects of externally induced-deficits, including those resulting from rapid increases in their import bill, on the industrial development of these categories of countries.

346. UNIDO should keep under constant review, through periodic reporting to the Industrial Development Board, progress towards the implementation of, and study developments relating to, measures promoting the industrialization of these categories of countries.