

**ECONOMIC AND SOCIAL RESEARCH FOUNDATION
(ESRF)**

**Policies for Manufacturing Competitiveness:
An Overview of Least Developed Countries
(LDCs)**

**By Samuel M. Wangwe, Flora M. Musonda
and Josephat P. Kweka**

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LEAST DEVELOPED COUNTRIES**

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Published by: Economic and Social Research Foundation (ESRF)
P.O. Box 31226 ● 51 Uporoto Street
Dar es Salaam, Tanzania
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ISBN: 9987 610 20 X

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LIST OF ABBREVIATIONS

ADB	-	African Development Bank
CTI	-	Confederation of Tanzania Industries
ESRF	-	Economic and Social Research Foundation
GDP	-	Gross Domestic Product
ISO	-	International Standards Organization
LDCs	-	Least Developed Countries
MCU	-	Manufacturing Capacity Utilization
MVA	-	Manufacturing Value-Added
R & D	-	Research and Development
S & T	-	Science and Technology
SADC	-	Southern African Development Community
SAP	-	Structural Adjustment Programme
SMEs	-	Small and Micro-enterprise Industries
SSA	-	Sub-Saharan Africa
TNCs	-	Transnational Corporations
UNCTAD	-	United Nations Conference on Trade and Development
UNIDO	-	United Nations Industrial Development Organization
WTO	-	World Trade Organization

PREFACE

This study was part of an initiative of the United Nations Industrial Development Organization (UNIDO) to conduct periodic international surveys of policies for industrial development and to strengthen international information and data networks on this subject. This initiative was launched at the Sixth Session of UNIDO's General Conference which was held in Vienna between 4-6 December 1995.

A number of Least Developed Countries (LDCs) plus others categorized as "Low Income" groups by the World Bank, newly open economies as well as successful industrializing countries, were selected for the review which placed particular emphasis on the interfaces between policies for manufacturing competitiveness on the one hand, and macro-economic policies on the other. Other areas of emphasis were the different areas of the industrial development policy such as human resource development; technology; entrepreneurship and small and medium enterprises; and investment. Factors accounting for effectiveness in the implementation of the industrial policies were also addressed. In a nutshell, the study sought to address the predicament faced by the various manufacturing firms and sub-sectors in terms of the key problems they face in building up competitiveness and how the relevant policies address this issue.

This project began in September 1996 and was completed in March 1997.

This publication is ESRF's contribution to this major project.

EXECUTIVE SUMMARY

The objective of this report is to assess and examine the key challenges, constraints and opportunities facing the economies of the LDCs in developing a competitive manufacturing base in the context of the reform policies underway. An interface between the different policies, which is necessary in order to forge sustained levels of manufacturing competitiveness within the LDCs, is emphasized.

Covering an overview on key issues and challenges pertaining to policies of manufacturing competitiveness in the LDCs, the report shows the following:

● **The Implementation of SAPs was Protracted and Inconsistent thus Raising Many Questions**

Classified as countries with slow growth and low levels of development, most LDCs began implementing SAPs during the middle or second half of the 1980s, though a few countries, such as Malawi and Togo, began earlier, and others, such as Burkina Faso, the Comoros, Ethiopia and Rwanda did not formally adopt SAPs until the 1990s. In a number of LDCs, including Sierra Leone, Sudan, Zaïre and Zambia, adjustment programmes were not implemented consistently and continuously. Periods of implementation and abandonment of the programmes are common. This has put into question the credibility of the economic reforms and the government capacity to manage the reform process.

● **SAPs were in Response to the Serious Economic Crises Facing Most LDCs**

The primary objectives of the reform programmes included short term economic stabilization, restoration of sustainable rates of economic growth and increased export production. In addition, the reform programmes included measures to reinforce macroeconomic management and reduce direct government involvement in and control over the markets. The reforms were thus adopted in response to the serious economic crises that these countries faced during the first half of the 1980s. The reform programmes were geared towards a greater use of market commodity and factor prices. Differences still exist among the agriculturally based countries. The dilemma in agricultural price reforms for many LDCs arises from the fact that the governments in LDCs, particularly those whose economies are dominated by traditional agricultural exports, have hesitated to carry out very comprehensive price and market reforms in the agricultural sector.

● **Many LDCs have been Poor Performers**

Many LDCs are endowed with abundant resources; however, these are underutilized and underdeveloped. Many of the countries are quite open and the degree of openness has increased with the reforms. Many of the LDCs have not fared well in the development of their human resources, the infrastructure and telecommunications, among others. Many LDCs exhibit a low and narrow manufacturing base, low level technological advancement, low expenditure in research and development, a low level of informatics and a high external debt.

● **There is a Poor Interface between Industrial and Other Macro-Economic Policies**

Policies towards manufacturing competitiveness include a proper interface between the industrial policies and other macroeconomic policies related to trade liberalization, the exchange rate, investment, the infrastructure, human resource development, technology, entrepreneurship and regional linkages. Other policies quite crucial in enhancing manufacturing competitiveness include those related to wage and productivity, quality and standards, specialization, competition and economies of scale.

● **Drags from the Previous Regime are Causes for Poor Policy Implementation**

Factors accounting for the poor implementation of policies include institutional constraints, drags from previous regimes, inadequacy in the administrative capacity and managerial personnel, resistance to change by economic agents, information technology gap, and changing approaches to policy formulation for the manufacturing sector's competitiveness. Policy priorities for industrial development and manufacturing competitiveness include an enabling environment, regional integration, science and technology, human resources and skills, among others.

● **The Pace, Extent, Sequence and Thrust of the Reforms Differ Country-Wise and Region-Wise**

LDCs have implemented far-reaching reforms, but the pace, extent, sequence and thrust of these reforms have differed and varied remarkably between countries and regions. However, the report has earmarked the key differences and commonalities within LDCs which are explained largely by the quality and quantity of resource endowment among these countries and which account for their notable differences in the levels of socio-economic development. The report has shown that such differences have implications concerning the extent and ability to attain manufacturing competitiveness. The outcome is influenced by the current policy stance in these countries and the extent to which industrial policy is effective in interfacing favourably with other macro, sectoral and institutional policies.

● **The Manufacturing Sectors Responded Differently to the Reforms**

The manufacturing sectors responded differently to the reform policies and the report discusses areas where implementation has not been adequate for enhancing competitiveness. It has been shown that LDCs have other persistent and recurring problems such as structural rigidities, lack of an adequate infrastructure, inadequate finance, insufficient managerial capabilities and skills, factors whose solution will ensure sustained manufacturing competitiveness in the LDCs. Such constraints have rendered LDCs least competitive in the world market and backward in industrial development.

● The UNIDO List of Structural and Framework Factors Points to the Missing Links

The list of structural and framework factors by UNIDO sheds further light on this and specifically points to the serious missing links in the LDCs which are essentially a result of the structural rigidities in their economies. For instance, governance in these countries has been weak and unpredictable thus eroding confidence in the legal and regulatory system. Such weaknesses have the effect of eroding the credibility of the macroeconomic policy (incapacitating the monetary policy and rendering the fiscal policy ineffective) and eventually limiting the efficacy of complementary policy measures (characterized by, for instance, unregulated trade policies, inconsistent privatization programmes) and price systems (the exchange rate, the interest rate, etc). Policies from the past regimes still linger on and hamper the smooth implementation of policy reforms which could ensure competitiveness.

The group of Least Developed Countries (LDCs) currently comprises 48 countries with a population of more than 555 million. Economically, LDCs are generally the poorest and the weakest among the developing countries with serious economic, institutional and human resources problems which are often compounded by geographical handicaps as well as natural and man-made disasters.¹¹ Despite this generalization, remarkable differences and variations exist within the group in terms of size, geographical location, political stability, level of economic development, resource endowments and infrastructural development, among others.

In recent years (mostly beginning in the middle and second half of the 1980s), the majority of the LDCs have committed themselves to a wide range of reform policies and programmes usually with the support of the IMF and the World Bank. The objective of these reform processes include the restoration of both external and internal imbalances, macro-economic management and institutional reforms. The reform objectives took on more complex and ambitious characteristics, shifting from concerns of macroeconomic imbalances and stabilization to promoting development using a plethora of market-oriented reforms including the improvement of economic efficiency, the curbing of public sector intervention, the encouragement of the private sector and the liberalization of the external trade sector. Variations in their sizes, resource endowments and levels of development in addition to the initial conditions prior to the adoption of these reforms have largely determined the extent and quality of the reform pay-offs in these countries.

The emphasis of the Structural Adjustment Programme (SAP), at least in the initial phases, has mostly been focused on getting the prices right, with little concern being given to the need to address the prevalent structural rigidities in these economies. Although the economies of LDCs face structural problems and are confronted by difficult problems when it comes to issues of market for their products or external finance, their development experiences have become more heterogenous over the years. Despite the bleakness of the overall picture, several countries have recorded notable improvements. For instance, Bangladesh, Benin, Cambodia, Equatorial Guinea, Guinea Bissau, Lao Peoples Democratic Republic, Lesotho, Mozambique, Myanmar, Sao Tome and Principe, the Solomon Islands and Sudan are reported to have improved their performance and most have had a notable increase in their per capita income during the first half of the 1990s (UNCTAD, 1995). On the other hand, there are other countries whose development experience has been dominated by a range of non-economic factors such as civil conflicts, political instability, refugees, recurrent droughts, floods and devastating cyclones (e.g. Somalia, Liberia, Zaïre, Rwanda, Burundi, Ethiopia,

¹¹ The most recent additions to the group (General Assembly resolution 48/133) are Angola and Eritrea with Botswana graduating from the group in 1994.



Sierra Leone). Developments on the domestic policy regime were mixed. Characterizing the policy regime were also divergences in the exchange rate policies as some countries (such as the CFA² zone in the African case) devalued their currencies so as to restore external competitiveness and others adopted market determined exchange rates. Recent developments involved the creation or strengthening of markets e.g. the establishment of stock markets.

An examination of the manufacturing performance of the majority of LDCs points to variation in growth rate of the sector. In a number of countries declines have been recorded, implying lack of sustained competitiveness, and the inability of the sector to respond to price and non-price signals. Notwithstanding the significant variation in the manufacturing growth rates among the LDCs, the performance of the manufacturing sector has weakened in recent years. While about one-third of the LDCs maintained a positive growth of manufacturing value added (MVA) in the 1980s and early 1990s, most LDCs experienced stagnation and even decline in manufacturing output. In addition to reasons arising from past policies and strategies, manufacturing activities were constrained by low investment, a low level of technology, import compression and the impacts of reform and adjustment (UNCTAD, 1995).

For the industrial policy to be successful, it has to interface favourably with other policies. Thus, in order for the reforms to contribute positively towards manufacturing competitiveness, the whole policy arena has to be taken into consideration in designing and implementing the industrial policy. Policy linkage suggests that the careful synchronization of policies to ensure their consistency with long-term development objectives, as well as with regional conditions, will have desirable spin-offs in reinforcing credibility. These policies have a three-dimensional focus, i.e., they are, namely, firm-centered policies, sub-sector specific policies and industry wide policies.

The objective of this report is to assess and examine the key challenges, constraints and opportunities facing the economies of the LDCs in developing a competitive manufacturing base in the context of the reform policies underway. An interface between the different policies, which is necessary to forge sustained levels of manufacturing competitiveness within the LDCs, is emphasized in Section One. Section Two examines the key commonalities and differences within the LDCs and the current policy regime. Section Three discusses the policies for manufacturing competitiveness that address the key challenges and constraints in the process of policy reforms and the interface thereof. Section Four outlines the factors affecting the effectiveness of policy implementation while Section Five presents policy priorities for industrial development and manufacturing competitiveness. Finally, Section Six summarizes and offers some policy recommendations.

². CFA refers to the standard monetary unit of the African Financial Community, i.e. Benin, Burkina Faso, Cameroon, Central African Republic, Chad, Congo, Cote d'Ivoire, Equatorial Guinea, Gabon, Mali, Niger, Senegal and Togo.

2.0 DIVERSITY WITHIN THE LDCs AND THE POLICY REFORMS UNDERTAKEN

2.1 Key Commonalities and Differences Among the LDCs

Least Developed Countries (LDCs) are defined as those low-income countries that are suffering from long-term handicaps to growth, low levels of technology and human resource development and severe structural weaknesses. According to UNCTAD (1995), the group of LDCs is comprised of 48 countries.³² They are divided into three important regions namely; African LDCs, Asian LDCs and Pacific Islands LDCs (which includes Haiti). On the one hand, variations in resource endowments, levels of economic and infrastructure development, and the socio-political situation within the LDCs' economies largely determine the extent of the success of economic reform policies. On the other hand, the specific initial conditions facing a particular nation prior to the adoption of the reform policies determined the way and extent to which the particular country responded to reform policies.

● Low income levels and widespread poverty

LDCs are commonly characterized by their low level of income and widespread poverty. The low level of income as indicated by low per capita income (see Table A.1) implies that even if the governments of these countries wanted to distribute incomes in an egalitarian manner, the low level of income would be a major handicap. However, within the LDC group, there are significant regional differences. The majority of the LDCs are in the African continent (32 countries) which, in general, have the lowest per capita incomes as compared to, for example, Asian LDCs. Ethiopia, Mozambique and Bhutan have per capita incomes of less than US\$100 compared to such countries as Djibouti, Samoa, and Vanuatu which had incomes per capita of more than US\$1,000 in 1993. Trends in the real GDP per capita growth rate have also exhibited remarkable differences within the regions as indicated in Table 1.

Table 1 : Regional Breakdown of the Trends in Economic Growth in LDCs

	African LDCs		Asian LDCs		Pacific Islands LDCs		All LDCs	
	1980-90	1990-93	1980-90	1990-93	1980-90	1990-93	1980-90	1990-93
Real GDP	1.9	0.6	3.1	3.9	0.4	-1.4	2.2	1.6
Real GDP per capita	-0.1	-2.3	1.2	1.4	-1.5	-3.4	-0.3	-1.2

Source: UNCTAD, 1995 Report.

³² The list includes: Afghanistan, Bangladesh, Benin, Bhutan, Botswana, Burkina Faso, Burundi, Cambodia, Cape Verde, Central African Rep., Chad, Comoros, Djibouti, Equatorial Guinea, Ethiopia, Gambia, Guinea-Bissau, Haiti, Kiribati, Laos, Lesotho, Liberia, Madagascar, Malawi, Maldives, Mali, Mauritania, Mozambique, Myanmar, Nepal, Niger, Rwanda, Samoa, Sao Tome & Principe, Sierra Leone, Solomon Islands, Somalia, Sudan, Togo, Tuvalu, Tanzania, Uganda, Vanuatu, Yemen, Zaire and Zambia.

Table 1 above shows that Pacific Islands LDCs have experienced a rather dismal growth followed by African LDCs. While Asian LDCs continue to show signs of continued increase in their level of socio-economic development, other regions within the LDCs show signs of persistent decline. Within a particular region, variations also exist among the countries in terms of the rate of growth in their economies. For instance, between 1980 and 1993, per capita incomes of some countries improved (e.g. Bangladesh's per capita income rose from US\$162 to US\$215, Bhutan's from US\$79 to US\$139) while those of others declined (e.g. Ethiopia's per capita income fell from US\$83 to US\$64, and Malawi's fell from US\$238 to US\$193).

- **Country sizes differ widely**

The size of a country is another significant aspect of differences within LDCs. Expressed in terms of population level, the size of LDCs ranged from very small (such as Tuvalu, followed by other Island LDCs) with a population of less than a million inhabitants, to very big countries such as Bangladesh with a population of 115.4 million people. The remote and scattered Island economies are small and geographically susceptible to climatic conditions. Frequent cyclones disrupt economic gains in these areas. The susceptibility to climatic conditions shows the extent to which these economies have been unable to manage nature. Climatic disruptions such as drought and floods are generally common in LDCs and these have always been cited among the major problems that contribute to a low level of economic growth.

- **Generally high population growth rates**

Apart from a few LDCs, many of them have high population growth rates averaging 2.7 percent for all of them together as compared to 0.7 percent for developed market economy countries. For instance, between the 1970-1980 and 1980-1993 periods, the population growth rate increased from 2.6 percent to 2.7 percent. There are exceptions such as Djibouti with a population growth rate of 5.7 percent on the upper boundary and 0.3 percent for Samoa on the lower boundary during the 1980-1993 period. These high population growth rates are cited among the reasons for their low level of development. High population growth rates are attributable to a combination of poverty and the low level of education, health services and income-earning opportunities.

- **Widely different resource endowment levels**

LDCs differ significantly in terms of resource endowments. Two major categories can be identified at the outset those countries which are rich in minerals and others basically possessing only agricultural potentials. Table 2 below serves to give a snapshot of the resource endowment based on these two categories.

Table 2 : Resource Endowment in LDCs for Selected Countries and Resources

Mineral Resource Based Countries		Agriculture Resource (Cash and Food Crops) Based Countries			
Countries	% of Total Exports	Cash Crops-based Countries	(% of Total Exports)	Food Crops-based Countries	(% of Total)
Zambia	87.2	Benin	75.6	Uganda	90.4
Zaire	55.9	Equatorial Guinea	60.1	Sao Tome & Principe	99.8
Niger	67.9	Mali	68	Guinea Bissau	92.3
Guinea	78.7	Sudan	56.3	Burundi	90.2
Mauritania	49.5	Tanzania	50	Cape Verde	80.6
Sierra Leone	41.1			Vanuatu	79.7

Source: World Bank (1995).

Table 2 above shows the sharp differences in both the type and extent of resource endowment in LDCs. While some countries are endowed with good farming lands and consequently depend more on agriculture for their export earnings, others depend entirely on mineral exports. In view of this typology, different LDCs are affected differently by changes in the terms of trade and in the world market in general. Those which depend entirely on agriculture are more likely to be susceptible to weather conditions and changing agricultural terms of trade compared to their counterparts relying on minerals. The extent of technology and the development of viable and basic manufacturing industry determine the ability of the countries in the latter category to exploit the mineral resources more than is the case with agriculture dependent countries.⁴ However, significant dependence by these countries on a particular item as a source of their export earnings implies an inadequate level of export diversification, in most cases undermining even the modest development efforts underway. This further characterizes the LDCs as producers of primary products.

⁴ Specifically in mining, despite the huge potential which LDCs possess, the performance of this sector has not been satisfactory. Its development has been inhibited by some structural constraints such as the shortage of foreign exchange to purchase equipment and spare parts for ageing machinery and a low level of investment. For instance, in Guinea, only a small quantity of the bauxite produced in Africa is refined to aluminum. Surprisingly, the aluminum industry is disjointed and uncoordinated in that country. There is no country in Africa with vertically integrated aluminum industries - - which means that there is a lack of the capacity to combine bauxite mining, aluminum refining, aluminum production and metal fabrication.

● Abundance of energy resources

LDCs are also endowed with abundant energy resources. In Africa, for example, the region is endowed with 6.2 percent of the world's proven oil reserves, 6.9 percent of the world's natural gas, and six percent of the world's coal deposits. In addition, there is a considerable hydroelectric power potential although only a small part of the energy potential is exploited at present. In fact, most LDCs are characterized by a low level and declining per capita energy consumption. Countries with higher levels of economic development (mostly the Asian LDCs) have relatively higher per capita consumption of energy compared to countries with the lowest levels of economic growth. For instance, Djibouti, Kiribati, Samoa, Sao Tome, Vanuatu, Zambia and Yemen have higher per capita consumption of more than 300 kgs of coal, compared to countries such as Bhutan, Nepal, Sudan, Ethiopia, Burundi, Cambodia, Chad and Uganda with very low per capita consumption of below the equivalent of 25 kgs of coal. Biomass, especially fuel wood, is the most important source of domestic energy in the region. The high operating costs, low capacity utilization and generally inefficient operations in most of the manufacturing industries in LDCs are the result of failure to utilize the region's energy potential. *Electricity production and consumption is low in Africa as compared to other regions.* This low level of consumption and production is related to the low level of development of the region.

● Economies are notably open

Another notable commonality within the LDCs is that they can be regarded as open economies, more so following the reforms in the external sectors. Defined as percentage share of external trade to GDP, the average degree of openness among LDCs was 25.7 percent in 1970, increasing to 47.5 percent in 1980 and declining to 36 percent in 1994. While in many countries the degree of openness can be considered as a good sign of global integration of that particular country, for many LDCs it signifies a lack of self sufficiency and high dependency on imports, especially where there are persistent balance of payments deficits. In addition, it also means more susceptibility to external shocks especially in the case of LDCs whose ability to absorb and contain external shocks is limited.

● Differences in human resource development

Although other indicators such as social development show that LDCs have not fared well in human resource development, there are significant variations among the countries with some recording notably higher levels while others have recorded very low levels in some aspects of human development. For instance, data on the adult literacy rate for 1993 shows that, while Côte d'Ivoire recorded an adult literacy rate of 37.8 percent, Zimbabwe had a literacy rate of 84 percent. Generally, LDCs are also characterized by a low life expectancy at birth, which in 1993 stood at an average of about 50 years.

● **Poor infrastructural development**

Another point where LDCs have shown common weakness compared to the developed countries is the level of infrastructural and telecommunications development. Transport and communications constitute an important sector for the enhancement of economic growth and the socio-economic integration of the LDCs, particularly the promotion of intra-regional trade. Access to well-maintained roads and well-functioning railway systems is essential in linking the potential producers to their markets, both domestic and foreign. However, the regional distribution of the transport and communication infrastructure is uneven with a low level of service to the rural areas where large sections (over 80 percent) of LDC populations live -- at least in most LDCs. In addition, in many of the LDCs there has been a deterioration of the physical infrastructure due to poor maintenance and outdated equipment.

This problem is most acute for landlocked LDCs with limited resources. For the whole continent of Africa on the average, there are 1.6 telephones per 100 people, 2.2 million kms of all weather roads and 73,000 kms of railways for the whole of the continent. For a population of nearly 700 million and a land area of 30 million square kilometres, the transport and communications constraints become fairly apparent. In the absence of adequate local manufactures, LDCs are dependent on industries outside their countries for the purchase of telecommunications equipment and spare parts. Such imports are generally made on a non-selective basis of "ready-made" packages with little room for adaptation to local needs through local enterprise and know-how. Telecommunications in Africa, for example, do not have the usual multiplier effects (via research and development, local manufacturing, services and employment) as they do in other regions of the world.

● **Very narrow manufacturing bases with varying performances**

A major characteristic of the manufacturing sectors in the LDCs is their very narrow base. The manufacturing value added (MVA) accounts for less than 10 percent of the combined GDP of LDCs, as compared to nearly 25 percent in the developing countries as a whole. Besides its small size, it raises great concern to note that the relative importance of manufacturing in LDC economies has diminished in recent years and that its contribution to GDP has declined from 10 percent in 1980 to nine percent in the 1990s.

In terms of manufacturing performance in the early 1990s, three groups of countries can be identified. The first is the group of countries with positive per capita MVA growth (three percent and above). This group (16 countries) had greatly varying performances. At one end of the spectrum are countries such as Bhutan, the Lao Peoples Democratic Republic, Lesotho and Maldives which enjoy high MVA growth while others (such as Comoro and Mali), could barely keep pace with population growth. In Cape Verde and Mali, MVA growth has picked up greater momentum in recent years

after years of depressed performance. The second group comprises of 10 LDCs which exhibit slow MVA growth. Of these, the Central African Republic, Nepal, Samoa, and Sao Tome and Principe experienced deceleration in MVA in recent years, while Mauritania, Nigeria, Sudan and Tanzania were able to improve their performance in the early 1990s. Finally, the third group (comprising of 13 LDCs) have experienced negative MVA growth on average since the mid-1980s. The most severe losses have been incurred in Zaïre and Zambia; countries which experienced 21.5 percent and 10.6 percent MVA declines respectively in 1991. The collapse of the manufacturing sector in this group of countries has been a major source of concern in as far as it affected the performance of the manufacturing sector of the LDCs as a whole during the early 1990s. A more detailed picture of the trends in MVA growth rate in specific LDCs is shown in Table A.2 in Appendix A.

- **Generally lagging behind in technological advancement**

Closely related to the low manufacturing base is the issue of technology in LDCs. Many LDCs lag behind in the development of indigenous technologies and technological advancement in general. This is attributable to low expenditures on technology investments, little research and development (R&D) and inappropriate technological transfers among others. Overall, investment in technology in terms of R&D is very low and has been declining. Africa spent only 0.33 percent of its GDP in 1970 on investment in technology (and the amount falling to 0.29 percent in 1990) compared to other countries that have a larger and increasing proportion.

The global spread of the information revolution has moved slowly in LDCs and especially among African LDCs. For example, despite rapid investments in this sector, in 1994, no more than 15 African countries had full access to the Internet and some remain without any electronic connectivity. In 1994, the average "teledensity" (number of main lines/100 inhabitants) in Africa was only 1.6 as compared to 45 in Europe, and the average teledensity outside large cities in Africa was only 1.2 according to the World Telecommunications Development Report (1995). In Sub-Saharan Africa where many LDCs are found, these figures are much lower. Africa has only two percent of the world's telephone lines and most of these are found in the few large cities.

- **Many suffer from a debt overhang: A major development hindrance**

Another commonality of LDCs is the external debt. Many LDCs are ridden with a debt overhang and this has been identified as a major hindrance to their development efforts. The levels of indebtedness remain very high. The stock of outstanding debts equals or exceeds the GDP in almost half the LDCs and they continue to face heavy external debt-servicing obligations, while their debt-servicing capacity has weakened over time. In terms of absolute size, the largest LDC debtors are Bangladesh and Sudan, each with over US\$10 billion of external debts in 1992, followed by Afghanistan, Ethiopia, Myanmar, the United Republic of Tanzania, Yemen, Zaïre and Zambia, all having outstanding external debts in the range of US\$5 billion to US\$10 billion. The characteristics of LDCs, as shown above, point to the fact that many countries in LDCs have to invest huge resources to catch up with the developed world.

2.2 The Current Policy Regime and the Reforms Undertaken in LDCs

Most LDCs began implementing SAPs during the middle or second half of the 1980s, though a few countries, such as Malawi and Togo, began earlier, and others, such as Burkina Faso, the Comoros, Ethiopia and Rwanda did not formally adopt SAPs until the 1990s. In a number of LDCs, including Sierra Leone, Sudan, Zaïre and Zambia, adjustment programmes were not implemented consistently and continuously. Periods of implementation and abandonment of the programmes are common. This has put into question the credibility of the economic reforms and the government capacity to manage the reform process. The primary objectives of the reform programmes included short term economic stabilization, restoration of sustainable rates of economic growth and increased export production. In addition, the reform programmes included measures to reinforce macroeconomic management and reduce direct government involvement in and control over the markets. The reforms were thus adopted in response to the serious economic crises that these countries faced during the first half of the 1980s. The reform programmes were geared towards a greater use of market commodity and factor prices. Differences still exist among the agriculturally based countries. The dilemma in agricultural price reforms for many LDCs arises from the fact that the governments in LDCs, particularly those whose economies are dominated by traditional agricultural exports, have hesitated to carry out very comprehensive price and market reforms in the agricultural sector. Against this background, the following are some of the macro-economic policy measures that further characterize the current policy regime.

2.2.1 Exchange rate reforms

Adjusting countries are grouped into two categories: those with fixed exchange rate regimes and those with flexible exchange rates. Countries with flexible exchange rates started the process of devaluation at a time when they were experiencing worsening trade and large premiums between the official and the parallel market. To curb this, devaluation was necessary. The experience of liberalization in many LDCs has clearly confirmed that the overriding influence on output response in highly rigid economies is that of structural impediments and non-price barriers rather than price incentives.

Many African LDCs resorted to exchange rate devaluation as a policy instrument, but nominal devaluation did not easily lead to a real depreciation of the currency partly because of its inflationary impact. However, in a number of LDCs it did work. For instance, there was a rise in the real effective exchange rate in at least four countries (these were Sudan, Rwanda, Cape Verde and the Central African Republic) out of the 22 countries examined between 1980-1990. In the majority of countries there was a real depreciation of over 10 percent. In Madagascar, Uganda, Tanzania, Zambia and Zaïre it exceeded 50 percent. Studies have also generally shown that there is no clear relationship between the real effective exchange rate and export growth, neither is there any clear association

between movements in the real exchange rate and the MVA growth rate. Countries with mild real depreciation registered better MVA/GDP growth than those with massive real devaluation (UNCTAD, 1993).

Zambia's experience illustrates some of the countries in which significant price incentives worked successfully in the absence of serious structural problems. Economies with relatively well diversified economic bases and infrastructures demonstrate that price incentives (including the exchange rate) are valuable tools in export promotion, whereas in countries with deep seated structural problems such policy instruments are ineffective and may even be de-stabilizing.

2.2.2 Market interventions and foreign exchange allocations

A significant feature of the reforms in most LDCs is the remarkable reduction of administrative controls and their replacement with market forces in the hope of imparting efficiency in resource allocation and utilization. However, the expected gains in efficiency have proved hard to come by in those LDCs which lack or have poorly-developed markets. In Zambia, for example, the shift from administrative controls to an auction system for the allocation of foreign exchange led to the pre-emption of almost all forex by large foreign-owned corporations, while smaller enterprises and the agricultural and social sectors received only marginal allocations. Thus undifferentiated market solutions do not provide a satisfactory alternative. Uganda, instead, successfully adopted a "two-tier system" (a system where the country's currency is pegged to the currency of *one* selected country whose economy is stable and which thus has a stable currency) while Tanzania adopted a managed, "floating system" (a managed foreign exchange system in which a country's currency is pegged to the currencies of *many* other countries).

2.2.3 Monetary policy reforms

The current regime in the wake of SAPs in LDCs is characterized by credit restructuring and positive real interest rates. Though these may have adverse effects on indigenous entrepreneurship and Small and Micro-enterprise Industries/SMIs (and hence manufacturing competitiveness), most LDCs have accepted them as a feature of SAPs. These prevail in the context of a low degree of monetization, illiteracy, poor infrastructure and wide-spread informal financing. These features have contributed to making private savings and investment insensitive to interest policies. Countries such as Gambia, Malawi, Samoa, Nepal discouraged deposits for lack of viable investment projects and a lack of credit-worthy borrowers. Crowding out of private investment and de-industrialization have been reported in several countries (e.g. Tanzania, Zambia and Ghana). In some countries (such as Burkina Faso, Sierra Leone and Tanzania) the loss of credit facilities has been associated with the dismantling of crop marketing parastatals.

2.2.4 Trade liberalization

There is a great variation within LDCs in the spread and intensity of measures taken during liberalization. The experience of LDCs, however, does not reveal a clear and systematic association between trade liberalization and currency devaluation. A number of countries that undertook substantial liberalization and devaluation experienced a fall in industrial output. A number of Asian LDCs obtained some positive results due to liberalization, since they undertook selective rather than generalized trade liberalization. Instead, it is increasingly being realized that the way trade liberalization has been implemented has partly contributed to the poor economic performance.

Three categories of LDCs can thus be analyzed in an attempt to examine the impact of liberalization on the industrial manufacturing sector; namely those that undertook extensive liberalization (high liberalizers), weak liberalization (low liberalizers) and those lying in-between (medium liberalizers). It appears that the countries which liberalized least extensively have also been the worst performers in terms of MVA share in GDP with the MVA declining by 0.2 percent between 1980-90. African LDCs in this category include Djibouti, Ethiopia, Madagascar, Mali, Mauritania, Niger, Rwanda, Sierra Leone, Somalia, Sudan, Togo, Uganda, Zaïre and Zambia. Both high and medium liberalizers were able to increase their MVA share in GDP over the 1980s, although the medium liberalizers (Botswana, Burundi, Central Africa Republic and Lesotho) fared better by registering an MVA growth rate of 4.3 percent in the same period. Generally, however, the performance of the group of medium liberalizers varied significantly between countries. The high liberalizers (Benin, Burkina Faso, Chad, Gambia, Guinea and Malawi) registered a growth rate of 1.5 percent (UNCTAD, 1995).

These results compare well with those obtained by Lall (1996) in his documentation of the impact of adjustment on manufacturing performance. Most adjusting countries have better results than the non-adjusting countries (Lall, 1996; World Bank, 1994). Within the former group, countries with improved policies performed better between 1990-95 than those with deteriorating policies (see the list of these countries in Table 4). On the other hand, the growth rates deteriorated in all countries in the first half of the 1990s suggesting that the achievements of the 1980-1990 period were mainly a reflection of the increased utilization of existing capacities rather than the enhancement of technological capability to attain and sustain competitiveness. Differences in performance may be attributable to the manner in which the reforms have been implemented and the initial conditions facing certain countries.

2.2.5 Privatization and public sector restructuring

Privatization has an important place in the current policy agenda of most LDCs. However, the extent of its implementation has differed between countries depending on the extent of public sector dominance and how drastically the reforms have been carried out. LDCs have tried to implement this policy through a combination of three types of measures: privatizing state-owned enterprises,

reforming public enterprises and to a limited extent, allowing greater private sector entry into commercial and productive activities. Experience shows that some LDCs had started privatization some years prior to the adoption of SAPs. For instance, Nepal carried out privatization in 1970, Bangladesh in 1975 and Uganda in 1982.

In the context of adjustment, Togo began its privatization process in 1990 and the Lao Peoples Republic in 1985. In some countries such as Zambia and Tanzania which undertook privatization in 1992, this was done through policy pronouncements and the establishment of executing agencies (e.g. the Parastatal Sector Reform Commission/PSRC in the case of Tanzania). The extent and speed of privatization differed remarkably among the LDCs. While most countries divested between zero percent to 10 percent of their ownership (e.g. Gambia, Sierra Leone, Zimbabwe, Uganda, Zambia, Malawi, Kenya and Tanzania), Ghana divested about 25 percent and Nigeria went as far as 51 percent. The countries also had differing numbers of State-Owned Enterprises⁵ (SOE) some with less than 50 and others with as many as 400. A few countries had their utilities sector commercialized (e.g. Ghana, Kenya, Nigeria and Zimbabwe).

In spite of the many policy pronouncements in many LDCs, little in terms of results has been realized. This is so because the process has been rather slow. In 1993, Bangladesh envisaged the privatization of 32 industrial units but at the end of 1994, only three went through. By mid-1994, the Tanzanian government had succeeded in privatizing only 24 out of 400 parastatal companies (i.e., from 1992). Such a slow pace can be attributable to factors such as the government's own uncertainty on the credibility of privatization, institutional inadequacies and bureaucratic delays, the dearth of local entrepreneurship, the lack of financial resources and the poor financial state of the companies being offered for privatization which makes them unattractive for would-be investors in the private sector. In the end, the success of the privatization programme will have to be judged not merely by the number of enterprises privatized, but against such considerations as output and efficiency gains, skill development, improvement in technological and managerial capabilities, and contribution to domestic savings and investment.

Privatization is a political process much as it is often carried out on the basis of economic arguments. The process of privatization often invokes shifts in the balance of power between various groups in society. This in itself makes the implementation process far from smooth. This situation is aggravated by the fact that privatization is often carried out in response to conditionality which is externally imposed (by IFIs) rather than a product of internal debates and internally generated decision processes.

⁵. Also referred to in the text as parastatals.

It is becoming clear that privatization may be a necessary but insufficient condition for the envisaged efficiency and productivity of the manufacturing sector. Table 3 provides a more precise picture of the status of the divestiture exercise in the case of African countries. As seen from the table, progress in divestiture has been rather uneven with six countries accounting for two thirds of divestiture (Ghana, Guinea, Mozambique, Niger, Nigeria and Senegal). Only a handful of countries have divested more than 40 percent of their enterprises, and half the countries have been very slow in privatization.

Table 3: Divestiture of Public Enterprises (1986-1992)

PERCENTAGE OF ENTERPRISES DIVESTED	NUMBER OF ENTERPRISES BEFORE DIVESTITURE			
	<i>0 - 50</i>	<i>51 - 100</i>	<i>101 - 200</i>	<i>More than 200</i>
0 - 10	The Gambia, Mauritania Rwanda Sierra Leone Zimbabwe	Burkina Faso Congo Uganda Zambia	Cameroon Cote d'Ivoire Malawi	Kenya Tanzania
11 - 25	Chad	Burundi, Central African Republic	Madagascar	Ghana, Mozambique
26 - 40	Niger		Guinea, Nigeria	
41 - 60	Guinea Bissau	Benin, Mali, Senegal, Togo		

Source: World Bank, 1994.

2.2.6 Civil service reform

Until recently, the World Bank's civil service reform consisted of two packages in all countries -- the retrenchment of civil servants and the reduction of the wage bill. Most LDCs have shown a decrease in their wage bill, but the amount and extent of retrenchment still varies across countries and data is rather sketchy. Civil service reform in many countries has been associated more with retrenchment than with shifts in the government's core functions or in the organization and efficiency of the civil service. These remain as the main challenges in many countries in the LDCs.

2.2.7 Financial sector and monetary reforms

The main purpose of financial sector reforms in LDCs has been the need to restructure financial systems to enhance efficiency by moving towards a market-oriented system and removing administrative controls. Other than the efficiency argument, the rise in the cost of capital was supposed to correct earlier inefficiencies by allowing investment projects which had high enough returns and by removing the earlier bias in favour of capital-intensive technology. Furthermore, higher interest rates would increase the level of savings by the public which could, in turn, be used for lending to productive investment. Financial sector reforms have been implemented in four major ways: the liberalization and rationalization of interest rates; the restructuring of state owned banks; privatization; and the liquidation of banks. Different countries adopted different combinations of ways of implementing this as shown in Table 4 below.

Table 4: Financial Sector Reforms Undertaken During the Adjustment Period

LIBERALIZATION AND/OR RATIONALIZATION OF THE INTEREST RATES	RESTRUCTURING OF BANKS	PRIVATIZATION OF BANKS	LIQUIDATION OF BANKS
Benin, Burundi, Congo, Cote d'Ivoire, Gambia, Madagascar, Malawi, Mauritania, Mozambique, Tanzania, Rwanda	Cote d'Ivoire, Guinea, Madagascar, Mali, Mauritania, Rwanda, Senegal, Tanzania, Uganda	Cote d'Ivoire, Guinea Bissau, Madagascar, Mauritania, Senegal	Benin, Cote d'Ivoire, Guinea, Niger, Rwanda, Senegal

Source: World Bank (1994).

The question is whether these measures had a positive impact on the level of manufacturing investment. Industrial financing in LDCs used to be done by specialized financial institutions, mainly the national state-owned development banks and commercial banks. However, with the emergence of private commercial banks in these economies, to a greater extent industrial financing has declined. Private commercial banks prefer short term credit to finance activities with quick returns and these are mainly trade. The other source of finance for investments in public enterprises used to be external assistance in the form of concessional loans and sometimes grants. This source has not been sustainable. Donors refrain from tying up their funds to long term projects and avoid high risk ventures such as manufacturing investments. External assistance for LDCs' manufacturing appears to have dwindled in recent years (for trends see Tables A.6 and A.7 in Appendix A) reflecting the low priority that donors now give to the manufacturing sector in their aid programmes.

However, both the rationalization and liberalization of interest rates, which are among the most common features of adjustment programmes, have been somewhat successful in easing financial

repression in most LDCs. Interest rates were fully liberalized in the case of Burundi, Gambia, Ghana, Kenya, Madagascar, Malawi, Mauritania and Zambia. The central banks in CFA franc zones raised the interest rates and eliminated preferential rates to maintain their competitiveness with France. However, reforms have not succeeded in reducing financial repression in countries with highly negative interest rates.⁶

2.2.8 Fiscal reforms

The ultimate objective of such reforms has been to remove budget deficits by putting into place an efficient tax system that can ensure a predictable and adequate level of public revenue with minimum administrative costs and distortions. In addition, the fiscal reforms in LDCs intended to enhance macroeconomic stabilization measures. While fiscal adjustment in many LDCs has had a good impact in terms of a higher level of tax revenue collection, in many other countries it has taken the form of expenditure compression, particularly in the case of development expenditure. The vulnerability of social expenditures to cuts has been an issue of particular concern to LDCs given the very low level in favour of the social sectors, and attempts to prioritize expenditures in that direction are being made in such countries as Bangladesh, Gambia and Tanzania. In countries that were unable to mobilize greater revenue, improvements in budget balance were mainly achieved through the compression of expenditures, sometimes dramatically as in Sierra Leone where expenditure fell by six percent and Tanzania where it fell by 14 percent between 1985-90 from its 1980-85 levels.

Nevertheless, the strategy of fiscal adjustment through compression of public expenditures must be assessed in the light of particular socio-economic characteristics of LDCs, namely, the widespread prevalence of market failures, skewed income distribution and poverty syndrome.

2.2.9 Impact of policy improvements

Further analysis of the key commonalities and differences in the current policy regime can be delivered from the ADB report of 1995 which attempts to classify countries by policy on Structural Adjustment. The ADB report identifies four classes of countries in two categories: the adjusting countries which are themselves divided into the "improvements in policy" group, and the "deterioration in policy" group, and the non-adjusting countries which are further divided into the "North Africa" group and the group of "Low-Income" African Non-Adjusters. In terms of the manufacturing sector's performance, none of the groups exhibit significant differences in their manufacturing growth rates. The report argues that adjustment, as such, had no special effects on manufacturing growth; and that the differences in the growth rates were caused by other factors such as the initial conditions prior to the adoption of economic reforms and resource endowment in a particular country. Table 5, below, shows that countries with policy improvements do better than those with policy deterioration, at least as far as manufacturing is concerned (see Box 1 for an

⁶ A negative rate implies that the interest rates are smaller than the existing rates of inflation in the country.

example of a country with policy improvement). Countries with policy deterioration performed significantly worse in 1990-93 than the non-adjusting countries and countries showing improvements.

Table 5a: ADB Classification of Countries by Type of Structural Adjustment Policy

Adjusting Countries		Non-Adjusting Countries	
<i>Improvements in Policy</i>	<i>Deterioration in Policy</i>	<i>North Africa</i>	<i>Low-Income Africa Non-Adjusters</i>
Burkina Faso	Benin	Algeria	Angola
Burundi	Cameroon	Egypt	Botswana
Gambia	CAR	Libya	Cape Verde
Ghana	Chad	Morocco	Comoro
Kenya	Congo	Tunisia	Djibouti
Madagascar	Cote d'Ivoire		

Table 5b: Mean GDP Growth Rates by Group

Category of Country	1980-93		1990-93	
	Weighted	Simple	Weighted	Simple
Policy Improvements	2.65	2.88	3.38	2.35
Policy Deteriorating	1.27	2.63	0.55	2.01
North Africa	2.11	2.63	1.04	1.62
Low-Income Non-Adjusting	2.0	2.82	0.24	1.52

Table 5c: Mean Annual Real Growth Rates of Manufacturing Value-Added

Category of Country	1980-93		1990-93	
	Weighted	Simple	Weighted	Simple
Policy Improvements	2.70	3.59	4.41	3.09
Policy Deteriorating	1.64	1.91	-1.67	-3.35
North Africa	3.75	2.2	0.33	1.43
Low-Income Non-Adjusting	2.12	3.17	0.05	.87

Source: ADB 1995 Report.

BOX 1: Ghana: An Example of an Adjusting Country in Africa with Policy Improvements

Ghana is acknowledged as a country in the African region that has the longest history of consistent adjustment in terms of liberalization of the economy and increased reliance on market forces. It is advanced in reaching low, tariff-based protection and free trade. It has undertaken massive devaluations in the exchange rate, from 2.75 cedis to the dollar in 1982 to 920 cedis to the dollar in 1994; the removal of quantitative restrictions on imports and the lowering of tariffs to a relatively uniform 10 percent to 25 percent range; reduction of corporate taxes to 35 percent and the capital gains tax to five percent; the removal of price controls and subsidies; the abolition of credit ceilings and guidelines; the privatization of state-owned enterprises; the revision of the investment code; the provision of incentives for exporters; and the encouragement of investments in infrastructure. The private sector was to be the prime mover of the economy; balance of payments deterioration was to be reversed; and public sector management improved. The widespread reforms have had important implications for the manufacturing sector in terms of output, employment, productivity, technology, efficiency, investment, international competitiveness and linkages. Initially, the response of the manufacturing sector was fairly good, with value added in manufacturing rising rapidly in 1983, when imported inputs were made available to the existing industries that were suffering from substantial excess capacity. The rate of growth was 12.9 percent in 1984, 24 percent in 1985, 11.0 percent in 1986 and 10 percent in 1987. However as liberalization spread to imports and excess capacity was used up, the exposure to world competition led to a steady deceleration of industrial growth. The rate of growth of MVA fell to 5.1 percent in 1989, 1.1 percent in 1990, 2.6 percent in 1991 and 1.1 percent in 1992. Employment in manufacturing has fallen from a peak of 78,700 in 1987 to 28,000 in 1993. There has been a small rise in the number of small enterprises, but this is in low productivity activities aimed at local markets and does not bode well for longer-term growth and competitiveness. Foreign investment has not responded well to the adjustment, and most of it is concentrated in primary activities, rather than in manufacturing, and domestic private investment has not picked up sufficiently to dynamize the manufacturing sector. As far as the export of manufactures is concerned, the expectation was that they would grow and diversify rapidly under the new incentive regime. The result is that growth was extremely small, mainly from wood and aluminum products, long established sectors, and from firms established in export markets, rather than from new producers. Large sections of the manufacturing sector have been devastated by import competition while industrial survivors and new entrants are activities that have natural protection from imports. Manufacturing activities requiring a low technology "entry level" (such as garments and footwear), in which Ghana should be developing a competitive edge have been unable to survive the import threat. Cheap labour has not emerged as a source of comparative advantage to the Ghanaian industry. This is because the ability to compete internationally in low-technology labour-intensive industries requires a level of productivity and managerial and technical skills that at present, Ghana lack.

Thus, key commonalities and differences exist in the group of LDCs with regard to their current economic policy regime and performance. This mainly stems mainly deriving from the peculiarities of the LDCs group relative to others.⁷

⁷ Groups other than the LDCs include: Successful Industrializers, (SI), Countries turning towards Outward oriented strategies (NOE), and Economies in Transition (TE).

2.3 Extent, Thrust, Sequence and Pace of the Policy Reform Processes Underway

Initial conditions characterizing these countries prior to the adoption of the economic reforms largely influenced the difference in the pace, thrust and extent of reforms in these countries. Another factor that may explain differences in the pace and thrust of reforms in the LDCs is the political orientation of a particular country. The extent of economic development coupled with the extent of infrastructural development that meant a more developed manufacturing sector largely determined not only the success of reforms but their acceptance as a key solution to the ailing economies. For instance, it is accepted that countries whose economies were in very deep crises accepted the reforms more widely and undertook more comprehensive reforms, with a quicker, pace than other countries which had relatively stable and growing economies.

2.3.1 Pace of the reforms

Experience of the reforming countries indicates that there is a group of countries which undertook quick reforms ("shock therapy") while others followed a gradual road to reforms. It is acknowledged that both paths have pros and cons; however, the clear lesson is that regardless of the starting point, decisive and consistent reform pays off.

On the one hand, quicker reforms have been opted for by countries that want to minimize the duration of the inevitable pain of reforms. The advocates of the all-out approach (in favour of the reforms) say that wherever rapid change is feasible, it should be adopted. While other types of reforms such as macroeconomic stabilization measures, market liberalization and the removal of restrictions can be implemented rapidly even with a simple range of policy instruments, others, particularly institutional reforms, require a much slower pace. Developing market-supporting institutions such as legal and financial systems may take a longer period of time, because it involves fundamental changes in skills, organization, and attitudes. In Tanzania for instance, the recognition of the need to undertake institutional reforms came a few years after stabilization measures had been introduced. Even when institutional reforms were introduced, the pace of implementation started slowly. For instance, privatization and financial sector reforms have taken a markedly longer time to go through. *Many firms are operating without effective owners; information and legal systems have not yet adapted to market mechanisms; private firms face constrained access to bank credit; governments find it difficult to move fast enough to tax emerging sectors to make up for lost revenues from declining ones. Examples of countries which followed quick and more extensive reforms are Benin, Burkina Faso, Chad, Gambia, Guinea, Malawi, Tanzania, Uganda and Zambia.*

On the other hand, piecemeal and phased (gradual) reforms could have been implemented first by having them start with localized experiments involving the liberalization of a few sectors first, whose dimensions could have been broadened as they proved successful. This strategy relies on there being scope to reap large productivity gains from the first, partial reforms. These, in turn raise incomes, so building momentum for further and more difficult reforms in a self-reinforcing process. Gradualist reformers must also be able to sustain the reforms over an extended period and contain the side

effects of liberalizing the economy selectively i.e., "feeling the stones to cross the river" approach. Countries that are perceived to have carried out gradual/slower reforms include, for instance, Djibouti, Ethiopia, Madagascar, Mali, Mauritania, Niger, Rwanda, Sierra Leone, Somalia, Sudan, Togo and Zaïre. Others were regarded as medium reformers e.g. Botswana, Burundi, the Central African Republic and Lesotho.

2.3.2 Extent of the reforms

The extent to which a country has carried out economic reforms differs from one LDC to another and from one region to another. The first stage of policy changes leading to reforms has typically concentrated on macroeconomic stabilization, with currency devaluation and fiscal restraint as the key instruments. Demand management measures have usually been reinforced on the supply side by microeconomic and institutional reforms, the standard features of which have been: trade liberalization, decontrol of prices and marketing in agriculture and industry, financial liberalization, and the privatization of public enterprises. Comprehensive systemic reforms such as parastatals, civil service and financial sector reforms (particularly in the case of Tanzania) took longer to be implemented and in many cases are still in the process of being implemented. Explicit in the reforms have been sharp reversals of policy away from the traditional emphasis on administrative controls and highly interventionist public sector strategies to those that rely on market forces and the price mechanism for resource allocation. Thus, the extent of progress so far has been on "easier" interventions such as cutbacks in public expenditure, including subsidies, changes in price incentives, trade liberalization, and more limited changes in sectoral policies.

2.3.3 Thrust of the reforms

The experience of the thrust of reforms in the LDCs varies across countries and across regions and has thus depended on several factors including the initial condition of the country before embarking on reforms. The deeper the crisis the country is in, the easier it is for the interest groups to accept the reforms as usually in such cases the choice is limited. For instance Zambia, Tanzania, Ghana and Uganda put more thrust in reforms because they were buffeted with significant macroeconomic imbalances. Reforms stand a better chance of gaining acceptance and of success when the process is domestically internalized and not seen to be imposed from outside. Gambia is cited as the case where local participation was sought in the reforms formulation and thus acceptance was at a higher level. The government of Gambia was able to resist opposition to reforms by holding open forums with the chambers of commerce, farmers and other public interest groups to secure support. Policy debates and dialogue and consultations with the key stakeholders is important in the policy reform process.

2.3.4 Sequencing of the reforms

There is now a close convergence of views on some aspects of the sequencing of the reforms. It has become widely accepted that stabilization should precede any attempts at full-scale trade

liberalization. Dealing with the revenue-reducing effects of trade liberalization is particularly tricky for LDCs, given their heavy dependence on trade taxes for government revenue. Certain kinds of trade reforms, with prospects for revenue enhancement, will need to be emphasized. The experience of LDCs suggests that full trade liberalization should not be attempted before export growth is achieved; otherwise, the reforms will put so much pressure on foreign exchange resources as to undermine sustainability. Strong export promotion measures have been found to be useful complements in assisting trade liberalization to work in many countries. Export production, however, *requires increased imports to raise investment capacity*; this places priority on external financing to relieve the import constraint. It may also imply phased trade liberalization starting with imported inputs as one way of enhancing efficiency among the domestic activities that use imported inputs. This approach is reported to have worked quite well in Zimbabwe (Ndlela and Robinson, 1995).

Agricultural incentives should be placed at a relatively early stage of the reforms, but the focus of these must be to encourage non traditional products and self-reliance in food production. This requires the adoption of both price and non-price measures, such as *foreign exchange allocations for the repair and maintenance of the economic infrastructure*. Credit markets must also be responsive to the needs of producers before any action is taken to stimulate private sector investment through the deregulation of markets. It is now widely accepted that the gains from liberalization and increased private sector participation can only be achieved if there is development of a viable and effective financial sector. There is also a widespread recognition of the need to phase interest rate liberalization to take into account the macroeconomic conditions and institutional constraints. In many LDCs the sequencing of reforms started with the opening up of the trade sector, in many cases, import liberalization.

Learning from East Asian cases, it is acknowledged that the Asian economies during the 1980-90 adjustment period liberalized in a gradual manner, retaining considerable control over resource allocation during the process. They undertook a controlled process of opening up, accompanied by a strategy of industrial restructuring and upgrading, rather than a rapid, indiscriminate and sweeping exposure to international market forces. The speed of liberalization was based on a realistic, detailed and differentiated assessment of which activities were internationally viable in the medium term, with the process geared to the learning and relearning needs of various activities. The model of adjustment placed strong pressures on industries to invest in building up new capabilities to face the import and export competition within a limited period. The strategy was generally developed in collaboration with the industrial sector, and pre-announced so that enterprises had time to adjust. The gradual approach for reforms is recommended for LDCs; however, this does not imply the slowing down of reforms but rather that more preparations are needed for some reform policies to be effective, given the peculiarity of the initial conditions, capabilities, market size, geographical location and infrastructure of a particular country.

to be linked with monetary and fiscal policies in a way that will harmoniously enhance both macroeconomic stabilization objectives and manufacturing competitiveness. In cases where manufacturers are adversely affected, as in many LDCs, special assistance has to be carefully designed and executed to cushion the manufacturers, especially the small to medium sized ones. In Tanzania, for instance, micro-enterprises and SMIs have benefited from informal finance and a variety of credit shop schemes but the provision of micro-finance has yet to be adequately institutionalized to cope with the emerging demands in the reform period.

The recent experiences of LDCs indicate that macroeconomic reforms do not automatically lead to economic regeneration. However, a stable macro-economic framework, along with policies to correct market failures, can augment growth and enhance efficiency.

3.1.2 Trade liberalization

The experience of the LDCs reveals no clear and systematic association between trade liberalization and manufacturing competitiveness. In fact, a number of countries that undertook substantial liberalization and devaluation experienced falls in industrial output and increased concentration on production and exports of primary commodities. In a limited number of countries where exports of manufactures expanded significantly, the expansion was seldom accompanied by establishment or expansion of supply capacity in modern industries. Trade liberalization has instead exposed many industries to intense competition, at times too soon. In some cases, manufacturing competitiveness has increased especially with those industries which could compete by changing their production structures aided by external borrowing. To enhance manufacturing competitiveness in LDCs, trade liberalization policies need to be accompanied by supply side measures to develop skills, capabilities and technical support. Policies to upgrade skills, technical information and technological support should interface with trade liberalization policies to enhance manufacturing competitiveness of LDCs.

Differential impact of trade liberalization policies is evident in many LDCs. For these reasons, the analysis of the degree, spread, effectiveness and credibility of the trade liberalization is often very difficult (Lall, 1996). The degree of import liberalization in Kenya, Tanzania and Zimbabwe has varied considerably, as has the governments' commitment to the adjustment process. The technological response to liberalization has been rather mixed. As may be expected, weak firms responded by moving out of the manufacturing sector, or by cutting down their technological activities. This is particularly the case with many Tanzanian firms. Among the more efficient firms (the larger ones in Kenya and Zimbabwe), the response to liberalization has been more positive.

The case of Tanzania may be used here for illustrative purposes. In a recent study of 46 engineering and 15 clothing firms in Tanzania, preliminary results indicate that responses to improved trade liberalization were limited.⁸

Only 11 percent of the sample engineering firms upgraded technology by investing in new and fairly sophisticated equipment. Apparently for these firms, improved access to foreign exchange during economic reforms was an opportunity to invest in improved technology. Around 35 percent of the sample engineering firms made some replacement investment which did not involve more sophisticated technology. Over 50 percent of engineering firms remained technologically stagnant. Around 55 percent of the sample engineering firms introduced new products during economic reforms largely as one response to import competition in existing product lines. In many cases, however, the move was down rather than up the technology ladder i.e., they produced lower quality and cheaper products. Only 15 percent of the engineering firms increased the number of graduate engineers they employed and only 30 percent provided some form of systematic training of the workforce. The majority of the firms undertook little training of any type and did not show awareness of their skill deficiencies.

In relative terms, the study found that while the engineering firms had faced some direct import competition, the clothing industry faced a more rapid exposure to import competition. The extent of technology and skill upgrading in the engineering industry was limited but the situation in the clothing industry was far more bleak.

There is a need of revisiting the incentive structure in LDCs that is relevant for industrial development and which is linked to their competitiveness. Industries need to be nurtured to build capabilities. For instance, industries with sophisticated technologies which require a long, risky and costly learning process, are associated with significant market failures in the capability development process. Some protection is therefore needed for broad-based industrial development. Again, efficient industrial policy requires that protection be limited in extent and duration and its deleterious effects be offset by measures to encourage firms to invest in developing their technological capabilities. This is more likely to occur in situations where firms are exposed to export markets than in situations where firms are confined to protected domestic markets.

⁸ The study was carried out in 1995/1996 by the ESRF in collaboration with UNU-INTECH and Oxford University (Queen Elizabeth House/QEH). The complete report is in the process of being published in a volume to be edited by Sanjay Lall.

3.1.3 Exchange rate policies

The consequences of exchange rate adjustment for manufacturing competitiveness is not clear-cut. In the case of manufactured exports, their high import content implies that with devaluation import costs become prohibitive. Foreign exchange constraints will usually result in strangling industries which are dependent on imported inputs. Substantial devaluation in some countries was associated with so much volatility in the real exchange rate that it exacerbated rather than reversed capital flight and deterred exports and investments, since relative prices and returns on long term investment could not be predicted by entrepreneurs with certainty. This has generated observations that price stability is a prerequisite for the use of the exchange rate as a signalling device for private sector investment decisions.

3.1.4 Relative prices

In the LDC economies which were operating under administrative controls and price controls, the relative price structures did not reflect relative scarcities or costs of production. The result of the fixed relative prices was inefficiency as there was no incentive to cut down costs. Furthermore, the controlled exchange rate had adverse effects on exportables. The overvalued exchange rate also encouraged investments in capital intensive industries as capital was also artificially cheap. Decades of bureaucratic allocation of resources created serious distortions, relative prices diverged from market patterns, and this meant considerable explicit or implicit subsidies among sectors. With large state ownership, enterprises lacked the defined property rights that spur work effort and profit making in market economies. Reforms were aimed at correcting these distortions in relative prices and giving the correct price signals to efficient resource allocation. Though these measures to correct relative prices for efficient allocation of resources are necessary for the manufacturing sector to enhance efficient resource allocation, the experience of many reforming countries has shown that they are not sufficient

While the relative prices have changed to reflect market forces more accurately, there are several reasons why manufacturing competitiveness has not been significantly realized. First, imported inputs and exportable local inputs have become more expensive, pushing up the cost of production. Second, rewards to labour have not increased commensurate with the increases in other prices. This has damped workers' morale, a situation which has not been conducive to enhancing productivity. Third, reforms in relative prices in LDCs have not always been linked with conscious policies to increase appropriate skills of workers through training. It has been argued by, for example, Pack (1993), that while industrial productivity (in LDCs) might be improved by a typical macroeconomic cum liberalization policy package, the magnitude of the gain is not likely to be particularly large given the scarcity of experienced industrial managers and the paucity of general industrial experience. Investments in creating or improving technological and managerial skills have not been stimulated sufficiently.

3.1.5 Investment

Investment normally flows to where it receives the highest returns. In the past in most LDCs, investments were mostly carried out by the government or parastatals. There was thus investment in sectors which were less productive. Investment is crucial in manufacturing sector competitiveness as it permits firms to access modern technology to produce quality products which can compete in the domestic and export markets. With reforms, many LDCs have instituted investment laws and procedures to encourage investment and therefore competitiveness.

The level of investment in many LDCs is still low and trends over time show that in many countries, growth in investment has been low or negative. Some countries have their level of investment as low as 10 percent of GDP or less (e.g. Zaire, Niger, Chad and Lao Peoples Republic), while in other countries such levels are as high as over 50 percent of the GDP (Lesotho, Maldives, Sao Tome and Principe and Tuvalu) during 1990-1993. Many countries are experiencing negative annual growth rates of investment as shown in Table A.3 in Appendix A.

Since LDCs are in their early stages of manufacturing development, they are more susceptible to failures in both product and factor markets that lead to distortions for allocation of investment among competing activities. Industrial progress in LDCs depends essentially on how well firms manage the complex process of technological development. Issues of technological development should mean efficiency in the use of the existing technologies and build up of capacity to adopt the newer ones. This can take place with an understanding that the process of capability development may face various market failures.

3.1.6 Infrastructure

Apparently, infrastructure plays a crucial role in enhancing manufacturing competitiveness. One of the glaring characteristics of many LDCs is the underdeveloped infrastructure. Lack of adequate infrastructure hinders effective communication within and among the countries, preventing swift movement of factors and products. Poor infrastructure also increases the cost of manufacturing in the LDCs and it reduces investible capital flows to these countries, factors which directly lower efficiency and competitiveness. For many years, many manufacturers in LDCs (particularly those with significant public sector development in the economy) survived with the poor infrastructure given the generous subsidies from the government.

Lack of progress in establishing necessary physical infrastructure in LDCs continues to be a major handicap to providing the required services needed to support the expansion of the production base and the commercial sector in the LDCs. Insufficient physical infrastructure, particularly road transport and communications, is more evident in land-locked and island LDCs. Despite efforts to expand the road network in many LDCs, lack of adequate and effective maintenance of a significant part of the existing infrastructure is pertinent. Growth performance in the rail transport sector has been even more sluggish and the problem is compounded by lack of equipment and efficient management.

Inadequate communication systems in LDCs are a major bottleneck to providing required services to other sectors of the economy, particularly the commercial sector. The international community should support arrangements to help LDCs to benefit from the rapidly growing telecommunications technology. Joint maintenance facilities at the sub-regional level are even more imperative.

3.1.7 Privatization

Parastatals were a significant feature in many LDCs (see Table 3 in Section 2.2.5). Parastatals normally enjoyed soft budget constraints from governments that made them operate inefficiently and at high costs, thus uncompetitively. The reforms have addressed these issues and divestitures are being undertaken together with privatization of most of these parastatals. Privatization is expected to improve efficiency and thus competitiveness. Some of the divested firms which were formerly state owned have started to exhibit major improvements in terms of efficiency, new investments, productivity, profitability and managerial and technological upgrading (e.g. the Tanzania Breweries Ltd.). However, privatization may not be the only viable option and solution for this purpose. Complementary and supplementary supportive mechanisms to privatization are rather needed to enhance skills and technological advancement necessary for manufacturing competitiveness. The government can mobilize its own resources or induce mobilization of resources of the private sectors through appropriate policies such as moderate taxation to ensure that the private sector is not only the lead sector, but also advanced and able to compete in the international arena.

3.1.8 Social policies

Social policies are important in enhancing manufacturing competitiveness because policies such as education and health, are important in building human resources and skills. In many LDCs the economic crises preceding reforms implied significant reductions in health and education budgets. This had serious consequences for the quality and quantity of government social service provisions at all levels. Investments in human capital have important positive externalities, which impinge on productivity, higher wages, and therefore on an increase in the aggregate demand for manufactures. Lack of qualified personnel may result in firms continuing to use relatively backward technologies which have potential negative impact on cost and ability to export. The transfer of modern technology depends by and large on the capacity of the labour force to manage such technologies.

3.2 Industrial Policy Sub-Areas for Manufacturing Competitiveness

3.2.1 Human resource development

The relationship between the lagging industrial development of LDCs and their relatively weak base of human capital has been noted. While the importance of skills to industrial competitiveness is universally recognized, the LDCs have not adequately included it in policy discussions. SAPs in LDCs do not seem to address skill shortages, albeit that many industries might become competitive if their human resources were improved. The design of SAP should therefore include education and training as an integral part of the restructuring process.

The importance of firm-led training has also been noted and emphasized (Wangwe, 1995).⁹ Investment in training has been shown to be an important factor in influencing competitiveness of most exporting firms in LDCs. Many successful exporting firms had elaborate training programmes, but appropriate local training institutions for specific skills are limited. Human resource development is very instrumental in enhancing competitiveness at the level of firms and industries. It is in this area that government should pledge to take a lead since industrial demands for higher educational levels will have to be met by further investments in education.

3.2.2 Technology development

One of the major constraining factors for dynamism of industrial development for manufacturing competitiveness in the LDCs is their low level of technology development. Apart from skill development, the development of science and technology (S&T) infrastructure and the provision of technical extension services to industry enhances technological capability. Requirements of quality control have changed significantly in LDCs, and international trade in manufactured products increasingly requires stringent proofs of quality management.¹⁰ A concerted effort is needed by the governments of LDCs to strengthen standards, to provide support to firms to obtain quality certification; and encourage firms (through policy) to invest in this process. Not much of this is happening in most LDCs, and SAP packages make no explicit provision for it.

As for technical extension services, most of the existing ones are largely ineffective in provision of requisite inputs to firms to sharpen their competitive edge. LDCs manufacturing is identified with minimal in-house R&D activities because of the limited skills and resources. So little also is the interaction between the industrial sector and technology infrastructure/parks to provide a base for R&D and to support firms technically. Such R&D and technological support institutions are fragmented, poorly funded and ill-equipped with unmotivated staff. Thus, they do not aggressively

⁹ See pp. 96-98.

¹⁰ For instance the ISO 9000 standards in the EU are becoming an important requirement for exporting industrial products. A coherent policy to promote ISO 9000 requires expensive training.

assist firms to attain competitiveness. The challenge is how these institutions can be restructured and revamped to adequately support the process of restructuring manufacturing firms towards attaining greater competitiveness.

3.2.3 Entrepreneurship and SMIs

There is an economic rationale for increased measures to promote SMIs in LDCs. Measures need to be initiated to attract informal sector activities to the formal sector in order to strengthen the linkages between the two.¹¹ This points further to the fact that paucity of entrepreneurial, managerial and technical skills is a major endowment-related constraint on LDCs' manufacturing competitiveness. The challenge is how various stakeholders can appropriately intervene in the skill market to promote broad-based entrepreneurial (medium level) personnel. As part of the supply side measures the existing training centres/institutions may be rationalized, modernized and decentralized towards client satisfaction, higher quality, cost efficiency and rural based enterprises. In this respect, to enhance manufacturing competitiveness, skill development measures should be an integral part of manufacturing policy.

Another aspect of entrepreneurial development for the manufacturing sector is inter-sectoral and networking linkages in firms. LDCs are characterized by few manufacturing linkages and weak sub-sector linkages largely because of the paucity of locally produced intermediate goods. Except for a small number of sub contracting arrangements (e.g. knitting and shoe manufacturing firms in Lesotho and the garment industry in Bangladesh), forward and backward linkages are limited. Nevertheless, linkages between manufacturing and other sectors (e.g. agriculture, mining, utilities, construction, trade, services, and transport) seem to be relatively more developed. Regression for 44 LDCs for the 1985-1988 period shows that linkages to trade and services are important determinants of manufacturing growth (UNIDO, 1993b). However, there has been little policy effort to encourage the development of sectoral linkages and firm networks.

¹¹ Such measures include, from the demand side, selective product reservation schemes (restricting entry for particular SMIs), encouraging subcontracting culture, sales promotion and techniques and supply side measures such as targeting fiscal and financial instruments to promote SMI (access to credit for SMI, tax holidays for new enterprises, simplified tax collection procedures etc); deliberate allocation of foreign exchange to meet import commitments of SMI, provision of infrastructure and other support services such as technical upgrading, research and development etc and finally providing entrepreneurial and vocational training facilities.

3.2.4 Special regimes

A regional focus

There are three major and important regions in LDCs, namely, African, Asian and Pacific Islands LDCs. Each of these regions has salient characteristics of socio-economic development with some implications on attainment of sustainable manufacturing competitiveness.

(a) African LDCs

Economic conditions in African LDCs as a whole have been more depressed than in any of the other two regions. The impact of civil conflicts and political instability in several African LDCs and the unfavorable weather conditions have adversely affected the agricultural sector. This region is also diversely endowed with minerals in addition to the agricultural resources as mentioned in earlier section 2, but these have yet to be exploited effectively. The continent is shown to have also been adversely affected by changes in world market prices and terms of trade of the major primary commodities. Economic reforms which have been adopted in the 1980s have started to show positive results. A number of LDCs in this group have attained reasonable levels of per capita growth rates including *inter alia* Benin, Botswana, Cape Verde, Guinea, Uganda and Tanzania. In many respects the conditions for developing a competitive manufacturing sector are being put in place. However, almost a quarter of the African LDCs are still beset with political instability and armed conflicts. Besides the human tragedy in Rwanda, destructive effects of civil war have been considerable in Liberia, Somalia, Sudan, Burundi, Sierra Leone and Zaïre.

(b) Asian LDCs

There are significant variations in the economic performance of Asian LDCs, but the general performance of their economies is better than that of African LDCs with some countries attaining GDP growth rate above five percent in 1994 (UNCTAD, 1995). Countries in this group pursued various adjustment and reform policies of which fiscal measures have been the most remarkable. In some countries, exchange rate reforms and trade liberalization led to a shift in the product composition of exports towards more manufactured goods. Many Asian LDCs have taken serious measures to attract investment through fiscal and non fiscal incentives particularly in the export oriented activities. Their proximity with some of the most dynamic economies of the world is proving to be helpful. The challenge is whether these countries can develop a viable and competitive manufacturing sector given their small size and distance from the main markets.

(c) Pacific Island LDCs and Haiti

Pacific LDCs are small (in size and population), generally consisting of remote and scattered islands, which makes them susceptible to climatic conditions and changes. Frequent cyclones disrupt the economic gains and involve high rehabilitation costs. Manufacturing is generally limited and is restricted to processing of agricultural products with the exception of Solomon Island. Invisible earnings are an important source of foreign exchange earnings in almost all Pacific LDCs. While the countries are giving renewed emphasis to the development of fishing, tourism has become a major foreign exchange earner in recent years and has become a source of employment in countries such as Samoa and Vanuatu. Governments are funding road construction and promoting private sector investment through tax incentives for hotels and reserve development.

3.2.5 Regional cooperation

The need for regional cooperation among and within the LDCs cannot be overemphasized, particularly to countries that have small internal markets. There is a need for serious reassessment of the viability of small scale import substitution and a need to invoke regional cooperation and regional trade as a strategy for tapping economies of scale and attaining international competitiveness. Regional cooperation has to be advocated in promoting intra-regional trade by removal of tariff and non tariff barriers to trade and establishment of basic and supportive infrastructure, e.g., transport and communication services. The benefits accruing from regional cooperation, e.g., in setting up supportive systems for technology and training, would greatly relieve the pressure on individual governments and allow diffusion of knowledge and experiences. Thus, economies of scale will be realizable and competitiveness of the manufacturing sector will be improved within the locality, region and beyond. However, there is a great problem of lack of information on potential networks in the region. There is thus a great need to overcome this information market failure.

SADC (*Southern African Development Community*) for instance follows a development approach in its areas of cooperation.¹² SADC can be said to have been successful in mobilizing external financing resources for its projects and programmes. It has also recorded reasonable success in the fields of agriculture, energy, transport and communication. SADC has, however, not been very successful in mobilizing resources from within the region. This situation puts into question the sustainability of the envisaged long term programmes. SADC has embarked on a big sensitization programme to attract businessmen and women and industrialists of the region to invest in Southern

¹² The areas of cooperation are mainly, food security to achieve sustainable food production, infrastructure and services such as railways, roads, civil aviation and ports; industry and trade for greater movement of goods and services by removal of trade barriers and human resource development through measures to support science and technology. Others include natural resources and environment, energy, social welfare and diplomacy by advocating peace and harmony in the region.

African countries. The South African industrialists are expected to inject more viable investments into the region following the recent entry of South Africa into SADC.

Trade should be accompanied by investment flows which should be encouraged by the creation of guarantee mechanisms for cross-border investments. Appropriate investment mechanisms should be put in place incorporating some elements of a "regional policy" which would be designed to influence, through incentives, the allocation and location of investment even at the cost of some loss from the full benefits of integration.

Within the broader context of forging inter-firm linkages and cooperation arrangements, special attention will need to be paid to the possibilities of promoting investments by Transnational Corporations (TNCs) not only from developed countries but also from countries in the region and from other developing countries. There is evidence that TNCs from developing countries can also have capabilities to share with other developing countries in ways which have not been effectively utilized.

Many studies have also shown that adaptations have been made by developing countries' firms with respect to characteristics of raw materials (type, quality and input-mix), scaling down, product quality and product mix, simplicity, capacity and factor intensity. These firms have tended to produce simpler, lower technology products, low-cost products which have required little marketing ability to sell in world markets, have had a higher propensity to form joint ventures with local firms, have used more local human resources and raw materials and often they have down-scaled imported technologies. It has been pointed out in a case study of an Indian joint venture in Thailand that being themselves in a learning stage, developing country firms transfer not only the know-how but also the know-why (UNESCAP, 1990). One reason why this occurs is that developing country TNCs often set up overseas enterprises using machinery imported from the developed countries. This necessitates adaptation of this machinery to local conditions on the site of the host country thus providing it with the opportunity to learn by doing. This would imply that developing country TNCs are more skilled in specific technology adaptations, and therefore they transfer those skills. To the extent that developing country firms are also associated with the ability to design smaller size plants for small market segments, it seems reasonable to expect such flexible technologies to be more appropriate for small and segmented markets. Through these various forms of learning, adapting and modifying imported technologies, the TNCs from developing countries have acquired unique technological capabilities and can carry out these and related activities quite efficiently.

However, various obstacles inhibit further South-South technological cooperation: lack of information, inadequate institutional frameworks and economic and legal barriers. There is a need for a shift in trade policy in the direction of improved South-South trading infrastructure; liberalization of intra-south trade restrictions; forging organizational ties to enhance the exploitation of economies of specialization; and creating an effective and innovative capacity for more efficient and appropriate processes and products.

Promotion of South-South inter-firm linkages and cooperation arrangements should be viewed as complementary to the kinds of benefits which can be obtained from inter-firm networks and cooperation arrangements with TNCs from the North and not necessarily as substitutes. The Abuja declaration on the establishment of the African Economic Community is an encouraging step. Its implementation, however, should first involve taking steps towards establishing the institutional framework to spearhead the development of these kinds of inter-firm linkages and cooperation arrangements not only within Africa but between Africa and other regions.

The approach towards regional cooperation will need to take on board the experiences gained in the past and the current shifts in market and technological conditions in the national and world economy. At the national level, the policy shifts towards the market and private sector development will need to be reflected in regional cooperation arrangements. At the international level, the globalization process and its formalization through the establishment of the World Trade Organization has important implications on designs of regional cooperation.

These developments at national and international level imply that regional cooperation arrangements will need to:

- proceed on a multi-speed basis with several local points;
- be based on the market and engage in public intervention in policy formulation with a view to creating a regional policy environment that will facilitate market-based integration;
- allow greater room for private sector involvement consistent with the shift towards private sector led development at national level;
- permit systematic regional policy coordination to minimize inter-state conflicting policy reforms and harmonize various national policies;
- cope with the WTO provisions for reduced trade barriers and make regional integration arrangements more open and outward looking; and
- invoke cooperation in production and delivery of services, and promote joint investments and collaboration in technology development efforts, with a view to enhancing international competitiveness.

3.2.6 Sectoral focus

The manufacturing sector in the LDCs is identified with the dominance of two consumer oriented sub-sectors, namely food processing and textiles and clothing. These sub-sectors command the lion's share (accounting for two thirds) of the manufacturing value added in LDCs. Food processing alone accounts for nearly half of the total MVA in LDCs. For instance, in Burkina Faso, Burundi, Central African Republic, Sudan and Yemen, this sub-sector alone accounts for 60 percent of their respective MVAs, while in Ethiopia, Gambia, Togo, Zaïre and Zambia it is over 40 percent. Textiles and clothing (including garments and leather) is a sub-sector close to final demand, with few backward and forward linkages with other sectors. The relative importance of this sub-sector also varies among the LDCs. In Bangladesh, Madagascar and Mali, for instance, textiles represent the largest manufacturing activity, while for Ethiopia and Tanzania it accounts for almost 20 percent of the total MVA compared to the small contribution of the sector in such countries as Central African Republic contributing 2.1 percent, and Yemen, four percent. Another sub-sector of considerable importance in the LDCs is the chemicals sub-sector that accounts for around 20 percent, followed by the metal and non-metal sub-sectors (especially in Ethiopia and Yemen). In five LDCs (Mali, Sudan, Tanzania, Yemen and Zaïre), machinery and equipment contribute at least eight percent to their respective MVA (UNIDO, 1993a).

Thus overall, the sub-sectoral distribution of MVA points towards a concentration of manufacturing in a few activities that are close to the final demand. Lack of dispersing of MVA across a wide range of manufacturing activities indicates that LDCs have made only limited progress towards diversifying their manufacturing bases. The countries with highly skewed manufacturing sectors were Burundi, Guinea, Lesotho, Mauritania, and Sierra Leone (UNIDO, 1993a). On the other hand, a few other countries (e.g. Bangladesh, Haiti, Malawi, Uganda and Tanzania) made some strides to diversify their manufacturing base. However, studies (UNCTAD, 1995) have shown that some countries such as Burundi and Lesotho experienced strong MVA growth regardless of lack of diversification in their economies. Another issue points to the smallness of the manufacturing base itself within the LDCs where manufacturing is carried on by a handful of enterprises.¹³

In addition, such sub-sectors as garment making and design, wood-working, food processing and metal working are considered a potential for LDCs to form the dynamic edge of industrial growth (ADB, 1996).

¹³ In such a situation an entry or closure of one enterprise has significant bearing on the diversification of the sector. An example of this is that of a closure of a single textile factory in Central Africa which led to a virtual disappearance of this sub-sector's contribution of more than 30 percent to the overall MVA in the early 1980s (UNCTAD, 1995).

3.2.7 Wages and productivity

The gross indicator/measure of productivity may be taken to be the value-added per employee. Using UNIDO data, the non-adjusting countries continue to perform poorly with productivity and wages declining over the 1980-90 period. Others had performed better with the highest rate of increase in wages and productivity. Analysts have invariably associated productivity to capacity utilization as well. Data on manufacturing capacity utilization in LDCs at sectoral, sub-sectoral and plant level are somewhat missing and incomplete (UNCTAD, 1995). The report attributes the low level of Manufacturing Capacity Utilization (MCU) to a number of factors including: policy related factors, management inadequacies, rent-seeking tendencies and limited impact of reforms. Policy measures to promote and advocate quality need to be adopted as an integral component of industrial policy.

3.2.8 Quality, the regional regime and standards

The unfolding competition intensified by trade liberalization implies that regional markets can be retained basically on grounds of international competitiveness. Quality is an important element of competitiveness which deserves greater attention in the emerging competitive environment. Opportunities in the regional markets have been tapped on the basis of product quality and appropriateness to the specific conditions in the region. For instance, Zimbabwean firms exporting agricultural machinery had developed products which suited the soils and climatic conditions in the region. Their competitiveness in this case is attributed to many years of continuous investment in researching and learning through their R&D activities (Ndlela and Robinson, 1995). Another observation is that quality of products that has underlined genesis of firms' competitiveness has been a result of initiative to copy from imports in the initial years; and was demand driven. Quality control is one of the basic aspects of S&T infrastructure whose requirements have changed to be more stringent particularly in the case of manufactured products. The whole of low income Africa, for instance, has less than 10 ISO 9000 certificates, while Singapore alone has over 550 million showing how competitively disadvantaged industries in Africa are (ADB, 1995). The promotion of ISO 9000 quality assurance standards is becoming a major objective of standard bodies in many LDC's but achievements so far are uneven.

3.2.9 Specialization, competition and economies of scale

The degree of specialization at firm level is usually a function of the size and stability of the targeted markets and the supply conditions. A study of 55 exporting firms in Africa found that firms which targeted the export market from the outset tended to be more specialized than those which were primarily catering for the domestic market (Wangwe, 1995). For instance, in the case of the Tanzania garment sub-sector, the newly established firms producing for the export market have tended to specialize in a narrower product range and have invariably concentrated in the external market only,

possibly a single buyer.¹⁴ The earlier study of 55 firms identified the lack of specialization in the manufacturing industry of LDCs as one factor which inhibited attainment of international competitiveness (Wangwe, 1995). Specialization has a necessary implication for product quality hence competitiveness. The challenge is how these observations can be translated into reality by appropriately utilizing opportunities for specialization and tapping economies of scale through regional cooperation arrangements.

3.2.10 Exports

The strength of the export sector in LDCs is crucial to the overall performance of their economies and in propelling manufacturing competitiveness. The growth of exports of LDCs as a group has been at best moderate and in many cases stagnant in recent years. In 1990-93 it was merely 0.2 percent compared with the average of 0.8 percent during the 1980s and over 10 percent during the 1970s. The purchasing power of exports of LDCs and their share in the world exports have been declining. This dismal performance implies that reforms in many LDCs have not succeeded in augmenting the manufacturing sector growth for the supply of tradeable goods. Export diversification to include a significant share of manufactured exports has been emphasized in recent studies (see also the action programme for the 1990s in UNCTAD). This is explained by the remarkably little progress by LDCs in establishing viable non-traditional export industries.

The benefits accruing from the reform policies, notably exchange rate devaluation and trade policy reforms, have, significantly, been confined only to producers of primary products (traditional exports). Policy measures during reforms have given little attention to export diversification beyond putting in place an improved macroeconomic policy framework. Complementary policy measures to address critical supply constraints to the growth of non-traditional exports have not been given adequate attention in the formulation of policy reform programmes.

See, for details, Semboja and Kweka, J., "Import Liberalization, Industrialization and Technological Capability in SSA, The Case of the Garment Industry in Tanzania", ESRF Research Paper (forthcoming).

4.0 FACTORS ACCOUNTING FOR THE EFFECTIVENESS OF POLICY IMPLEMENTATION

In order for the implementation of various policies that influence manufacturing competitiveness to be effective in LDCs, there are a number of factors which need to be taken into account by the governments. The recent experience of development and policy implementation in LDCs suggests that the following influences deserve attention: institutional constraints, drags from previous regimes and resistance to change, learning by doing in policy reform, limitations in administrative capacity and managerial cadre, exogenous constraints and the influence of globalization and information technology. This section is concluded with some reflections on some recent changes in the approach to policy formulation which are likely to have important implications on designing policies for manufacturing competitiveness.

4.1 Institutional Constraints

In order for policies which enhance manufacturing competitiveness to be effective, institutions in LDCs have to be transformed to be able to assume new roles and face new challenges. A reformed legal framework is needed that can provide investors (domestic and foreign) with a stable and predictable economic and political environment which is legally backed and that ensures confidence. This discussion implies that the need for institutional reforms in LDCs is even more imperative. Since after economic reforms government objectives and modalities have changed, it is necessary to change the implementing institutions that were created in the old policy environment. A change in government bureaucracies is needed, likewise changes in corporate structures that allow companies to meet the challenge of changing market conditions in a competitive way. Good governance and political stability are instrumental in stimulating investment and production.¹⁵

4.2 Drags from the Previous Regimes

There are problems in LDCs that are deeply embedded in their economic and political structures and in attitudes carried over from the previous regimes. The previous regimes were characterized by bureaucracies which hindered the smooth workings of economic activities and efficient utilization of resources. Institutional reforms cannot be complete without inculcating a new kind of thinking and way of doing things which is commensurate with the new socio-economic and political conditions. This emphasizes the importance of change of attitudes and behavioural codes of stakeholders in the previous regime to fit into the new environment.

¹⁵ Legal reforms in LDCs are another important underpinning for the envisaged improvement in economic performance, especially in inducing investors and entrepreneurs. Without some realistic expectation that the legal system is sufficiently insulated from the locus of political authority, investors will consider the risk of legal conflict exceptionally high.

4.3 Difficulties Related to Learning by Doing

Learning by doing in policy formulation will enable the countries in question to be able to wisely prioritize their needs, and in the case of industrial policy, to better design sustainable policies to enhance skills and local entrepreneurship, thus contributing to manufacturing competitiveness. Many firms in LDCs lack the knowledge, time and resources to identify their technological needs. They often seek assistance to resolve most of the pertinent issues underlying their own development. There is little effort to learn systematically from past experiences and from the experience of other countries.

4.4 Inadequacy in the Administrative Capacity and Managerial Personnel

In many of the LDCs which undertook reforms, one of the biggest factors adversely affecting the effectiveness of the policy changes is the lack of adequate administrative and managerial personnel to steer the economies away from the working of the old regimes to the new ones. The obstacles of human capacities including managerial and entrepreneurial deficiencies is manifested in the lack of adequate response to new investment and trade opportunities. To ensure manufacturing competitiveness in this era of globalization, managers in the enterprises have to be equipped with knowledge and expertise to manage in a new market and technology environment whereby competitiveness, flexibility and adaptation to new situations are more important now than in the past.

4.5 Resistance to Change by the Economic Agents

The importance of governance in the context of policies, strategies and instruments concerning the manufacturing sector arises from a number of considerations. First, the discretionary use of promotional instruments may give rise to rent-seeking behaviour. Second, there is a need for government intervention to shift its thrust from regulation to promotion. Third, administrative efficiency, accountability and transparency are of critical importance for the success of policy implementation and instruments thereof. The long history of protection and dictatorial regimes combined with rent-seeking behaviours is associated with interests in society which tend to strive to safeguard such behaviours.

4.6 Exogenous Constraints

LDCs mainly depend on primary commodities for which there are generally declining market prospects. Structural impediments increase the susceptibility of these economies to external shocks at the same time as they limit their capacity to adjust. The lack of well developed irrigation systems means that agriculture, being the mainstay of LDCs' economies, is mostly rain-fed and therefore highly vulnerable to variations in weather conditions. In addition, the monoculture nature of these economies renders them susceptible to terms of trade shocks transmitted by the world economy.

Regarding the outcome of the Uruguay Round, a major concern for LDCs is that they will suffer erosion of preferential margins on most of their important exports to major markets, implying a loss of comparative advantage and a loss in export market shares. Debt also poses a big problem for LDCs which are trying to invest in enhancement of manufacturing competitiveness as it reduces the resources available to these countries for investment in appropriate technologies and R&D activities.

4.7. The Information Technology Gap

The increased globalization and intensification of competition in world trade has resulted not only from liberalization of trade policies but also from major advances in communication, transport, and storage technologies. The thrust of these developments has been to transform the traditional organization of production and marketing to one focused on the management of logistics with the objective of achieving cost savings in inventory and working capital and allowing for rapid responses to changing consumer demands. But the gap between LDCs and developed countries in the advances in information technologies is wide and it is going to be wider if the trend of LDCs investment in this area is not altered. For example, Africa, where most of the LDCs are situated, has startlingly low figures of expenditure in computers, which for instance in 1988 averaged 0.34 percent of GDP, compared with 1.4 percent in Italy and 2.5 percent in the USA. One reason for this is lack of qualified personnel to man and maintain computer equipment. Firms are reluctant to invest in such a technology if they do not have a reasonable assurance that the equipment can contribute to labour productivity and can be reasonably well maintained.

4.8. Changing Policy Formulation Approaches for Manufacturing Competitiveness

The environment in which policies have to be made is undergoing a continuous and rapid process of change. Recently, however, these changes have been more rapid and more far reaching. Individually and interactively, these changes are necessitating the need to review the way in which individuals and institutions carry out their activities and businesses. This presents enormous challenges to be faced as individuals and institutions alike devise mechanisms and build the capacity to cope with an increasingly dynamic environment.

The demand for more informed, more participatory and more precise policy making has increased in the past one and a half decades. The domain of economic management has expanded to encompass, more rigorously, the demands for continued macroeconomic stability, better supply response and enhanced efficiency of resource use. The dual transitional processes of economic and political liberalization have not only generated their own high demands for changes in the way the LDCs are doing business; further complications have arisen from the effect of the interactions of the two processes. Five main recent developments which have influenced the conduct of policy formulation analysis and implementation and economic management can be identified:

- The transition from controlled and interventionist to more open and market-oriented economies.

- The transition from closed political regimes operating along patron-client networks to more open and liberalized political systems which allow for a more explicit articulation of interests of various groups in society.
- The donor attitude has increasingly changed towards promoting the recipient ownership of policies and development strategies as one way of enhancing aid effectiveness, broad based accountability and transparency of policy action.
- The influence of the media has increased considerably in bringing up policy issues to the public domain and enhancing the public scrutiny of policy performance.
- Challenges from the changing world market conditions and rapid technological advances have intensified.

Political changes have emerged in the form of democratization and political liberalization. Various groups in the society have greater freedom to articulate their positions on various issues and hence make an impact on policy analysis and the policy making process. Under the new multiparty politics in many LDCs various political parties are free to articulate a variety of positions and policies. In addition, various social groups such as the private sector, the civil society, youths and women are better placed to articulate their interests. This has been accentuated by the significant increase in freedom of the press which has facilitated an increase in the involvement of the media in the process of bringing policy issues to the public domain thus enhancing public awareness and facilitating greater public scrutiny of policy performance. It is becoming politically more risky and costly to make policy mistakes and to ignore the views of these groups which are slowly but surely gaining the strength and ground to impact the policy making process. It is becoming increasingly clear that, in this new socio-political environment, policy making is no longer the monopoly of the government. Greater attention is being paid to devising the most appropriate ways through which all actors can be given the opportunity to present their views on policy proposals so that they can be incorporated in the policy making process. In the case of Tanzania, for instance, the role of the business community in policy formulation has increased considerably in the 1990s. In 1994 the Confederation of Tanzania Industries (CTI) submitted an Industrial Policy proposal to the government.¹⁶ Subsequent initiatives by the government to formulate an industrial policy took into account the proposals from CTI, and in various stages of formulating the policies the business community was consulted by the government. In another important policy area, that is, the budget, the business community submitted their inputs into the 1996/97 budget. Some of their proposals were incorporated in the budget, and during 1996 and 1997 consultations have continued between the government and the business community on matters of fiscal policy. Similar consultations are found in several other countries (e.g. Ghana and Uganda). These developments indicate that there is greater room now for various stakeholders to express their interests in policy making processes in LDCs.

¹⁶ See, CTI. Sustainable Industrial Development Policy.

This section

they have not featured in discussion on economic policy reforms. Yet existing manufacturing industries might become competitive if their human resources were improved (ADB, 1995). The design of economic policy reforms should therefore include education and training for capability development as a policy priority. Furthermore, policy emphasis points to the role of firm-led training as a potential measure for enhancing technological capability for competitiveness. This emphasis may eventually lead to gradual opening up to international competition given selective policies to develop skills in the areas of competitive advantage.

Development of the industrial sector and realization of sustainable manufacturing competitiveness requires policies to address the long standing impeding structural constraints such as infrastructural problems. This points to the need for policy priorities to focus on the improvement of existing physical infrastructure and on investment in new infrastructure with potential to realize the envisaged backward and forward industrial linkages. Measures to resolve transportation and telecommunication problems, including public utilities, should be emphasized.

The development of S&T infrastructure and the provision of technical extension services to industry especially SMI should be an important agenda in enhancing technology development. A recent report has correctly stressed that in the African LDCs, the great shortage of experienced trainers for staff and management of the industrial training system is the first bottleneck that governments should address in the context of economic reforms (ADB, 1995; Lall, 1996). Much more pressing is the need for greater emphasis on technology and technological capability development in LDCs' manufacturing sector. The need to promote investments in technology improvements should be emphasized. Access to new and emerging technology should be enhanced by deliberate government policies, particularly in those areas with potential for economies of scale.

Based on UNIDO's taxonomy of policies for manufacturing competitiveness, the policy priorities of the LDCs for manufacturing competitiveness can be categorized into firm level, sub-sector specific and industry wide policies. Industry level policies have been put in place in many reforming countries and notable improvements have been made. Sub-sector specific policies and firm level policies have not been put in place. Thus investments in technology (hardware, training or organization) have not been stimulated through policy. This is an area where the real challenge lies i.e. to put in place policies which can stimulate firm level and sub-sector level responses and stimulate investments in technology in ways which enhance international competitiveness.

6.0 SUMMARY AND CONCLUSIONS

This report has covered an overview on key issues and challenges pertaining to policies for manufacturing competitiveness in Less Developed Countries (LDCs). By classification, the LDCs are countries with low growth rates and low levels of development in other important sectors. We have shown in the report that these countries have implemented far reaching reforms, but the pace, extent, sequence and thrust of these reforms have differed and varied remarkably between countries and regions. However, the report has earmarked key differences and commonalities within LDCs which are explained largely by the quality and quantity of resource endowment among these countries and which account for their notable differences in the levels of socio-economic development. The report has shown that such differences have implications concerning the extent and ability to attain manufacturing competitiveness. The outcome is influenced by the current policy stance in these countries and the extent to which industrial policy is effective in interfacing favourably with other macro, sectoral and institutional policies.

Manufacturing sectors responded differently to the reform policies and the report discusses areas where implementation has not been adequate for enhancing competitiveness. It has been shown that LDCs have other persistent and recurring problems such as structural rigidities, lack of adequate infrastructure, inadequate finance, insufficient managerial capabilities and skills, problems whose solution will ensure sustained manufacturing competitiveness in the LDCs. Such constraints have rendered the LDCs least competitive in the world market and backward in industrial development.

The list of structural and framework factors by UNIDO sheds further light on this and specifically points to the serious missing links in the LDCs which are essentially a result of the structural rigidities in their economies. For instance, governance in these countries has been weak and unpredictable thus eroding confidence in the legal and regulatory system. Such weaknesses have the effect of eroding the credibility of the macroeconomic policy (due to impotent monetary policy and ineffective fiscal policy) and eventually limiting the efficacy of complementary policy measures (characterized by, for instance, unregulated trade policy, inconsistent privatization programmes) and the price system (exchange rate, interest rate etc). Policies from the past regimes still linger on and hamper the smooth implementation of policy reforms which could ensure manufacturing competitiveness.

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PPENDIX A: TABLES

able A.1: Per Capita GDP and Population: Levels and Growth

Country	Per Capita GDP in US \$		Annual Average Growth Rates of Per Capita Real GDP (%)		Population		
					Level	Annual Average Growth Rates (%)	
	1980	1993	1970-1980	1980-1993	1993	1970-1980	1980-1993
Afghanistan	765	522	0.8	-1.7	17.7	1.8	0.4
Bangladesh	162	215	-0.5	2.2	115	2.9	2
Benin	442	425	-0.3	-0.3	5.1	2.5	3
Bhutan	79	139	..	4.6	1.6	2	2.1
Botswana	1358	2862	10.5	5.9	1.4	3.6	3.4
Burkina Faso	256	288	2.2	0.9	9.8	2.3	2.6
Burundi	141	163	2.9	1.1	6	1.6	3
Cambodia	..	199	..	..	9.7	-0.9	3.2
Cape Verde	576	878	2.1	3.3	0.4	0.7	1.9
Central African Rep.	464	391	0	-1.3	3.2	2.3	2.4
Chad	134	199	-2.9	3.1	6	2.1	2.2
Comoros	484	408	-4.2	-1.3	0.6	3.4	3.6
Djibouti	1740	834	-3.4	-6.1	0.6	6.6	5.7
Equatorial Guinea	509	413		-1.6	0.4	-3.5	4.2
Ethiopia	83	68	0	-1.5	51.9	2.4	2.8
Gambia	682	491	2.2	-0.6	1	3.3	3.9
Guinea	682	491	3	-2.5	6.3	1.3	2.7
Guinea-Bissau	183	231	-2	1.8	1	4.5	1.9
Haiti	699	464	2	-2.9	6.9	1.7	2
Kiribati	551	447	-1.7	-1.5	0.1	1.7	2.2
Laos	226	289	-1.7	1.9	4.6	1.6	2.9
Lesotho	301	380	7.1	1.8	1.9	2.3	2.9
Liberia	771	479	-0.8	-3.9	2.8	3.1	3.2
Madagascar	333	243	-2.2	-2.4	13.9	2.8	3.3
Malawi	238	193	2.7	-1.6	10.5	3.2	4.4
Maldives	297	770	10.9	7.6	0.2	3.2	3.2
Mali	263	263	2.6	0	10.1	2.2	3.1
Mauritania	490	447	-1.2	-0.7	2.2	2.4	2.6
Mozambique	93	93	-4.9	0	15.1	2.6	1.5
Myanmar	1060	906	2.3	-1.2	44.6	2.2	2.2

Nepal	115	154	0	2.3	20.8	2.6	2.6
Niger	430	260	-2.3	-3.8	8.6	3	3.3
Rwanda	260	211	1.4	-1.6	7.6	3.3	3
Samoa	887	899	..	0.3	0.2	0.9	0.3
Sao Tome & Principal	275	313	3.1	1	0.1	2.6	2.3
Sierra Leone	196	170	-0.7	-1.1	4.3	2	2.2
Solomon Islands	502	692	2.4	2.6	0.4	3.5	3.5
Somalia	142	133	1.3	-0.6	9	3.5	2.2
Sudan	438	355	2.1	-1.8	26.6	3.1	2.8
Togo	441	326	1.4	-2.3	3.9	2.5	3.1
Tuvalu	..	1236	..	..	0	4	1.3
Uganda	162	202	-5.2	1.7	19.9	2.9	3.3
Tanzania	100	101	0	0	28	3.1	3.2
Vanuatu	1104	1163	..	0.4	0.2	3	2.5
Yemen	..	956	..	..	13.2	2.7	3.5
Zaire	342	221	-3.2	-2.8	41.2	2.9	3.3
Zambia	501	356	-1.7	-2.6	8.9	3.2	3.5
All LDCs	328	307	-0.4	-0.5	554	2.6	2.7

Source: UNCTAD (1995), The Least Developed Countries 1995 Report.

Table A.2: The Manufacturing Sector : Annual Average Growth Rates and Shares in GDP

Country	Share in GDP		Annual Average Growth Rates						
			In Percent						
	Average		1970	1980	1988	1989	1990	1991	1992
	1980	1993	1980	1993	1989	1990	1991	1992	1993
Afghanistan									
Bangladesh	11.0	9.0	5.1	3.4	2.8	7.2	2.4	7.3	8.0
Benin	8.0	8.0	3.7	5.0	1.2	8.9	2.0		
Burkina Faso	13.0	13.0	4.1	3.1	8.0	8.0	3.2	6.8	1.0
Burundi	7.0	11.0	3.8	5.2	-2.1	9.6	4.2	5.6	-3.1
Bhutan	3.0	9.0		13.2	16.2	16.5	13.5	15.0	
Botswana	4.0	5.0	22.9	8.8	5.4	4.8	6.6	6.4	5.0
Cambodia	10.0	5.0		5.9	13.9	-4.3	6.8	3.2	7.9
Cape Verde									
Central African Republic									
Chad	17.0	16.0		2.6	30.3	7.9	-18.00	-6.6	-3.0
Comoros	4.0	4.0	-4.9	4.5	1.3	5.2	1.8	5.6	3.6
Djibouti	5.0	5.0	6.3	1.5					
Equatorial Guinea	5.0	11.0		-10.9	2.4	-1.7	10.2	6.2	10.0
Ethiopia	11.0	8.0	2.5	0.7	1.9	-3.8	-18.77	-10.0	21.9
Gambia	7.0	7.0							
Guinea	3.0	5.0	1.6	-1.1	5.0	9.4	3.2	3.8	5.0
Guinea-Bissau	12.0	11.0		2.2	1.2				
Haiti			8.5	-2.1	1.6				
Kiribati	2.0	2.0		-0.9	2.5	-2.3	-1.2	0.1	
Lao People's Dem. Rep.	10.0	13.0		12.4	39.5	15.5	29.7	9.4	7.7
Lesotho	7.0	16.0	18.0	12.2	13.9	-3.9	9.2	15.1	5.0
Liberia	8.0	8.0	7.0	-2.9	-8.2				
Madagascar									
Malawi	12.0	13.0	8.0	3.9	8.5	11.3	3.0	3.0	-1.0
Maldives	4.0	5.0		11.3	10.5	15.4	10.0	8.7	9.5
Mali	4.0	9.0							
Mauritania	13.0	12.0		-0.6	-2.9	-8.4	6.2	11.1	6.2
Mozambique									
Myanmar	10.0	8.0	4.2	0.2	11.3	0.1	-4.1	13.7	7.3
Nepal	4.0	8.0							

Niger	4.0	7.0							
Rwanda	15.0	16.0	4.9	1.6	0.4	-4.0	-2.2	3.2	
Samoa	6.0	11.0							
Sao Tome and Principe									
Sierra Leone	6.0	5.0	-2.1	-4.6	-10.00	5.0	-20.77	-2.0	
Solomon Islands	4.0	3.0		3.6	2.3		1.1		
Somalia	5.0	5.0	-0.3	-1.7	-20.00				
Sudan	7.0	9.0	3.9	3.6	0.7	5.0	6.5		
Togo	8.0	7.0	0.5	1.2	16.7	13.7	5.5	-9.8	-40.8
Tuvalu	-2.0	5.0		7.9	-2.1	8.1	14.7	8.3	5.8
Uganda	4.0	5.0		5.7	10.8	1.6	12.7	3.6	3.7
United Rep. of Tanz	11.0	5.0	13.3	0.5	7.7	-2.5	12.0	1.9	
Vanuatu	4.0	6.0		14.9	13.2	12.5			
Yemen	12.0	11.0				-12.22	-0.5		
Zaire	14.0	8.0	56.1		-4.1	-14.66	-21.55		
Zambia	18.0	26.0	2.4	4.4	-0.5	7.8		5.6	5.8
All LDCs	10.0	9.0	7.7	1.6	1.0	-0.5	-4.0	3.7	4.1

Source : UNCTAD secretariat calculations based on data from the United Nations Statistical Office, the World Bank, the Asian Development Bank and other international and national sources

Table A.3: Investment : Annual Average Growth Rates and Shares in GDP

Country	Share in GDP		Annual Average Growth Rates						
	Average		1970	1980	1988	1989	1990	1991	1992
	1980	1990							
	1989	1993	1980	1993	1989	1990	1991	1992	1993
Afghanistan									
Bangladesh		12.0	4.8	1.6	3.6	2.6	-9.1	8.7	8.8
Benin		14.0	11.4	-3.0	-18.0	18.1	-0.7	15.1	13.2
Bhutan	37.0	35.0		7.6					
Botswana	27.0	36.0	6.9	6.6	112.9				
Burkina Faso	20.0	21.0	4.4	7.9	3.9	11.0	35.3	-12.5	3.5
Burundi	17.0	14.0	16.3	3.1	12.5	1.5	2.6	8.2	5.3
Cambodia	10.0	11.0		5.0	26.8	-23.5	22.0	11.3	4.0
Cape Verde	45.0	33.0	14.4	-0.4	-5.6	5.4		21.1	
Central African Republic	11.0	11.0	-9.7	0.6	-8.3	9.4	-3.6	-7.1	-30.5
Chad	7.0	9.0		12.7	15.6	11.2	-9.1	-1.7	2.2
Comoros	27.0	18.0	-1.0	-5.2	-15.5	4.6	-30.3	40.7	-22.6
Djibouti	21.0	17.0	-1.4	-5.3	18.0	-10.2			
Equatorial Guinea	19.0	29.0							
Ethiopia	13.0	12.0							
Gambia	19.0	20.0	31.4	1.4	23.3	-4.2	2.4		
Guinea	15.0	17.0	-0.9	-0.7	-0.2	18.0	-7.4	8.2	7.5
Guinea-Bissau	29.0	25.0	-1.7	5.8	33.3	-27.2	100.4	26.7	-41.0
Haiti	14.0	11.0	13.7	-4.0	-1.0	1.8	-8.0	-22.3	
Kiribati	55.0	67.0							
Lao People's	9.0	13.0		-1.1	11.2	2.5	10.7		
Lesotho	47.0	72.0	23.4	9.4	48.8	23.7	1.2	7.3	7.3
Liberia	13.0	15.2	-16.7						
Madagascar	11.0	12.0	0.4	2.5	4.8	28.0	-56.6	45.5	9.9
Malawi	19.0	18.0	4.2	-2.2	14.2	6.5	39.0	-17.9	-17.7
Mali	19.0	22.0	3.3	6.9	5.9	13.5	-0.2	11.1	2.0
Maldives	44.0	64.0		18.0	24.8	13.9	49.6		
Mauritania	30.0	21.0	8.3	-2.7	-30.8	5.8	-7.7	27.7	15.3
Mozambique	20.0	39.0	-7.1	3.3	7.3	8.5	2.5	-9.6	10.0
Myanmar	15.0	14.0	8.0	-1.0	-0.7	29.1	15.9	2.5	-5.5

Niger	4.0	7.0							
Rwanda	15.0	16.0	4.9	1.6	0.4	-4.0	-2.2	3.2	
Samoa	6.0	11.0							
Sao Tome and Principe									
Sierra Leone	6.0	5.0	-2.1	-4.6	-10.00	5.0	-20.77	-2.0	
Solomon Islands	4.0	3.0		3.6	2.3		1.1		
Somalia	5.0	5.0	-0.3	-1.7	-20.00				
Sudan	7.0	9.0	3.9	3.6	0.7	5.0	6.5		
Togo	8.0	7.0	0.5	1.2	16.7	13.7	5.5	-9.8	-40.8
Tuvalu	-2.0	5.0		7.9	-2.1	8.1	14.7	8.3	5.8
Uganda	4.0	5.0		5.7	10.8	1.6	12.7	3.6	3.7
United Rep. of Tanz	11.0	5.0	13.3	0.5	7.7	-2.5	12.0	1.9	
Vanuatu	4.0	6.0		14.9	13.2	12.5			
Yemen	12.0	11.0				-12.22	-0.5		
Zaire	14.0	8.0	56.1		-4.1	-14.66	-21.55		
Zambia	18.0	26.0	2.4	4.4	-0.5	7.8		5.6	5.8
All LDCs	10.0	9.0	7.7	1.6	1.0	-0.5	-4.0	3.7	4.1

Source : UNCTAD secretariat calculations based on data from the United Nations Statistical Office, the World Bank, the Asian Development Bank and other international and national sources

Table A.5: Main Markets for Export of LDCs : Percentage shares in 1993 (or latest year available)

Country	Developed Market Economy Countries					Countries in Eastern Europe	China	Developing Countries			Other and Unallocated
	Total	EEC	Japan	USA and Canada	Others			Total	OPEC	Other	
Afghanistan	5.2	4.1	0.1	0.2	0.7	71.7	0.2	13.1	0.4	12.8	9.8
Bangladesh	78.7	38.6	2.5	35.3	2.2	2.1	0.3	18.1	2.5	15.5	0.8
Benin	53.8	31.0	0.7	10.3	11.7			46.2	2.8	43.4	
Bhutan								98.3		98.3	1.7
Botswana	93.9	3.3		0.3	90.3			6.1		6.1	
Burkina Faso	13.8	12.6	0.9		0.4	69.9		16.1	0.2	15.9	0.2
Burundi	79.2	48.8	0.8	2.4	27.2			17.6		17.6	3.2
Cambodia	29.4	19.9	5.7	3.8				66.6	0.6	66.0	3.9
Cape Verde	83.3	66.7			16.7			16.7		16.7	
Central African Republic	73.5	72.1	0.7	0.7				26.5	6.6	19.9	
Chad	78.4	74.3	4.1					20.3		20.3	1.4
Comoros	40.7	24.1		16.7				59.3		59.3	
Djibouti	4.5	4.5						95.5		95.5	
Equatorial Guinea	100.0	66.7	22.2	11.1							
Ethiopia	85.8	45.9	17.1	10.6	12.2			13.0	7.3	5.7	1.2
Gambia	85.5	57.9	22.0	5.7				13.8		13.8	0.6
Guinea	56.2	40.2	0.4	14.2	1.4	0.1	2.1	41.6	0.1	41.5	
Guinea-Bissau	58.8	52.9	2.9		2.9		2.9	38.2		38.2	
Haiti	98.9	11.4	1.1	84.6	1.7			1.1		1.1	
Kiribati	82.8	19.8	49.4	13.0	0.6			17.2		17.2	
Lao People's Dem. Rep.	49.3	31.6	8.1	6.6	2.9	0.7	2.2	47.8		47.8	
Lesotho	99.2	22.7		26.8	49.7			0.8		0.8	

POLICIES FOR MANUFACTURING COMPETITIVENESS: OVERVIEW FOR LEAST DEVELOPED COUNTRIES (LDCs)

Liberia	77.1	71.1		0.5	5.5		0.8	22.1	1.5	20.6	
Madagascar	77.5	61.7	6.7	7.1	2.0	3.6		18.6	0.8	17.8	0.4
Malawi	82.3	35.1	13.7	17.4	16.0	2.9		14.9		14.9	
Maldives	63.6	25.8	1.5	34.8	1.5		1.5	34.8		34.8	
Mali	37.7	34.3	1.3	1.3	0.8			61.8	8.9	53.0	0.4
Mauritania	86.4	59.5	25.2	1.6				12.9		12.9	0.7
Mozambique	58.5	40.1	8.3	6.5	3.7	1.8	2.8	33.6	3.7	30.0	3.2
Myanmar	22.4	6.6	7.8	6.1	1.8		18.1	59.0	2.2	56.9	0.5
Nepal	87.4	53.2	1.0	26.7	6.4		0.5	12.1		12.1	
Niger	63.3	57.9	0.4	5.0				35.8	2.5	33.3	0.8
Rwanda	74.5	68.1		4.3	2.1			13.8		13.8	11.7
Samoa	83.3			16.7	66.7			16.7		16.7	
Sao Tome and Principe	87.5	75.0		12.5				12.5		12.5	
Sierra Leone	76.2	51.5	0.4	22.5	1.8			1.8		1.8	22.0
Solomon Islands	80.9	13.0	63.4	2.3	2.3			19.1		19.1	
Somalia	7.6	6.8			0.8		0.8	91.5	70.3	21.2	
Sudan	52.0	38.6	9.1	3.1	1.1	-0.6		47.4	19.7	27.7	
Togo	38.1	18.8		13.7	5.6	3.0	0.5	58.4	7.1	51.3	
Tuvalu	63.5	5.8		55.8	1.9			32.7		32.7	3.8
Uganda	85.1	68.7	2.2	10.4	3.7	0.7		14.2	1.5	12.7	
United Republic of Ta	60.6	47.4	8.1	3.1	2.0		0.2	39.2	4.6	34.6	
Vanuatu	87.0	34.8	26.1	17.4	8.7			13.0		12.0	
Yemen	70.9	43.2	14.3	6.1	7.2	0.1	6.4	21.0	1.7	19.3	1.6
Zaire	92.2	60.7	5.3	22.8	3.5		0.3	7.5	0.2	7.3	
Zambia	42.6	19.1	18.4	3.6	1.4	0.1	1.0	56.3	7.3	49.0	
All LDCs	69.6	32.8	6.5	12.5	17.9	2.3	1.4	25.9	3.0	22.9	0.8
All Developing countries	56.1	20.0	10.2	22.6	3.4	1.4	5.7	36.8	36.8	32.5	

Source : IMF, Direction of Trade Statistics Year book 1994, and other international and national sources.

Table A.6: Distribution of Financial Flows to LDCs and to All Developing Countries : In Percentages

	To Least Developed Countries									
	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
Concessional loans and grants of which:	99.6	92.6	97.2	101.7	101.7	96.0	99.5	93.9	102.1	98.3
DAC	75.1	77.3	82.4	86.7	90.0	88.3	94.4	89.2	96.7	97.4
- Bilateral	47.1	46.8	51.2	55.6	55.8	57.4	55.8	53.9	55.6	54.2
- Multilateral	28.0	30.5	31.2	31.1	34.2	30.9	38.6	35.3	41.1	43.2
- Grants	53.4	53.8	60.4	60.8	58.4	61.4	65.8	64.6	76.6	73.5
- Loans	21.7	23.5	22.0	25.9	31.6	26.9	28.6	24.6	20.2	24.0
- Technical assistance	21.3	19.8	20.7	21.5	20.3	20.7	22.1	19.3	21.8	22.0
- Other	53.8	57.5	61.7	65.2	69.7	67.6	72.3	69.9	75.0	75.4
OPEC	12.5	7.0	6.6	5.7	4.4	1.3	1.3	3.1	3.6	0.5
- Bilateral	10.5	6.0	5.9	5.0	3.9	1.2	1.2	3.1	3.6	0.5
- Multilateral	2.0	1.0	0.7	0.7	0.5	0.2	0.1			
- Grants	4.4	4.4	4.2	3.3	3.3	0.9	0.6	2.8	3.2	0.3
- Loans	8.1	2.6	2.5	2.4	1.1	0.4	0.6	0.3	0.4	0.1
Non-concessional flows of which	0.4	7.4	2.8	-1.7	-1.7	4.0	0.5	6.1	-2.1	1.7
DAC	0.4	7.6	2.7	-1.6	-1.6	4.2	0.7	6.0	-2.2	1.9
- Bilateral Official	4.1	12.2	4.3	3.9	3.5	3.0	0.7	3.4	0.9	1.0
- Multilateral	1.4	1.0	2.6	0.8	0.6	0.3		0.3	-1.3	-0.2
- Export Credits	-4.7	-6.3	-3.7	-5.4	-4.2	-2.7	-1.0	-2.2	-1.8	-0.7
- Direct Investment	1.0	-0.4	-0.8	-1.1	1.0	2.2	5.1	2.6	1.7	0.7
- Other	-1.4	1.1	0.4	0.3	-2.5	1.4	-4.2	1.9	-1.6	1.1
Total Financial Flows	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source : IMF, Direction of Trade Statistics Year book 1994, and other international and national sources.

Table A.7: Shares of LDCs in Financial Flows to All Developing Countries : In Percentages

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Concessional loans and grants of which:	31.2	29.3	32.5	32.4	33	32.8	31.8	29.4	27.7	29.9	30.3
DAC	29.9	30.2	32.8	33.3	33.6	33.5	32.4	31.7	27.9	30.2	30.5
- Bilateral	27	25.9	28.7	29.1	28	29.4	26.5	26	2.2	23.8	24.7
- Multilateral	36.7	40.5	42.8	4.9	49.8	45.2	47.5	47.5	42.7	45.7	44
- Grants	31.5	29.9	32.9	32.5	31	31.9	31	30	28.4	29.8	30.1
- Loans	26.6	30.9	32.4	35.4	39.9	37.5	36.1	37.5	26.2	31.5	31.8
- Technical assistance	26.3	25.2	27.3	27.3	24.8	25.1	25.8	23.5	22.6	22	21.7
- Other	31.6	32.5	35.2	35.9	37.5	37.3	35.1	35.1	29.9	33.9	34.9
OPEC	27.2	17.4	22.7	16.7	19.6	10.1	12.3	9.3	23.8	9.2	..
- Bilateral	24.8	15.4	21.2	15.3	7.8	9.2	12.3	9.2	25.4	12.1	..
- Multilateral	56.5	65.6	56.6	55.2	91.6	39.5	2.1	18.3	-	2.4	..
- Grants	14.3	12.3	16.3	10.9	14.9	6.5	6.2	8.3	19.6	7.7	..
- Loans	53	53.3	68.3	63.3	-	-	-	-	-	-	18
Non-concessional flows of which	-	1.5	2.5	-	-	2.3	.2	5.1	-	0.6	..
DAC	0.1	1.5	2.5	-	-	2.5	0.3	5.1	-	0.7	..
- Bilateral Official	11	22.5	12.5	18.5	9.7	7.7	2.4	8.2	2.3	2.2	..

- Multilateral	1.8	1.2	3.8	1.2	0.2	0.9	-	0.6			
- Export Credits	-	-	-	33.6	17.2	10.4	-	21.3	64.6	10.7	
- Direct Investment	1	-	-	-	0.8	1.6	3	1.8	1.2	0.5	
- Other	-	0.5	-	0.3	5.6	-	18.6	-	9.5	1.6	
Total Financial Flows	13.4	12.2	24.3	17.5	22	21.6	17.7	22.8	17.7	16.5	

Note : No percentage is shown when either the net flow of all LDCs or the net flow to all developing countries in a particular year is negative.

Source : IMF, Direction of Trade Statistics Year book 1994, and other international and national sources.

Table A.8: Debt and Debt Service Ratios: In Percentages

Country	Debt / GDP										
	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
Afghanistan	91	122	97	62	76	90	91	66	65	100	110
Bangladesh	38	45	41	43	51	57	58	52	54	53	55
Benin	50	66	60	74	71	71	51	78	75	74	65
Bhutan	2	1	3	5	10	16	32	28	30	37	33
Botswana	35	34	28	39	45	45	30	21	18	17	16
Burkina Faso	28	34	38	44	39	40	37	42	43	42	42
Burundi	27	31	37	41	48	70	76	80	89	92	105
Cambodia	55	50	41	38	37	49	64	99	108	89	89
Cape Verde	67	85	75	101	87	80	61	61	55	51	46
Central African Republic	36	42	42	50	45	59	58	60	66	74	69
Chad	28	29	24	24	28	37	34	43	47	53	59
Comoros	75	78	97	118	101	102	94	101	86	84	79
Djibouti	15	20	43	70	62	73	65	53	50	49	49
Equatorial Guinea	172	164	87	139	151	145	134	159	169	177	161
Ethiopia	60	73	70	86	92	115	121	117	124	125	178
Gambi	87	87	107	91	96	160	127	105	122	112	123
Guinea	97	87	80	99	84	94	88	87	90	86	96
Guinea-Bissau	105	103	187	241	177	302	290	299	245	267	288
Haiti	40	43	37	36	32	40	39	37	31	30	24
Kiribati	29	29	28	46	48	71	42	46	47	44	47
Lao People's Dem. Rep.	375	219	61	48	67	129	248	200	185	177	167
Lesotho	42	44	49	69	70	70	65	67	78	72	95
Liberia	83	116	118	128	147	167	150	135	142	138	131
Madagascar	47	56	62	75	81	126	132	144	125	143	123

Malawi	80	79	75	91	96	113	101	87	84	76	92
Maldives	101	122	107	70	71	78	61	54	61	56	75
Mali	70	91	106	116	101	103	107	110	106	117	102
Mauritania	155	175	188	215	217	211	205	197	205	181	171
Mozambique	87	105	107	101	138	378	387	369	359	385	387
Myanmar	34	37	37	43	43	42	38	24	20	18	14
Nepal	15	19	18	24	29	38	40	46	53	57	66
Niger	45	54	70	86	78	74	74	77	73	71	72
Rwanda	16	17	1	21	23	29	29	31	35	54	58
Samoa	59	70	74	84	81	78	55	56	64	79	80
Sao Tome and Principe	167	212	256	247	165	215	229	302	302	318	414
Sierra Leone	42	42	58	48	41	128	58	70	83	104	110
Solomon Islands	196	40	76	184	85	80	57	55	72	96	89
Somalia	50	80	58	85	117	143	131	200	208	213	204
Sudan	71	84	81	93	100	87	90	69	47	26	114
Togo	130	123	126	127	102	104	90	97	91	86	89
Tuvalu		1	3	3	3	8	2	5	11		266
Uganda	43	42	35	28	26	31	31	39	66	86	85
United Republic of Tanzania	43	49	50	49	76	128	129	153	200	160	206
Vanuatu	14	76	75	108	156	140	157	181	199	161	143
Yemen	65	74	73	83	96	125	135	139	121	102	89
Zaire	37	51	63	81	87	114	99	105	119	117	106
Zambia	90	122	143	201	302	276	148	138	147	161	163
All LDCs	53	63	62	68	75	87	83	77	73	65	76

Source : UNCTAD secretariat, mainly based on information from the OECD secretariat.

Table A.9: Indicators on Area and Population

	Area			Population				
	Total (000sq. km)	% of arable land and land under permanent crops	Density 1993	Total 1993	Urban 1993	Activity Rate 1985 - 1990		
						M	F	T
Afghanistan	652.1	12.4	27	17.7	19	53	5	30
Bangladesh	144	64.8	800	115.2	18	52	4	29
Benin	112.6	16.7	45	5.1	40	50	43	46
Bhutan	47	2.9	34	1.6	6	58	30	44
Botswana	581.7	2	2	1.4	27	45	23	33
Burkina Faso	274	13	36	9.8	17	57	48	53
Burundi	27.8	48.9	216	6	6	56	48	52
Cambodia	181	13.3	53	9.7	12	56	35	46
Cape Verde	4	11.2	92	.4	30	58	21	38
Central African Republic	623	3.2	5	3.2	48	53	42	48
Chad	1284	2.5	5	6	34	56	14	35
Comoros	2.2	44.8	272	.6	28	54	36	45
Djibouti	23.2		24	.6	81			
Equatorial Guinea	28.1	8.2	14	.4	29	51	32	41
Ethiopia	1221.9	11.4	42	51.9	13	53	32	42
Gambia	11.3	15.9	92	1	23	56	37	46
Guinea	245.9	3	26	6.3	27	55	35	45
Guinea-Bissau	36.1	9.4	28	1	21	56	37	46

Haiti	27.8	32.8	248	6.9	30	49	34	42
Kiribati	0.7	50.7	107	1	36			
Lao People's Dem. Rep.	236.8	3.4	19	4.6	20	53	43	48
Lesotho	30.4	10.5	64	1.9	21	55	39	47
Liberia	111.4	3.8	26	2.8	47	50	21	35
Madagascar	587	5.3	24	13.9	25	53	34	43
Malawi	118.5	14.4	89	10.5	12	51	35	43
Maldives	0.3	10	800	.2	29			
Mali	1240.2	1.8	8	10.1	25	54	10	32
Mauritania	1025.5	.2	2	2.2	49	48	14	31
Mozambique	801.6	4	19	15.1	30	56	50	53
Myanmar	676.6	14.8	66	44.6	25	56	33	45
Nepal	140.8	16.7	148	20.8	12	54	29	42
Niger	1267	2.9	7	8.6	21	55	47	51
Rwanda	26.3	44.4	287	7.6	6	52	46	49
Sao Tomé and Príncipe	2.8	43.0	59	2	22			
Sao Tome and Principe	1	38.5	132	1	42			
Sierra Leone	71.7	7.5	60	4.3	34	50	23	36
Solomon Islands	28.9	2	12	.4	16			
Somalia	637.7	1.6	14	9.	25	52	32	41
Sudan	2505.8	5.2	11	26.6	23	51	14	32
Togo	56.8	11.8	68	3.9	29	52	29	41

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Tuvalu	0		356	0				
Uganda	241	28.7	83	19.9	12	52	36	44
United Republic of Tanzania	883.7	3.7	32	28	22	49	44	47
Vanuatu	12.2	11.8	13	.2	19			
Yemen	528	2.8	25	13.2	31	45	6	25
Zaire	2344.9	3.4	18	41.2	28	49	26	38
Zambia	752.6	7.0	12	8.9	42	48	19	33
All LDCs	19858	6.0	27	543.6	21	52	25	39
All Developing Countries	666788.6	10.1	45	3001.4	38	53	21	38

Source : UNCTAD secretariat, mainly based on information from the OECD secretariat, the World Bank and IMF.

Note: Debt and debt service are defined as in Table A8.

Table A.10: Indicators on Communication and Media

Country	Post Offices Open to the Public per 100,00 inhabitants				Telephones per 1000 inhabitants		Radio Receivers per 1000 inhabitants		Circulation of daily newspapers per 1000 inhabitants	
	Total		Of which: Urban dont:		1980	1992	1980	1991	1980	1990
	1980	1992	1980	1992						
Afghanistan		2.3		0.5	1.7	2.3	75.0	107.0	6.0	11.0
Bangladesh	8.2	7.5	0.7	0.6	1.1	2.2	17.0	43.0	3.0	6.0
Benin		3.9		1.1	4.9	3.2	66.0	90.0	0.3	3.0
Bhutan	6.3	5.3		4.3		1.8	6.0	16.0		
Botswana	6.3	12.4	1.3	1.0	13.3	26.6	83.0	122.0	21.0	14.0
Burkina Faso	1.2	1.6	0.6		1.5	2.1	18.0	26.0	0.2	0.3
Burundi	0.4	0.6	0.0	0.3	1.3	2.3	39.0	60.0	0.2	4.0
Cambodia						0.6	92.0	112.0		
Cape Verde	18.7	16.2	7.1	4.3	5.7	31.4	142.0	164.0		
Central African Republic	3.0	1.8	0.2	1.9	2.1	1.7	52.0	68.0		0.7
Chad	0.5	1.4	0.1	0.6	1.5	0.7	168.0	243.0	0.2	0.3
Comoros		11.2		7.0	5.0	6.6	120.0	128.0		
Djibouti	1.6	1.8	0.3	0.6	16.8	14.5	69.0	86.0		
Equatorial Guinea	4.6	5.8	4.1	5.5		3.9	401.0	425.0	7.0	6.0
Ethiopia	1.1	1.0	0.1	0.9	2.3	2.3	77.0	189.0	1.0	0.8
Gambia					5.4	13.3	114.0	170.0		2.0
Guinea		1.3		0.7	1.9	1.6	30.0	42.0	5.0	2.0

Guinea-Bissau		2.5		2.5		7.1	31.0	40.0	8.0	6.0
Haiti		2.0		2.0		8.2	20.0	47.0	7.0	7.0
Kiribati		2.0		4.2	12.3	19.6	203.0	207.0		
Lao People's Dem. Rep.	2.1	2.9	2.9	2.6	2.1	1.5	109.0	125.0	4.0	3.0
Lesotho	9.2	7.9	0.8	1.1		6.9	25.0	32.0	33.0	11.0
Liberia	2.6	1.9	0.5	0.4		4.0	179.0	225.0	6.0	14.0
Madagascar	85.6	70.8	0.7	1.8	4.3	2.9	182.0	200.0	6.0	4.0
Malawi	3.9	3.6	0.6	0.5	5.2	3.3	42.0	220.0	3.0	3.0
Maldives	5.8	17.3	1.3	2.6	6.8	37.0	44.0	118.0	6.0	7.0
Mali	1.8	1.0	1.1	0.6		1.3	15.0	44.0	0.5	1.0
Mauritania	3.7	3.0	1.3	0.6	2.5	2.4	97.0	144.0		0.5
Mozambique	4.8	1.9	0.2	1.9	4.6	3.8	21.0	47.0	4.0	5.0
Myanmar	3.3	2.8	1.8	1.6	1.1	2.0	23.0	82.0	10.0	5.0
Nepal	9.6	21.2		0.9	1.0	3.3	20.0	33.0	8.0	8.0
Niger	2.6	3.7	0.4	0.6	1.6	1.2	45.0	60.0	0.5	0.6
Rwanda		0.6		0.2	0.9	1.7	34.0	64.0	0.1	0.1
Samoa		28.1		5.6	36.9	40.6	206.0	475.0		
Sao Tome and Principe		9.3		2.5	15.1	19.3	245.0	269.0		
Sierra Leone	3.3	2.0	1.7	0.9		3.2	138.0	223.0	3.0	2.0
Solomon Islands		34.5		2.7		13.8	88.0	119.0		
Somalia						2.0	17.0	37.0	0.9	1.0
Sudan	4.0	3.2	1.4	1.1	3.4	2.4	187.0	250.0	6.0	24.0
Togo		11.7		0.8	3.8	4.1	203.0	211.0	6.0	3.0

Tuvalu						14.4	206.0	229.0		
Uganda		1.9		0.5	3.6	1.5	30.0	109.0	2.0	2.0
United Republic of Tanzania	3.2	3.7		0.9	5.0	2.9	16.0	25.0	11.0	7.0
Vanuatu	5.3		1.8		23.2	18.6	198.0	300.0		
Yemen	2.4	3.6	1.6	1.8		11.4	29.0	27.0	12.0	12.0
Zaire	1.3	0.8	0.3	0.2	1.0	1.0	56.0	97.0	2.0	1.0
Zambia	7.0	5.9	1.0	1.2	10.7	8.8	24.0	81.0	19.0	12.0
All LDCs	6.8	6.1	0.7	0.9	2.4	3.1	52.0	95.0	5.0	6.0
All Developing Countries	13.1	12.6	1.9	2.3	20.8	32.6	115.0	175.0	36.0	62.0

Source: UNESCO, Statistical Yearbook 1993; Universal Postal Union; ITU, Statistical Yearbook 1992 and other international and national sources

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