# UNITED NATIONS CONFERENCE ON TRADE AND DEVELOPMENT Geneva

# THE LEAST DEVELOPED COUNTRIES REPORT 2004

Part Two: Chapter 2

THE POTENTIAL ROLE OF INTERNATIONAL TRADE IN POVERTY REDUCTION IN THE LDCs



# The Potential Role of International Trade in Poverty Reduction in the LDCs

# Chapter 2

# A. Introduction

This chapter and the next two apply the development approach outlined in the previous chapter to consider the relationship between trade and poverty in the least developed countries. The present chapter examines the role that international trade could play in poverty reduction in the LDCs, and identifies some of the key conditions for the realization of this role. The next two chapters consider how the trade–poverty relationship works in practice.

The chapter is organized into three sections. Section B examines the relationship between sustained economic growth and poverty reduction in the LDCs. Section C discusses the relationship between exports and economic growth in LDCs and identifies some of the conditions through which exports can lead to sustained economic growth. Section D identifies some of the conditions that must be fulfilled if exports are to lead to a form of economic growth which is poverty-reducing. The concluding section summarizes the main points of the argument.

The chapter builds on the empirical analysis in *The Least Developed Countries Report 2002*. A more detailed description of the nature of poverty in the LDCs and of the methodological issues are available there. Box 6 summarizes the approach of this Report to defining and measuring poverty.

The majority of the population lives at or below income levels sufficient to meet their basic needs...

# B. The importance of sustained economic growth for poverty reduction in the LDCs

## 1. THE NATURE OF POVERTY IN THE LDCs

The relationship between economic growth and poverty critically depends on the nature of poverty, the definition of the poverty line and the level of per capita income in a country. Using the \$1/day and \$2/day international poverty lines to identify the proportion of the population which are poor, it is clear that the key feature of poverty in the LDCs is that there is a generalized or mass poverty. The majority of the population lives at or below income levels which are sufficient to meet their basic needs. The available resources in the economy, even when equally distributed, are barely sufficient to cater for the basic needs of the population on a sustainable basis.

Table 25 shows our estimates of the incidence and depth of poverty during 1995–1999 in 39 LDCs for which data were available. At that time, 81 per cent of the population of the LDCs lived on less than \$2/day and 50 per cent on less than \$1/day (table 25). The average daily consumption of the \$2/day poor was only \$1.03, whilst the average daily consumption of the \$1/day poor was \$0.64

... and the available resources in the economy, even when equally distributed, are barely sufficient to cater for the basic needs of the population on a sustainable basis.

## BOX 6. THE MEANING AND MEASUREMENT OF POVERTY IN THIS REPORT

This Report follows the approach to defining and measuring poverty that was adopted in *The Least Developed Countries Report 2002*. The major, though not exclusive, focus is on poverty defined as the inability to attain a minimally adequate level of private consumption. The incidence of poverty and the depth of poverty are measured by the specification of a poverty line that represents, in monetary terms, the level of consumption that is regarded as minimally adequate. It includes both purchased goods and the imputed value of consumption from a household's own production. The incidence of poverty is calculated as the proportion of the total population living below the poverty line, i.e. on less than a minimally adequate amount. The depth of poverty is calculated by estimating, in monetary terms, the average level of income of the poor, namely those people living below the poverty line.

Within this consumption-based and money-metric approach, the choice of the poverty line is an important issue. The Report utilizes the \$1/day and \$2/day international poverty lines using purchasing power parity (PPP) exchange rates, which enable comparisons in levels of private consumption between countries. The \$1/day poverty line is a standard of extreme poverty that has become a focal concern for the international community through the Millennium Development Goals. The \$2/day standard is increasingly being used in international poverty comparisons because the \$1/day is most relevant for the poorest countries. The adoption of the \$1/day and \$2/day poverty lines in this Report does not imply that higher international poverty lines should be excluded in analysis of the trade–poverty relationship, particularly in more advanced developing countries.

One advantage of a focus on consumption poverty is that it is possible to build on past insights that link trade, economic growth and poverty. However, even with this relatively simple definition of poverty, a number of difficult issues arise in making precise poverty estimates. Critical methodological issues are: the specification of the purchasing power parity exchange rates which are used to make national consumption estimates internationally comparable; and discrepancies in estimates of average private consumption per capita derived from household surveys and national accounts.

The current state of global poverty monitoring can best be described as one of statistical turmoil. Firstly, the purchasing power parity exchange rates in the latest revision of the Penn World Tables (version 6.1) differ considerably from the PPP exchange rates that provided the basis for the original specification of the \$1/day international poverty line and from those used by the World Bank in its more recent global poverty estimates (Karshenas, 2004). Secondly, national-accounts estimates of the average level of private consumption per person differ from estimates of the average level of private consumption per person in household expenditure surveys. Poverty estimates which incorporate the national-accounts estimates suggest that global \$1/day poverty is lower in total than purely household-survey-based poverty estimates (see, for example, Bhalla, 2002). *The Least Developed Countries Report 2002* also found that the global distribution of poverty was different, with the current purely household-survey-based estimates underestimating the incidence and depth of poverty in the poorest countries, and particularly in Africa (UNCTAD, 2002).

Against this background of statistical turmoil, the present Report has not made any new poverty estimates for the LDCs. The estimates of the incidence and depth of poverty quoted in this Report are thus derived from the same database as that used for *The Least Developed Countries Report 2002*. These are national-accounts-based poverty estimates, which are calculated on the basis of average private consumption per capita as reported in the national accounts, and the distribution of private consumption as reported in household surveys. As this chapter indicates, there is a close relationship between average private consumption per capita and the incidence of \$1/day and \$2/day poverty in lower-income Asian and African countries. Thus chapter 3 also uses trends in private consumption per capita from the national accounts data as a proxy measure of trends in poverty (see box 8).

Some would argue that combining unadjusted national accounts estimates of average private consumption per capita with survey-based estimates of distribution "will certainly give poor measures of poverty" (Deaton, 2004: 38; see also Ravallion, 2003). However, this Report retains the view that both national-accounts-based and house-hold-survey-based statistics are flawed (see UNCTAD, 2002: 45–49) and that the national-accounts-based methodology used here provides "as plausible poverty estimates as purely household-survey-based estimates" (p. 47). This is partly for the arguments outlined therein, particularly in relation to the fact that household-survey methodology is less standardized internationally than national-accounts methodology. But in addition, it is clear that the biases in the household surveys are not simply a question of errors in the distribution of consumption, but more importantly they also relate to the level of consumption and questions of survey design and recall period.

The view that only household surveys would allow us to measure poverty renders analysis of the relationship between globalization, development and poverty in the LDCs impractical. In these circumstances, it is necessary to develop statistically sound methods to fill the data gaps.

### Box 6 (contd.)

What is necessary now is that the international community agree on a common set of best-practice protocols for household surveys, in order to increase the international comparability of these data (Deaton, 2004); and an effort is made to reconcile discrepancies between household surveys and national accounts estimates of private consumption (Pyatt, 2003). In the mean time more effort needs to be devoted to obtain poverty estimates which make full use of the information contained in both national accounts and household surveys (see Karshenas, 2004, for an attempt to create a unified framework). In the next LDC Report, this will be done.

Finally, it should be noted that consumption-based and money-metric approach to defining and measuring poverty adopted here is regarded as being complementary to, rather than superior or inferior to, other approaches that may be adopted within a general multidimensional view of poverty. Thus broader views of poverty, encompassing in particular access to health and education services and the question of food security, enter the discussion in this chapter.

(in 1985 purchasing power parity dollars). The incidence of poverty was particularly high in the African LDCs, where 65 per cent of the population was living on less than \$1/day in the second half of the 1990s. Even if total private consumption expenditure had been distributed equally amongst all the population in the African LDCs, the average daily consumption would still only have been \$1.01 per day. In the Asian LDCs, the situation was better. However, 68 per cent of the population was living on less than \$2/day in those countries during 1995–1999. If the total private consumption expenditure had been equally distributed amongst all the population in the Asian LDCs, their average private consumption would have been \$2.21 per day.

Associated with low levels of income and consumption there are human deprivations of all kinds. Daily existence is marked by hunger, seeing one's children die before they reach the age of five, long hours of drudgery, high levels of risk and uncertainty, a constant struggle for existence, little freedom of choice and, in the end, a short life.

TABLE 25. AVERAGE INCOME, PRIVATE CONSUMPTION AND THE INCIDENCE AND DEPTH OF POVERTY IN AFRICAN AND ASIAN LDCs and selected OECD countries, 1995–1999

	GDP per capita per day		Per capita private consumption per day						Percentage share of population	
			Total population		Poor (living below \$1 a day)		Poor (living below \$2 a day)		living on less than:	
	Current \$	1985 PPP \$	Current \$	1985 PPP \$	Current \$	1985 PPP \$	Current \$	1985 PPP \$	\$1 a day	\$2 a day
Weighted averages										
LDCs <sup>a</sup>	0.72	2.50	0.57	1.39	0.29	0.64	0.44	1.03	50.1	80.7
African LDCs	0.65	1.51	0.52	1.01	0.30	0.59	0.44	0.86	64.9	87.5
Asian LDCs	0.88	4.59	0.69	2.21	0.28	0.90	0.45	1.42	23.0	68.2
Selected OECD countries <sup>b</sup>				Poore	est 10%	Poore	est 20%			
United States	90.1	57.9	58.2	41.4	10.5	7.5	15.1	10.8		
Switzerland	99.3	44.6	61.9	28.2	16.1	7.3	21.4	9.7		
Sweden	73.8	43.7	37.3	23.5	13.8	8.3	17.9	10.8		
Japan	94.1	43.4	50.5	24.2	24.2	11.6	26.7	12.8		
France	66.9	41.9	36.7	25.4	10.3	7.0	13.2	9.0		
United Kingdom	66.4	41.6	43.7	29.9	11.4	7.4	14.4	9.4		

Source: UNCTAD (2002: 52, table 18).

- a Thirty-nine countries, including 4 island LDCs. For an exhaustive country list, see UNCTAD (2002: 57, table 19).
- b Data on individual OECD countries refer to 1998. The share of the bottom deciles in OECD countries is calculated by applying per capita consumption averages to decile income distribution.

In the majority of the LDCs, poverty is not only all-pervasive throughout society, but it has also been quite persistent. For the LDCs as a group, the proportion of the population living on less than \$1/day was about the same at the end of the 1990s as it was at the start of the decade (see UNCTAD, 2002: chapter 1).

# 2. THE RELATIONSHIP BETWEEN PRIVATE CONSUMPTION GROWTH AND POVERTY

In conditions of generalized poverty, there is a close relationship between the level of average private consumption expenditure per capita and the incidence of poverty...

In conditions of generalized poverty, there is a close relationship between the level of average private consumption expenditure per capita and the incidence of poverty. This is shown by the poverty curves in chart 9, which trace the incidence of \$1/day and \$2/day poverty in relation to average private consumption per capita. Those curves are based on 32 low-income and lower-middle-income countries in Africa and Asia and include available observations, from LDCs and other developing countries, over three decades.¹ The poverty curves are analogous to the inverted U-shaped curve of Simon Kuznets that suggests that income inequality will increase in the early stages of development and then decrease. But instead of specifying the inequality–development relationship, they show the poverty–development relationship in African and Asian developing countries. They indicate the normal path of poverty reduction that should occur during the development process as average private consumption per capita rises in countries characterized by mass poverty.

The poverty curves are gentle at the top, steep in the middle and gentle again at the bottom. The \$1-a-day poverty curve is steeper than the \$2-a-day poverty

100 (%) Share of population living on less than \$1 or \$2 a day 80 60 40 0 0 100 400 700 1000 1300 1600 1900 2200 Annual average private consumption per capita (1985 PPP \$) ▲ \$1-a-day • \$2-a-day

CHART 9. \$1/DAY AND \$2/DAY POVERTY CURVES

Source: UNCTAD (2002: 72, chart 13).

Note: For significance of points A and B, see text.

curve, which means that a given amount of consumption growth will reduce the \$1-a-day poverty rate faster. Thus, for example, if average private consumption per capita doubles from \$400 to \$800 a year, the proportion of the population living on less than a dollar a day is expected to fall from around 65 per cent to less than 20 per cent. However, the shape of the curves is also such that once a country passes a certain threshold of average private consumption per capita, the impact of economic growth on reducing poverty becomes considerably smaller. This point is reached first for \$1/day poverty (at average annual private consumption per capita of about \$1,100, in 1985 PPP \$) and then for \$2/day (at average annual private consumption per capita of about \$2,000). The poverty curves suggest that for \$1/day and \$2/day poverty, the growth–poverty relationship becomes weak after those points (represented by point A and point B in chart 9), and reducing poverty must then rely more on special measures targeted at the poor.

The normal paths of poverty reduction depicted by the curves result from a combination of consumption growth and the typical patterns of change in the distribution of consumption that accompany such growth during the development process. The scatter of individual observations around the poverty curve indicates that poverty in each country may be higher or lower than expected owing to the deviation of the consumption distribution in individual countries from the typical distribution at different levels of consumption that underlies the poverty curves. The tightness of the fit of the observation points indicates that in low-income countries with generalized poverty, the average level of private consumption expenditure is most important in explaining the incidence of \$1/day and \$2/day poverty. Research to reproduce these curves in middle-income countries with higher levels of private consumption per capita, and including Latin American countries, shows a much less close relationship between the incidence of poverty and average private consumption per capita (Karshenas, 2004). Beyond a certain level of private consumption per capita, where one leaves the realm of generalized poverty, the close relationship between average consumption per capita and poverty is lost and variations in the incidence of poverty between countries is explained more by differences in the distribution of consumption expenditure between countries than by differences in the level of consumption expenditure.

At low levels of development and in conditions of mass poverty, when the average level of private consumption per capita is very low, there is not only a close relationship between the level of average private consumption per capita and the incidence of poverty, but also a close relationship between the average level of private consumption and the depth of poverty. This is shown in chart 10 which depicts the relationship between the average consumption of the poor and per capita consumption expenditure for the \$1-a-day and \$2-a-day international poverty lines. The curves fitted to the observations in chart 10 show that the relationship between the average level of private consumption per capita and the depth of poverty is as close as the relationship between the average level of private consumption per capita and with the incidence of poverty. This is significant because although the incidence of poverty is totally independent of the distribution of consumption expenditure amongst the poor, the average level of consumption of the poor depends on such distribution. However, the power of economic growth to raise the level of consumption of the poor diminishes at much lower levels of average private consumption per capita than its power to reduce the proportion of the population living in poverty. The form of the curves is such that the effect of economic growth on the average private consumption per capita of the poor weakens once the average private consumption for the country as a whole is about \$800 per capita ...as well as a close relationship between the average level of private consumption and the depth of poverty.

(in 1985 PPP \$) for the \$1/day poverty line and about \$1,400 per capita (in 1985 PPP\$) for the \$2/day poverty line. These are represented by points A and B in chart 10.

The poverty curves indicate that in very poor countries, which are characterized by generalized or mass poverty, sustained economic growth is a precondition for a significant reduction in poverty. But it will be sufficient only if growth is of an appropriate form. Only that form of economic growth which leads to a commensurate increase in per capita consumption on a sustainable basis will lead to poverty reduction. For this to take place, economic growth should be inclusive. If inequalities become too large and are linked to a sense of exclusion on the basis of social identity, it is possible that a legitimacy crisis will emerge and the whole growth process may then be threatened. But if a country focuses on policies to reduce poverty by purely redistributional devices, to the neglect of economic growth, this is likely to be unsustainable in the long run. If redistribution is attempted in situations of mass poverty, poverty may be falling for a specific section of the population benefiting from redistribution policies, but the cost may be an even higher poverty increase in other parts of the economy.

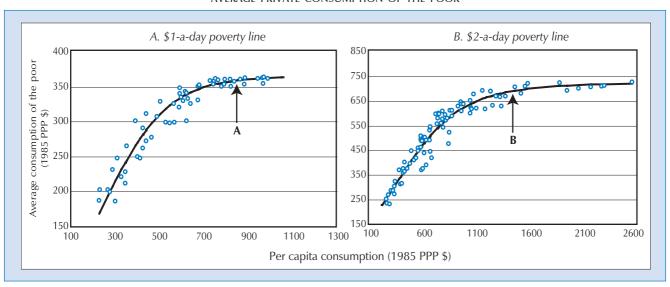
The poverty curves indicate that in very poor countries, which are characterized by generalized or mass poverty, sustained economic growth is a precondition for a significant reduction in poverty. But it will be sufficient only if growth is of an appropriate form.

In the end, sustained and substantial poverty reduction requires sustained economic growth of a form that leads to creation of productive employment for the working-age population that is sufficient for there to be growth in households' real per capita income and consumption. Rising output per capita that is not associated with a net increase in income-earning opportunities (jobs and livelihoods) will not be enough.

### 3. ECONOMIC GROWTH AND THE PROVISION OF PUBLIC SERVICES

Income or consumption poverty, no matter how it is measured, does not fully reflect the consumption of goods and services by the poor. An important part, which is normally missing from the household budget surveys on the basis of which income poverty is measured, is access to important public services such as sanitation, health and educational services. To the extent that such services are procured through market transactions they are reflected in the income or consumption poverty measures. A large part of such services, however, are

CHART 10. RELATIONSHIP BETWEEN AVERAGE PRIVATE CONSUMPTION PER CAPITA AND AVERAGE PRIVATE CONSUMPTION OF THE POOR



Source: UNCTAD (2002: 49, chart 9).

Note: For significance of points A and B, see text.

normally provided either free of charge or at highly subsidized levels by the public sector. This can be particularly important for poor households, and can substantially increase their access to vital services which would otherwise be difficult for them to procure. A more complete picture of the nature of poverty in the LDCs, therefore, would require coverage of their access to such public services. The total value of public sector expenditure on those services, the distribution of that expenditure and the quality of service provision decide the final impact on poverty.

In conditions of generalized poverty sources of government revenue are limited and hence total public sector expenditures on social services are relatively low. The example of per capita public health expenditure in the LDCs compared with other developing countries, shown in chart 11A, highlights this point. The Asian and African LDCs on average spend \$4.6 a year per head on public health expenditure, in contrast to an average of \$73 in other low-income and middle-income developing countries. The per capita public health expenditure of \$4.6 in the LDCs shows the stark realities of generalized poverty in an even more glaring light when compared with per capita public health expenditure of \$1,456, and per capita total health expenditure of \$2,391, in the high-income OECD countries. The low per capita health expenditure in the LDCs is not because health services are neglected in those countries as compared with other items of public sector expenditure. As can be seen from chart 12, the share of general government expenditure on health in the LDCs is not significantly different from other that of developing countries. The low per capita expenditure on health in the LDCs is rather a reflection of the condition of generalized poverty. This also applies to education and other public social services in countries subject to generalized poverty.

It is sometimes argued that the inability of public social services to substantially contribute to the alleviation of poverty in the developing countries, including the LDCs, is to a large extent due to the distribution of such services being skewed in favour of the rich (see for example World Bank, 2003). This argument breaks down in the case of countries suffering from generalized poverty, even though it may be true that in some countries the rich may benefit to a greater extent than the poor from public services. The reason is that where there is generalized poverty, even if one distributes the entire public health expenditure amongst the poor, the increase in per capita expenditure allocated to the latter will be relatively small. This can be seen from chart 11B, where the distribution of the entire health budget to the poor in the Asian and African LDCs has increased the average per capita health expenditure from \$4.6 to only \$5.3 a year, which is still less than a tenth of the average public health expenditure in other developing countries. This is not of course to deny that the distribution of public social services amongst the poor in the LDCs can be improved, but rather to point out that in conditions of generalized poverty such redistribution will improve poverty on only a limited scale.

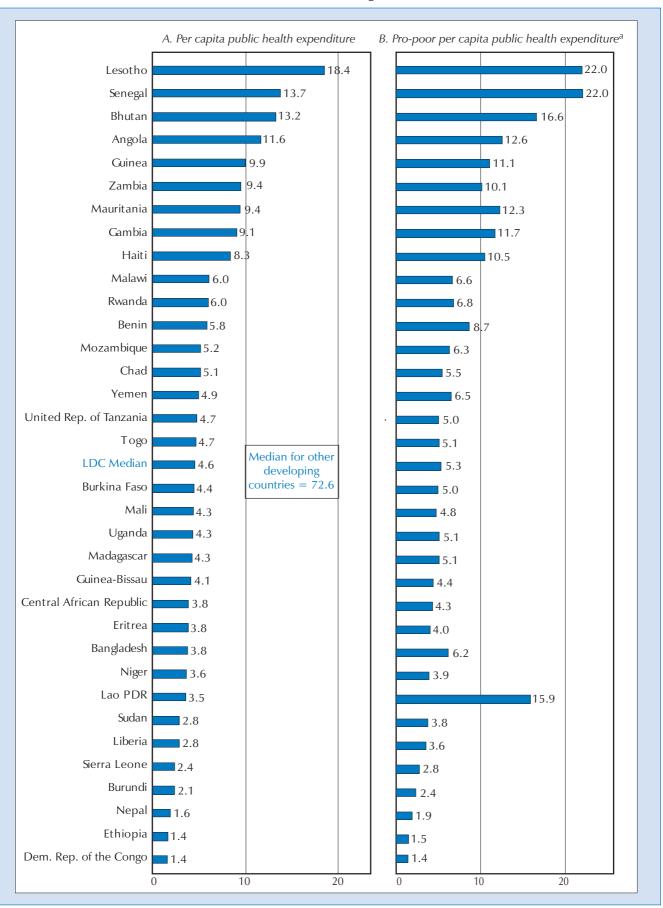
Similar remarks may be made about the extent to which improving the efficiency of public services in the LDCs can improve the lot of the poor in conditions of generalized poverty. To put it simply, \$4.6 per capita public health expenditure needs to be stretched a long way by efficiency improvements to come anywhere close to providing the \$73 average per capita expenditure in other developing countries.

The question of the efficiency and effectiveness of public services is, of course, not irrelevant. But in conditions where there is mass poverty, the efficiency and effectiveness of public services are not independent of the level of

The Asian and African LDCs on average spend \$4.6 a year per head on public health expenditure, in contrast to an average of \$73 in other lowincome and middle-income developing countries.

Even if one distributes the entire public health expenditure amongst the poor in the LDCs, the increase in per capita expenditure allocated to the latter will be relatively small.

CHART 11. PER CAPITA ANNUAL PUBLIC HEALTH EXPENDITURE IN ASIAN AND AFRICAN LDCs, 1990–2000 (\$, annual average)



Source: UNCTAD secretariat estimates, based on World Bank, World Development Indicators 2003.

Notes: LDC median refers to the countries listed in the Chart. Other developing countries refers to the 78 low- and middle-income countries (World Bank definition) excluding the LDCs and high-income oil-exporting countries.

a Pro-poor public health expenditure assumes that all spending goes to the poor.

18
16
14
12
30 10
4
2
0
African LDCs Asian LDCs Island LDCs ODCs

CHART 12. SHARE OF PUBLIC HEALTH EXPENDITURE IN GENERAL GOVERNMENT EXPENDITURE IN THE LDCs and other developing countries, 1990–2000

Source: Same as for chart 11.

per capita GDP or the level of economic development in general. For example, household diet and nutrition, which are highly correlated with per capita income, affect the susceptibility of children and adults to disease. Poverty can hinder the children of poor households from benefiting from education services, even if adequate provision is made on the supply side. There are also important externalities between different public services that can make the effectiveness of each category increase with the total government expenditure on public services, which in turn normally rises with the level of per capita GDP. For example, education together with better water and sanitation can make health services more effective by helping to prevent disease. An adequate public transport infrastructure also can improve the effectiveness of all the other services. It is plausible to assume that these interdependences are particularly important for countries with mass poverty, and are likely to become less significant after countries pass a certain per capita income threshold where a basic minimum set of social and economic infrastructures has been put in place.

The above has important implications for the design of development policy in general and public expenditure policy in particular, in the case of countries in which the majority of the population are living at or around basic subsistence levels. The first implication is that in countries facing such mass poverty, there is a need for substantial increases in public expenditure in a concerted manner on a host of social services if the policy is to make a noticeable dent in poverty. Such expenditure increases are normally beyond the financing capacities of countries facing generalized poverty and need to be financed by foreign aid. The second important implication is that, the focus on social services such as health and education should not lead to the neglect of economic growth. To a large extent, measures to improve health and education in the LDCs are also growth-enhancing, particularly in the long term, if they are combined with other appropriate measures to enhance economic growth. However, if policy makers become preoccupied with attempts at poverty alleviation by focusing solely on income redistribution or social expenditures and neglect economic growth, in the conditions of generalized poverty the desired outcomes cannot be achieved.2

In conditions where there is mass poverty, the efficiency and effectiveness of public services are not independent of the level of per capita GDP or the level of economic development in general.

# C. The importance of trade expansion for sustained economic growth

# 1. How international trade can help LDCs to escape the poverty trap

The LDCs which are characterized by generalized poverty are often enmeshed in a low-income trap of poverty and underdevelopment. The lowincome trap has various elements:

- There are few surplus financial resources available for investment and
  for funding vital public services, including education, health,
  administration, and law and order. Low income leads to low savings; low
  savings lead to low investment; and low investment leads to low
  productivity and low incomes.
- To reduce risks in conditions of extreme scarcity, people pursue economic activities with low but certain returns, including production for their own subsistence and survival through multiple activities.
- The lack of effective domestic demand associated with all-pervasive poverty reduces profitable investment opportunities.
- There is a dearth of domestically available skilled personnel, and the lack of domestic opportunities encourages skilled people to seek work outside the country.
- Pervasive poverty leads to environmental degradation as people have to
  eat into the environmental capital stock simply to survive, and this in
  turn undermines the productivity of key assets on which livelihoods
  depend.
- There is a high risk of civil conflict in countries where low per capita income is associated with economic stagnation and regress (see chapter 4).

Escaping this poverty trap is not impossible. However, it is highly unlikely without integration into a wider international economy or, more particularly, without a form of integration which supports sustained economic growth and poverty reduction. The lack of surplus resources for financing investment implies that external finance usually plays a critical role in generating the big push which is necessary in order for LDCs to move to a virtuous circle of economic growth and poverty reduction. But international trade is equally vital.

International trade is particularly important for poverty reduction in the LDCs because, contrary to popular impressions, their "openness", measured by the level of integration with the rest of the world, is high. During 1999–2001, exports and imports of goods and services constituted on average 51 per cent of the GDP of the LDCs (chart 13). This is somewhat lower than the average trade/GDP ratios of low-income and low- and middle-income countries. But the average level of trade integration of the LDCs was actually higher than that of high-income OECD countries, which stood at 43 per cent in those years. In only 10 of the LDCs for which data are available was the trade/GDP ratio lower than that in the high-income OECD countries (table 26).

The high level of trade integration implies that international trade is of major significance for the economies of the LDCs. But it is notable that exports of goods and services constitute a lower proportion of GDP than imports of goods and services. Exports of goods and services constituted 20 per cent of GDP in

International trade is particularly important for poverty reduction in the LDCs because, contrary to popular impressions, their "openness", measured by the level of integration with the rest of the world, is high.

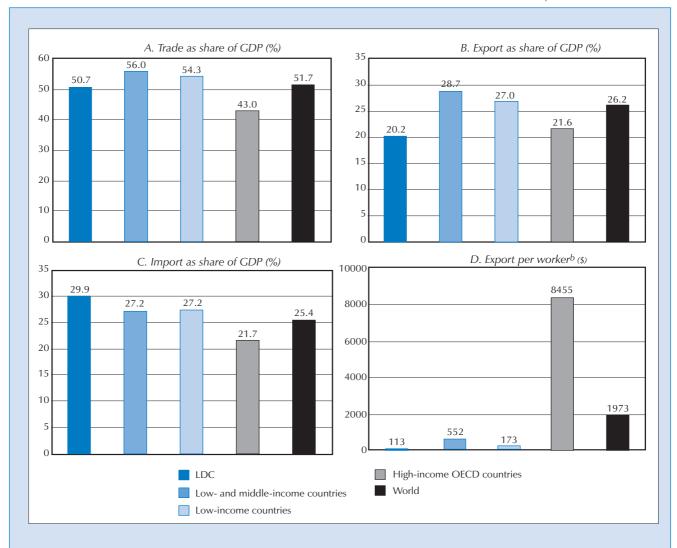


CHART 13. THE ECONOMIC IMPORTANCE OF TRADE IN LDCs AND OTHER COUNTRY GROUPS, 1999–2001<sup>a</sup>

Source: UNCTAD secretariat estimates, based on World Bank, World Development Indicators 2003, CD-ROM.

Note: The country classification follows the one used by the World Bank. The data based on its national accounts.

- a The figures for high income OECD countries refer to the period 1999–2000.
- b The working population is equated with the economically active population between 15 and 64 years old.

the LDCs during 1999–2001. This level is below the average level of low-income countries (29 per cent) and low- and middle-income countries (27 per cent), though it is not far below the level of high income OECD countries (22 per cent). One may expect that the share of exports in GDP would vary systematically between countries according to their income per capita levels and size of population. But even so, the relatively low export/GDP ratios in the LDCs are indicative of weak export capacities.

As outlined in the last chapter, export growth can play a number of different roles in supporting economic growth. These include: (a) static efficiency gains which arise through specialization according to current comparative advantage; (b) increased capacity utilization which arises if external demand enables the employment of previously idle (or surplus) labour and land resources which previously were not utilized owing to a dearth of effective domestic demand or if trade reduces the costs of wage goods; (c) increased physical and human capital investment owing to improved returns to investment which can arise either through the identification of new opportunities associated with external demand or through the improved profitability of investment following the cheapening of the production costs; (d) productivity growth which can arise

Export growth can play a number of different roles in supporting economic growth.

TABLE 26. THE IMPORTANCE OF TRADE IN LDCs BY COUNTRY, RANKED BY "OPENNESS", a 1999–2001 (Annual average, percentage)

	0,1 0,						
	Trade	Exports	Imports	Trade balance	Exports	Exports	Imports
	as share	as share	as share	as share	as share	per capita	per capita
	in GDP	in GDP	in GDP	in GDP	in imports		
Above average "openness"							
Equatorial Guinea	299.2	187.3	111.8	75.5	167.5	5 545.3	3 310.4
Maldives	169.9	77.5	76.8	0.7	121.2	1 982.1	1 635.2
Angola	155.1	84.0	71.0	13.0	118.6	521.4	439.7
Vanuatu	134.0	65. <i>7</i>	68.4	-2.7	96.0	738.5	768.9
Solomon Islands	124.2	61.3	62.9	-1.5	97.5	411.7	422.1
Sao Tome and Principe	120.5	36.0	84.3	-48.3	42.9	114.5	266.5
Lesotho	114.6	30.3	87.2	-57.0	31.3	116.7	372.4
Gambia	113.8	63.1	64.6	-1.4	76.3	156.9	205.6
Djibouti	105.5	40.7	60.8	-20.1	73.6	393.0	533.7
Cambodia	104.3	43.2	57.0	-13.7	83.1	128.4	154.6
Samoa	102.6	32.9	69.6	-36.7	47.4	462.9	976.9
Eritrea	95.6	15.4	80.2	-64.8	19.2	25.3	131.7
Guinea-Bissau	89.7	28.2	57.6	-29.4	55.8	57.0	102.3
Mauritania	89.1	37.8	50.7	-12.9	75.7	141.3	186.7
Bhutan	83.0	30.8	55.2	-24.4	50.5	168.2	332.9
Cape Verde	81.6	26.6	58.8	-32.2	38.8	303.5	781.6
Togo	79.7	33.8	47.3	-13.4	68.5	93.1	135.9
Yemen	76.3	42.8	37.0	5.8	106.3	193.8	182.4
Senegal	68.5	30.1	38.3	-8.2	78.7	145.5	185.0
Malawi	66.3	29.0	39.7	-0.2 -10.7	67.1	45.4	
Mali							67.6
	64.9	27.3	38.0	-10.7	71.0	64.7	91.1
Lao PDR	64.4	29.5	34.9	-5.4	84.5	91.6	108.4
Liberia	62.0	23.1	38.9	-15.8	59.4	36.7	61.8
Madagascar	61.8	18.4	33.9	-15.4	82.6	73.3	88.7
Zambia Below average "openness"	60.2	28.0	36.6	-8.6	64.7	78.3	121.1
		24.2	40.5	0.2	25.0	24.2	07.1
Mozambique	55.0	31.3	40.5	-9.2	35.8	31.2	87.1
Nepal	54.3	25.3	31.4	-6.2	72.6	53.1	73.1
Chad	54.1	18.8	38.7	-19.9	39.8	30.4	76.6
Guinea	52.8	24.4	28.4	-4.0	86.1	104.5	121.3
Sierra Leone	46.4	12.2	30.4	-18.1	52.9	21.9	41.3
Comoros	45.4	14.6	30.8	-16.2	47.4	56.6	119.3
Ethiopia	45.4	15.0	30.4	-15.4	49.4	14.8	30.0
Haiti	44.6	12.7	32.1	-19.4	38.9	61.9	159.1
Benin	43.6	24.0	28.2	-4.2	54.6	57.3	105.1
Niger	40.9	16.7	24.1	-7.5	69.4	29.8	42.9
Dem. Rep. of the Congo	40.3	20.7	20.3	0.4	98.2	18.9	19.3
United Rep. of Tanzania	39.1	14.2	24.4	-10.2	60.1	39.3	65.4
Burkina Faso	38.2	11.6	27.7	-16.1	38.2	22.9	60.0
Uganda	36.4	11.7	24.7	-13.0	47.6	30.9	64.9
Bangladesh	34.3	14.2	20.1	-5.9	70.8	50.6	71.4
Rwanda	32.1	6.7	24.3	-17.6	31.9	18.2	57.2
Sudan	28.8	12.9	15.9	-2.9	81.1	47.0	58.0
Burundi	28.2	8.1	20.1	-12.0	40.3	8.3	20.5
Central African Republic	27.3	10.7	15.2	-4.5	79.6	32.2	40.5
LDCs	50.7	20.3	30.0	-9.7	76.7	61.2	79.7
Low-income	54.3	27.0	27.2	-0.3	94.6	101.6	107.3
Low- and middle-income	56.0	28.7	27.2	1.3	103.5	343.9	332.2
High-income OECD	43.0	21.6	21.7	0.5	97.7	5 672.5	5 804.5

Source: UNCTAD secretariat estimates, based on World Bank, World Development Indicators 2003, CD-ROM.

Note: Data on exports and imports of goods and services are based on national accounts statistics, except for Equatorial Guinea, the Lao PDR, Liberia, Solomon Islands and Vanuatu, whose data are based on balance-of-payment statistics. The country averages are slightly different from those in chart 13 owing to the use of these data sources.

Afghanistan, Kiribati, Myanmar, Somalia and Tuvalu were not included for lack of data.

a "Openness" is defined by trade as a share of GDP. The LDCs with above average openness are those which have trade as a share of GDP ratio higher than that of low- and middle-income countries.

through the transfer of technology or increased efficiency owing to the pressure of exposure to international trade competition; (e) export-accelerated industrialization, involving a labour re-allocation from agriculture into manufacturing; and (f) relaxation of the balance of payments constraint on sustained economic growth.

The relative importance and the mix of these roles vary between countries. For most LDCs, the primary sector, particularly agriculture, dominates production and employment in the economy, and productive capacities are weakly developed. In this situation, the key role of exports is that they enable the acquisition, through importation, of goods which are necessary for economic growth and poverty reduction, but which are not produced domestically. These include food, manufactured consumer goods, fuel and raw materials, machinery and equipment and means of transport, and intermediate inputs and spare parts.

If there are idle resources in the economy, — a "vent for surplus" consisting of untapped mineral resources, underutilized land or surplus labour — export growth may be achieved without constraining the growth of other domestic sectors. Indeed, exports provide the means through which such unexploited natural resources and surplus labour can be translated into the imports that are essential for sustained economic growth. The income elasticity of demand for imports is likely to be high in the early stages of development. Exports must thus grow sufficiently fast, and in a sufficiently stable way, to meet growing import demand. If not, and in the absence of capital inflows in the form of grants and compensatory financing facilities to cope with temporary shocks to export earnings, the sustainability of economic growth will be threatened by the build-up of an unsustainable external debt.

2. THE IMPORT SENSITIVITY OF LDC ECONOMIES

The import-supply effects of exports are important because a key structural feature of the LDC economies is their high level of import sensitivity (Sachs, 2003). An economy can be described as being highly import-sensitive when import bottlenecks hamper the full utilization of domestic productive capacities, when the import content of investment is high, and when food security also depends on food imports.

The import sensitivity of an economy is related to, but is something different from, the "openness" of an economy, measured by the ratio of trade to GDP. As chart 13 shows, imports constitute on average 30 per cent of GDP, which is the highest proportion of all the country groups. But, import sensitivity is not simply defined by the share of imports in total GDP, but is also related to the structure of the national economy and the composition of imports. The higher the proportion of imports that is essential to the continuation of on-going economic activities and their development, the higher the import sensitivity of the economy.

The import sensitivity of LDC economies is clearly illustrated by the experience of many African LDCs in the 1980s when unfavourable movements in the terms of trade, high interest rates, reduced capital inflows and increased debt service obligations interacted with a weak real export performance to create severe import compression. The basic process is well described by Helleiner (1993). Capacity utilization depends heavily on the availability of critically important imports — fuel, other intermediate inputs and spare parts.

In the LDCs, exports provide the means through which unexploited natural resources and surplus labour can be translated into the imports that are essential for sustained economic growth.

The import-supply effects of exports are important because a key structural feature of the LDC economies is their high level of import sensitivity.

The higher the proportion of imports that is essential to the continuation of on-going economic activities and their development, the higher the import sensitivity of the economy.

When such imports cannot be financed at levels necessary for full utilization of capacity, there is underemployment of labour, capital and resources in the import-dependent sectors. Because these inputs cannot typically be redeployed quickly into other activities, "the entire economy is, in the short- to mediumterm, if not longer (particularly where investment activity is also highly importdependent), also driven to production levels that are well below potential" (ibid.: 124). Once import compression started in the early 1980s, many commercially oriented smallholders began to reduce their marketed output because of the unavailability of such consumer goods as soap, textiles, matches, tea, coffee, sugar, cooking oil, tinned milk, fish, cement, metal roof sheeting, radios and bicycles due to foreign exchange shortages and the inability to utilize domestic manufacturing capacity. The negative effects of such shortages on recorded market output have been extensively studied in Madagascar, Mozambique and the United Republic of Tanzania (Berthelemy and Morrisson, 1989). The partial withdrawal of farmers from the market system reduced export earnings, further reinforcing the foreign exchange shortages and deepening the crisis through a foreign exchange crisis.

Most LDC economies are import-sensitive not simply because of the importance of imports for capacity utilization but also because of the high import content of investment processes.

Most LDC economies are import-sensitive not simply because of the importance of imports for capacity utilization but also because of the high import content of investment processes. This reflects the absence of a domestic capital goods industry and engineering capabilities. The financing of non-inflationary sustained economic growth also depends on an elastic supply of food and other wage goods to meet the needs of the increased demand by additionally employed and/or better-remunerated workers. Food imports can play a role in this. Finally, in some LDCs food security may also be import-sensitive to the extent that imports affect the availability of, and access by households and individuals to, sufficient quantities of food for a nutritious diet.

The sensitivity of food security to imports is an important and complex issue. Hunger is certainly widespread in the LDCs and there are 29 of them where the average per capita calorie supply is below 2,300 calories per day, which is the recommended minimum of the Food and Agriculture Organization of the United Nations and WHO. Furthermore, it is clear that the LDCs are becoming increasingly dependent on food imports (chart 14). During the period 1996-2001 all except seven of the LDCs were net food importers, and for many LDCs food imports are now a significant component of total merchandise imports and exports. If food aid, which is very important for a number of LDCs, is left aside, it is apparent that commercial food imports constituted over 20 per cent of total merchandise exports for 29 LDCs during the period 1996-2001, and over 20 per cent of total merchandise imports in 13 LDCs (table 27). But although this implies that food imports are important for LDCs' balance of payments, the share of food imports in domestic food consumption is low (see last column of table 27). In the Democratic Republic of the Congo, for example, food imports constituted 30 per cent of total merchandise imports and 31 per cent of total merchandise exports during 1996-2001, but only 2 per cent of total food consumption. For almost two thirds of the LDCs food imports are less than 10 per cent of total food consumption. Moreover, in many African LDCs a major part of staple food consumption is based on crops which are only "semitradable", such as cassavas, plantains, yams, millet, sorghum and white maize (see UNCTAD, 1998).

This pattern, in which food imports absorb a significant share of total import earnings but at the same time constitute only a minor proportion of total food consumption, may imply that food imports are not actually important for the

A. Least developed countries 9 8 \$ billions 5 4 3 2 1 1982 1984 1986 1988 1990 1992 1994 B. Other developing countries 160 140 120 \$ billions 100 80 60 40 20 1980 1982 1984 1986 1988 1990 1992 1994 1996 1998 2000 Export

CHART 14. FOOD EXPORTS AND IMPORTS OF LDCs AND OTHER DEVELOPING COUNTRIES, 1980–2001

Source: UNCTAD secretariat estimates, based on UN COMTRADE.

food security of the general population but only go to enrich the diets of a small minority. However, it could also be the case that small amounts of food imports are crucial for food security, in spite of their small contribution to total food consumption, because they stabilize food prices at certain times of the year when prices rise. This issue requires further research. But in those LDCs where both investment processes and food security are import-sensitive, there may be a difficult dilemma. This would arise if scarce foreign exchange is serving to alleviate poverty and support food security in the short term, but at the same time, the capacity to import the investment goods which are necessary for sustained economic growth, and also improved food security in the long run (see box 6), is being reduced. This dilemma may be an important policy issue in the field of trade and poverty in some LDCs. It is likely to have important implications for both LDC Governments and the donor community.

Finally, landlocked LDCs have a specific type of import sensitivity which is related to the fact that their international trade is often quite dependent on imported transport and insurance services. There are 11 African landlocked LDCs where such imports are equivalent to over 20 per cent of total exports of goods and services. In this situation, the growth process in those countries is very vulnerable to disruptions in the transit transport system (table 28).

In those LDCs where both investment processes and food security are importsensitive, there may be a difficult dilemma. This dilemma may be an important policy issue in the field of trade and poverty in some LDCs.

TABLE 27. INDICATORS OF FOOD SECURITY IN LDCs, AVERAGE 1996–2001

	Under-	Food		A cui cultural	Food aid	Commercial	Cammanaial	Food
	nourished	Food consumption	Change in food	Agricultural production	as % of	food imports	Commercial food imports	imports
	population	per capita <sup>b</sup>	consumption <sup>c</sup>	instability <sup>d</sup>	total food	as % of total	as % of total	as % of
	% of	рег сарна	consumption	instability	imports	merchandise	merchandise	food
	total <sup>a</sup>				шрога	imports		consumption
						por.co	слрота	consumption
Net food importers and	•		ers					
Afghanistan	70	1 694	••	6.0	30.6	13.4	66.6	6.1
Angola	49	1 878	10.0	4.2	25.3	8.9	4.4	11.4
Bangladesh	32	2 117	4.4	3.1	19.8	12.2	18.6	7.8
Bhutan		2 500	••	3.6	28.2	6.4	9.8	3.4
Cambodia	38	1 905	7.6	31.2	20.9	7.5	13.9	3.4
Cape Verde		3 227	9.8	13.2	21.3	17.4	373.3	32.7
Central African Rep.	44	1 927	4.6	14.1	5.8	8.6	7.7	2.3
Comoros		1 776	-7.6	27.8	14.0	25.8	156.6	12.7
Dem. Rep. of the Congo	75	1 635	-28.7	16.2	9.9	30.2	31.0	2.2
Djibouti		2 101	14.6	22.1	15.1	29.3	330.6	43.9
Equatorial Guinea		2 500		32.8	13.5	22.8	2.2	5.6
Eritrea	61	2 500		23.3	33.8	6.9	84.5	11.8
Gambia	27	2 248	-4.8	18.7	32.9	21.9	181.7	38.1
Guinea	28	2 282	15.1	4.1	7.5	12.2	16.1	8.7
Haiti	49	1 984	15.2	3.1	20.7	30.3	112.3	19.6
Kiribati		2 896	12.8	15.1	3.1	21.3	127.0	26.5
Lao PDR	22	2 231	8.3	7.4	1.3	4.2	7.6	1.8
Lesotho	25	2 296	2.3	8.9	7.9	9.8	39.1	19.0
Liberia		2 148	-10.6	12.7	28.4	8.9	7.1	12.9
Maldives		2 548	8.3	3.0	5.9	12.4	64.1	31.0
Mauritania	10	2 716	5.6	3.5	7.2	42.9	37.5	32.9
Mozambique	53	1 904	10.8	8.1	21.8	13.5	44.4	7.2
Nepal	17	2 376	-0.6	4.4	15.3	8.4	23.7	2.7
Niger	34	2 086	3.9	13.2	10.6	22.9	32.4	5.8
Rwanda	41	1 904	1.6	14.0	69.9	8.1	26.9	5.9
Samoa		2 500		7.3	8.4	12.8	97.0	18.5
Sao Time and Principe		2 411	6.5	7.0	14.2	10.8	39.6	14.9
Senegal	24	2 256	0.2	14.5	7.8	20.8	32.9	21.1
Sierra Leone	50	2 001	-2.9	5.3	8.3	35.7	414.7	10.0
Somalia	71	1 635		7.9	9.0	24.7	50.9	8.6
Tuvalu		2 500	••	13.3	4.8	13.9	346.1	24.7
Yemen	33	2 043	-0.8	5.9	7.0	32.7	28.0	31.2
Zambia	50	1 900	-4.9	10.6	21.1	8.8	6.7	4.5
Net food importers and								
Benin	16		6.7	7.5	6.2	13.7	22.8	5.3
Burkina Faso	17	2 440	8.7	19.7	5.6	14.9	38.6	3.9
Burundi	70	1 639	-13.0	27.5	17.9	6.6	17.2	0.8
Ethiopia	42	2 500		14.8	72.0	3.5	8.7	2.0
	36	2 038	 -1.8	2.3	24.5	9.5		3.3
Madagascar Malawi	33	2 126	-1.6 11.7	2.3 9.1	26.4	9.3 6.7	16.6 7.5	3.5 3.6
Togo	25	2 322	6.0	9.1 5.4	4.2	9.3	15.8	6.8
Uganda	19	2 306	1.8	3.9	29.0	6.2	16.0	2.9
United Rep. of Tanzania	43	1 936	-8.3	3.4	19.1	13.3	30.9	4.7
Net food exporters and				07.0	400			2.2
Chad	34	2 058	23.4	27.0	12.2	7.3	11.5	2.0
Guinea-Bissau		2 392	0.5	4.3	43.8	19.6	36.6	11.4
Mali	21	2 324	2.7	6.4	3.0	9.3	13.2	3.7
Myanmar	7	2 799	7.4	5.1	22.6	6.1	11.8	1.9
Solomon Islands		2 227	8.8	7.4	3.4	11.3	13.5	14.1
Sudan	25	2 323	5.9	9.2	19.2	12.1	22.4	4.7
Vanuatu		2 580	1.9	7.8	14.2	11.3	36.0	13.7
LDCs	41	2 390	3.5	11.7	18.1	19.9	124.4	23.6

FAO (2003a); and FAO (2003b). Source:

The country classification of net food exporters and net food importers was drawn from FAO trade data on food excluding fish. This Note: classification, according to their agricultural trade and food status, is based on the period 1995–2000.

Calories per capita per day.
Percentage change from 1988–1991 to 1999–2001.

Reference period 1999–2001.

b

Measured according to the Agricultural Production Instability Index for the period 1979-2001 and it is defined according to the methodology included in the Explanatory Notes from the Committee for Development Policy's Economic Vulnerability Index (available at http://www.un.org/esa/analysis/devplan/cdp00p21.pdf).

Table 28. Imports of transport and insurance services as a proportion of total exports and imports of goods and services,  $2000^a$  (\$ millions)

	Imports of transport	Exports of goods	Imports of goods	Ratio	Ratio
	and insurance (a)	and services (b)	and services (c)	(%) (a)/(b)	(%) (a)/(c)
	(a)	(2)	(6)	(4)/(5)	(4)/(0)
Landlocked LDCs					
Burkina Faso	107.8	237.0	657.6	45.5	16.4
Burundi	19.6	55.2	150.7	35.4	13.0
Central African Rep.	58.7	179.0	244.4	32.8	24.0
Chad	98.5	190.1	411.5	51.8	23.9
Ethiopia	302.3	992.2	1622.1	30.5	18.6
Lao People's Dem.Rep	42.4	506.0	578.3	8.4	7.3
Lesotho	36.2	253.8	770.1	14.3	4.7
Malawi	88.6	437.4	629.1	20.2	14.1
Mali	245.7	644.2	926.9	38.1	26.5
Nepal	119.9	1282.1	1790.1	9.3	6.7
Niger	92.5	336.9	497.8	27.5	18.6
Rwanda	64.8	127.8	423.3	50.7	15.3
Uganda	164.1	663.1	1408.5	24.7	11.7
Zambia	227.5	871.2	1318.0	26.1	17.3
Island LDCs					
Cape Verde	47.6	145.9	325.9	32.6	14.6
Comoros	21.1	49.1	99.3	43.0	21.2
Kiribati	11.0	23.7	44.5	46.4	24.7
Maldives	57.5	457.2	451.7	12.6	12.7
Samoa	5.6	79.9	140.2	6.9	4.0
Sao Tome and Principe	5.4	16.3	36.1	33.3	15.0
Solomon Islands	49.5	226.8	291.7	21.8	17.0
Vanuatu	26.8	157.0	147.1	17.1	18.2
Other LDCs					
Angola	374.4	8188.0	5739.0	4.6	6.5
Bangladesh	1103.8	7214.3	9673.1	15.3	11.4
Benin	141.1	528.4	707.8	26.7	19.9
Cambodia	184.5	1829.6	2267.2	10.1	8.1
Djibouti	50.5	184.9	292.2	27.3	17.3
Eritrea <sup>b</sup>	6.9	97.7	499.7	7.1	1.4
Gambia	36.8	229.0	281.8	16.1	13.1
Guinea	118.3	734.4	871.9	16.1	13.6
Guinea-Bissau	16.9	56.9	88.6	29.7	19.1
Haiti	187.0	192.4	801.7	97.2	23.3
Madagascar	196.0	1187.8	1519.5	16.5	12.9
Mauritania	123.7	424.4	585.3	29.2	21.1
Mozambique	182.9	689.4	1491.8	26.5	12.3
Myanmar	26.8	2139.4	2493.5	1.3	1.1
Senegal	291.7	1276.3	1567.7	22.9	18.6
Sierra Leone	16.8	176.8	248.7	9.5	6.8
Sudan	555.4	1834.1	2013.9	30.3	27.6
Togo	98.7	423.6	602.1	23.3	16.4
United Rep. of Tanzania	223.9	1290.7	2050.0	17.3	10.9

Source: UNCTAD secretariat estimates based on IMF, Balance of Payments Statistics 2003.

Note: No data were available for Afghanistan, Bhutan, Democratic Republic of the Congo, Equatorial Guinea, Liberia, Somalia, Tuvalu and Yemen.

b Local currency units.

a The data refer to 1991 for Comoros; to 1992 for Rwanda; to 1994 for the Central African Republic, Chad and Kiribati; to 1995 for Dijibouti, Haiti, Mauritania, Myanmar, Nepal, Niger and Sierra Leone; to 1997 for Gambia and Guinea-Bissau; to 1998 for the Lao People's Democratic Republic and Lesotho; to 1999 for Samoa, Senegal and Solomon Islands.

### 3. THE STRUCTURE OF THE BALANCE-OF-PAYMENTS CONSTRAINT

Increased exports can finance, via foreign exchange, the increased imports which are critical for sustained economic growth and poverty reduction. But increased capital inflows and reduced debt service obligations can also generate the same effects.

Increased exports can finance the increased imports which are critical for sustained economic growth and poverty reduction. But increased capital inflows and reduced debt service obligations can also generate the same effects.

This is important to recognize because a major feature of LDC economies is that they almost all have persistent and large trade deficits. These are mainly financed by aid inflows, but workers' remittances are increasingly important, particularly in a number of LDCs, and FDI inflows are important in some. As chart 15 shows, the trade deficits of the LDCs as a whole were comprised between 5–10 per cent of GDP throughout the 1990s. In the period 1999–2001, the trade deficit was over 10 per cent of GDP in 25 out of 44 LDCs for which data are available, and over 20 per cent of GDP in 11 of them (table 26). For the LDCs as a group, export earnings financed only 77 per cent of imports in those years, and excluding the oil exporters, which tend to have trade surpluses, export earnings financed only 65 per cent of imports. In almost half the LDCs for which data are available, export earnings financed less than two thirds of imports (table 26). Moreover, for LDCs whose major exports are agricultural commodities, export earnings covered a mere 54 per cent of import earnings in 1999–2001.

The role of exports in expanding import capacity and loosening the foreign exchange constraint on economic growth needs to be seen in this context. The fact that exports only finance part of the total import bill and there are persistent trade deficits associated with, and mainly financed by, large aid inflows may lead to two different conclusions. One conclusion, which could be reached at the LDC level, is to say that capital inflows, and particularly aid, can provide a substitute for exports. The other conclusion, which could be reached at the donor country level, is to say that exports can provide a substitute for aid. Both these viewpoints are potentially misleading.

Although the effect of exports and aid on the foreign exchange constraint may seem equivalent, the importsupply effects of aid may not be as growth-enhancing as those of exports.

The first conclusion rests on the view that persistent aid-financed trade deficits are not a problem. This may be true to the extent that aid is provided in grant form on a sustainable basis, and/or concessional loans are used for investment, not consumption, and effectively build productive capacities and generate a sufficient stream of foreign exchange earnings to ensure debt repayments. But, although the effect of exports and aid on the foreign exchange constraint may seem equivalent, particularly when aid takes the form of balance-of-payments support, the import-supply effects of aid may not be as growth-enhancing as those of exports. The reasons for this are the instability of aid (which also applies to commodity exports), the tying of aid to import purchases, the high transaction costs and coordination failures which characterize the aid delivery process, and the difficulty of having genuine national ownership of domestic policies in the context of high levels of aid dependence and unsustainable indebtedness to official creditors. Attempts are being made to deal with these problems through the PRSP approach, with mixed success so far. However, in the end a critical goal of the LDCs must be to reduce aid dependence and to make a progressive transition in which sustained growth is increasingly founded on domestic resource mobilization, the attraction of developmental FDI and the tapping of international financial markets. Export expansion is an essential part of this transition, and a process through which the contribution of domestic resource mobilization to economic growth is enhanced.

2 -2 % CDP -6 -8 -10 -12 1980 1982 1984 1986 1988 1990 1992 1994 1996 2000 → Least developed countries → Other developing countries → Developed countries

CHART 15. NET TRADE IN GOODS AND SERVICES FOR DIFFERENT COUNTRY GROUPS, 1980–2001 (As percentage of GDP)

Source: UNCTAD secretariat estimates, based on World Bank, World Development Indicators 2003, CD-ROM.

A second conclusion would be to say that exports can provide a substitute for aid. From this perspective export expansion might be seen as an opportunity for donors to reduce their commitments without precipitating an economic crisis, or alternatively as the basis for forgoing a further round of debt relief and even for increasing debt service obligations. This conclusion is as misleading as the earlier one and the approach would be counter-productive. Reduced aid inflows and increased debt service obligations would offset the positive import-supply effects of increased exports. This would risk leaving a country in the same spot despite a major effort to increase its ability to finance its own development. Moreover, if aid inflows are reduced, or debt service obligations increased, when a country achieves an improved export performance, not only would the import-supply effects of exports not materialize, but also there could be negative effects on investment and the government budget. Aid inflows are not only important for balance-of-payments equilibrium, but also play a central role in the accumulation and budgetary processes in LDCs. As will be argued in the next section, the most beneficial effects of export expansion are likely to be achieved if export growth is linked with investment growth. However, these beneficial links between export growth and investment growth will be realized if export growth is accompanied by reductions in aid inflows.

Reduced aid inflows and increased debt service obligations can offset the positive import-supply effects of increased exports. This would risk leaving a country in the same spot despite a major effort to increase its ability to finance its own development.

### 4. THE INVESTMENT—EXPORT NEXUS

In poor, predominantly agrarian economies like most LDCs, economic growth depends on the development of a range of new capabilities, institutions and services. New agricultural technologies need to be adapted, or developed from scratch, in conformity with the agro-climatic and soil conditions of the country. Schools, universities, hospitals, technical training centres and research

and development institutions need to be strengthened or set up. Roads need to be built and extension services need to be established to bring the majority of the agricultural population into the orbit of the modern economy. New institutions and policies are needed to create a stable environment to encourage agricultural producers to adopt the new technologies and inputs. Peace and political stability need to be attained, the rule of law needs to be enforced, and the monopolistic activities of particular interests curtailed. In short, there is need for investment in physical, human, social and institutional capital, and innovation and technological progress adapted to the conditions of the countries. Capital accumulation and technological progress are the engines of growth, and international trade is the fuel for the engine. If the fuel dries up, the engine will not run.

A critical problem facing the LDCs in building a strong investment—export nexus is the absence of domestic resources available for financing new investments.

Thus sustained economic growth requires not simply export expansion but also a strong investment–export nexus through which imported equipment, raw material and production inputs are put to good use and lead to continuous improvement of labour productivity in the economy as a whole. If investment is linked to export expansion there can be a virtuous circle in which investment in export activities improves their productivity and leads to greater competitiveness, and export expansion in turn enables greater investment. This process is also associated with the upgrading of the export structure into more dynamic and higher-value-added products. This can occur in a sequential fashion, with foreign exchange earnings and resources derived from traditional exports supporting diversification into new export products. The case of Mauritius, in which earnings from the sugar boom in the 1970s were used to finance investment in manufactures exports in the export-processing zone, exemplifies this virtuous process (Dabee, 2002).

A critical problem facing the LDCs in building a strong investment–export nexus is the absence of domestic resources available for financing new investments. A telling fact in this regard is that during the period 1995–1999 the average per capita income in the LDCs when measured in terms of current prices and official exchange rates (rather than 1985 PPP dollars) was \$0.72 a day and the average per capita consumption was \$0.57 a day (see table 25 above). This implies that on average there was only \$0.15 a day per person to spend on private capital formation, public investment in infrastructure and the running of vital public services, including health, education, administration, and law and order.

It is against this background that the importance of external finance assumes such significance. Private capital flows can play some role. But it is most likely that establishing a positive investment–export nexus in most LDCs will require an effective partnership between increased trade and increased aid.

It is most likely that establishing a positive investment—export nexus in most LDCs will require an effective partnership between increased trade and increased aid.

# D. Export expansion and the inclusiveness of economic growth

Poverty reduction requires sustained economic growth. But sustained economic growth will not be poverty-reducing unless it raises average household consumption substantially through the creation of sufficient productive income-earning opportunities. Achieving this through export expansion alone is difficult in the LDCs. Indeed, there is a great danger that export expansion will not be broad-based but concentrated within an externally oriented enclave with few linkages with the rest of the economy.

### 1. EXPORT ACTIVITIES AS A SOURCE OF JOBS AND LIVELIHOODS

The danger that export expansion will not be broad-based is rooted in the structure of LDC economies in terms of sectoral composition, types of enterprises and types of employment. Although international trade generally constitutes a large proportion of total GDP, most jobs and livelihoods are not export-oriented in most LDCs. Moreover, the linkages between export-oriented activities and the rest of the economy are not automatic.

It is difficult to get measures of the degree to which the national population is directly employed in export activities. As chart 13 shows, exports only amounted to \$113 per worker in LDCs in 1999–2001 compared with \$552 per worker in low- and middle-income countries and \$8,455 per worker in high-income OECD countries. But these large differences reflect the very low levels of output per worker in the LDCs much more than differences in the export orientation of the workforce.

Although there are some exceptions, agriculture is the main source of livelihood in the LDCs. In 2000, 71 per cent of the population of working age was employed in agriculture in the LDCs as a group, and the proportion engaged in agriculture was more than 50 per cent in all except seven LDCs for which data were available — Cape Verde, Kiribati, Lesotho, Maldives, Samoa, Uganda and Yemen. There are some large-scale capitalist farms (plantations, estates and agribusinesses). However, agricultural production is mainly organized on a household basis with the unit of production and consumption overlapping and part of total household production not entering the market system but being consumed within the household. The larger farming units produce primarily for sale, hire labour and purchase manufactured inputs, and they may also be linked as out-growers to agribusinesses. But smaller farming units, though partly integrated into product and labour markets, tend to be more subsistenceoriented. The subsistence orientation of agricultural production is reinforced by the risks associated with living on a bare minimum to survive and also the weak development of the internal network of marketing, transport and communications.

Both agribusinesses and smallholders are engaged in export production. But, in general, exports constitute only a small fraction of total output. Agricultural exports were equivalent to less than 10 per cent of agricultural value-added in more than half of the LDCs for which data were available (table 29). The ratio of agricultural exports to agricultural value-added is certainly not a perfect measure of the extent to which agricultural livelihoods are export-oriented. But it suggests that the direct involvement of people working in agricultural activities in LDCs in exports is rather limited, with a few notable exceptions, including Guinea-Bissau, Malawi and the West African LDCs which export cotton.

The labour force outside agriculture is engaged in mining, industry and services, and just as in agriculture, the organization of production is characterized by much structural heterogeneity. In general terms, as argued in *The Least Developed Countries Report 2000*, it is possible to identify three types of enterprise (UNCTAD, 2000: 95–97). At one end of the spectrum (stratum A) there are a few large-scale enterprises, either domestically or foreign-owned, which have commercially viable assets, which provide regular full-time jobs for skilled labour, and which are linked with global markets. At the other end of the spectrum (stratum C) there are a mass of micro and small enterprises in which the majority of the unskilled labour is employed in informal ways, including casual wage labour. These enterprises are generally oriented to the domestic market, providing services or producing goods which are affordable for the poor.

Although international trade generally constitutes a large proportion of total GDP, most jobs and livelihoods are not export-oriented in most LDCs.

Moreover, the linkages between export-oriented activities and the rest of the economy are not automatic.

71 per cent of the population of working age was employed in agriculture in the LDCs as a group. Agricultural exports were equivalent to less than 10 per cent of agricultural value-added in more than half of the LDCs for which data are available.

Table 29. Indicators of Importance of exports in total employment in LDCs by country, 1999–2001 (Percentage)

		(r crecina)	50/		
	Rural population as % of total population	Agricultural labour force as % of total labour force	Agricul. exports as % of value added in agriculture	Manufactures value added as % of GDP <sup>a</sup>	Manufacture employment as % of total labour force <sup>b</sup>
Above average "openness"	:				
Equatorial Guinea	51.9	70.4	7.0		
Maldives	72.4	22.5		4.3	7.2
	65.8	71.8	 0.5	3.3	0.3
Angola					
Vanuatu	78.3	80.1	14.0	3.4	1.1
Solomon Islands	80.3	73.1			2.1
Sao Tome and Principe	53.1	64.4	44.2	4.4	••
Lesotho	72.1	37.9	5.4	12.7	1.8
Gambia	69.3	79.0	10.3	5.0	0.4
Djibouti	16.0	79.0	17.3	2.7	
, Cambodia	83.1	70.1	2.1	5.8	5.7
Samoa	77.9	34.5	14.1	15.4	
Eritrea	81.2	77.5	1.4	10.5	
Guinea-Bissau	68.5	82.8	59.3		
				10.1	
Mauritania	42.3	52.9	17.3	8.8	0.2
Bhutan	92.9	93.7	9.8	10.4	
Cape Verde	38.0	23.0	0.4	8.7	••
Togo	66.6	59.7	20.1	9.3	••
Yemen	75.3	36.7	32.6	7.0	0.4
Senegal	52.6	73.7	16.7	17.4	0.8
Malawi	85.3	82.9	77.8	12.9	0.8
Mali	69.8	81.0	23.7	3.8	
Lao PDR	80.7	76.5	3.7	17.2	
			3./		
Liberia	55.1 	67.5			••
Madagascar	70.5	74.2	9.6	12.1	
Zambia	60.3	50.9	4.8	11.6	1.1
Below average "openness" <sup>c</sup>					
Mozambique	67.9	80.5	5.8	12.1	0.3
Nepal	88.1	93.0	2.6	9.4	4.4
Chad	76.2	75.2	21.9	11.1	
Guinea	72.5	83.8	4.3	4.2	
Sierra Leone	63.4	62.1	2.5	4.7	0.6
Comoros	66.8	73.7	6.7	4.0	
Ethiopia	84.5	82.4	9.6	7.0	0.3
Haiti	64.3	62.2			••
Benin	57.7	54.0	21.7	8.9	
Niger	79.4	87.7	9.4	6.6	
Dem. Rep. of the Congo		63.2	1.4	4.5	
United Rep. of Tanzania	67.8	80.4	13.3	7.4	0.8
Burkina Faso	83.5	92.3	13.7	14.1	0.2
Uganda	85.8	25.0		9.8	
Bangladesh	75.0	55.6	0.9	14.9	5.6
Rwanda	103.5	90.3	5.3	10.0	
Sudan					••
	63.9	61.0	8.6	9.7	
Burundi	91.0	90.4	11.8	8.7	0.2
Central African Republic	58.8	72.6	4.5	9.2	0.3
Memo items:					
Afghanistan	78.1	67.0			
Kiribati	61.8	26.5		1.1	••
Myanmar	72.3		**		 5.5
WWALITIAL	/ 23	70.2	••	6.9	5.5
•		74.4			
Somalia	72.5	71.1			
•		71.1 <b>69.1</b>	 17.1	 10.3	 1.8

Source: UNCTAD estimates, based on World Bank, World Development Indicators 2003, CD-ROM; FAO online data; UNIDO, Industrial Statistics 2003, CD-ROM; and Asian Development Bank, Key Indicators 2003.

Note: Tuvalu was not included for lack of data.

- 1996–1998 for Cambodia, Kiribati and Maldives.
- b The data refer to the following periods: 1991–1993 for Angola, 1990–1991 for Burundi, 1991–1993 for the Central African Republic, 2000 for Bangladesh, Cambodia, Ethiopia, Mauritania, Mozambique and Vanuatu, 1999 for Nepal, 1998 for Lesotho and Burkina Faso, 1996–1998 for Malawi, 1995 for Myanmar, 1995–1997 for Senegal, 1997–1999 for the United Republic of Tanzania, 1994–1996 for Yemen, 1993 for Gambia and Sierra Leone and 1994 for Zambia.
- c "Openness" is defined by trade as a share of GDP. The LDCs with above average openness are those which have trade as a share of GDP ratio higher than that of low- and middle-income countries.

In between these two types of enterprises there is a thin stratum of domestically owned enterprises which are medium-sized and may have some degree of involvement in export activities (stratum B). A feature of these activities is that it is difficult to finance their development on commercial terms. They have been called the "missing middle" in LDCs in terms of their enterprise structure (UNCTAD, 2001).

As with agriculture, it is difficult to estimate the numbers of people working in export activities, notably in mining, textile and garment manufacture, and tourism services. But the available data show that manufacturing value-added constituted only 10 per cent of GDP in the LDC group during the period 1999–2001, and even in those LDCs which have diversified into textiles and garments exports, manufacturing value-added is low. In Bangladesh, the Lao People's Democratic Republic, Lesotho and Madagascar it constituted between 12 and 17 per cent of GDP. But in Cambodia and Nepal, manufacturing value-added constituted only 6 per cent and 9 per cent of GDP respectively. It is unlikely that manufacturing employment accounts for a greater proportion of the total labour force. Indeed, UNIDO data, which focus on wage employment in formal jobs, indicate that manufacturing employment constituted in the 1990s less than 2 per cent of total employment in almost all LDCs for which data are available (table 29).

Given the structure of production, enterprise and employment, there is a great likelihood that export expansion will be associated with "enclave-led growth".

### 2. THE WEAKNESSES OF ENCLAVE-LED GROWTH

Given this structure of production, enterprise and employment, there is no guarantee that export expansion will lead to a form of economic growth which is inclusive. Indeed, there is a great likelihood that export expansion will be associated with "enclave-led growth". This is a form of economic growth which is concentrated in a small part of the economy, both geographically and sectorally. It is exemplified by the pattern of development in the colonial period in African LDCs where a relatively rich commodity-exporting sector, well connected to roads, ports and supported by ancillary services, existed side by side with large undeveloped hinterlands where the majority of the population live. But it can equally occur with expansion of manufactures exports confined to an export-processing one based on assembly of imported inputs, or tourism enclaves which are supplied through imports, or capital-intensive mines based on FDI.

Enclave-led growth offers a short-term solution to the many binding constraints on economic growth which are characteristic of a low-income trap of underdevelopment and generalized poverty. The lack of investment funds, lack of effective domestic demand and unreliability of domestic suppliers can all be overcome through external sources — using foreign savings to make up for the lack of domestic savings, exports to make up for the lack of domestic demand, and imports to procure inputs of the right international standard. In the event of inelasticity of food supply from domestic agriculture, increased demand by additionally employed and/or better-remunerated workers in the enclave can also be met through increased food imports. But whilst orientation to external markets and suppliers certainly enables economic growth within the enclave — and this will lead to an increasing GDP per capita — economic growth within the enclave can take place together with widespread underemployment and persistent poverty (Mhone, 2001).

Economic growth solely concentrated in an export-oriented enclave will not be inclusive. Moreover, solely it is also unlikely to be sustainable. In very poor countries, increasing inequalities associated with enclave-led growth are likely to

Enclave-led growth offers a short-term solution to the many binding constraints on economic growth which are characteristic of a low-income trap of underdevelopment and generalized poverty...

be perceived as illegitimate and may even contribute to civil conflict (see chapter 4).

# 3. CONDITIONS FOR INCLUSIVE GROWTH

To be inclusive, sustained economic growth must be in a form that increases average household incomes substantially through the creation of sufficient productive income-earning opportunities (jobs and livelihoods). This requires not simply increasing output per capita, but also the achievement of a rate of economic growth and an employment intensity of growth that enable the population of working age to become more and more fully and productively employed. The faster the rate of population growth, the faster the economic growth rate and the greater the employment intensity of growth required to meet this condition.

Export expansion contributes to the achievement of this condition because of the employment created through export activities. These may be more labour-intensive than some import-substitution industries serving the domestic market. However, the total contribution of the tradable sector to employment expansion can be negligible, or even negative, if job creation through export expansion is offset by job loss in tradable sectors serving the domestic market which cannot compete with imports. Many of the stratum B enterprises may be of this type and if they disappear this will exacerbate the problem of the missing middle in the LDC enterprise structure. Moreover, economy-wide expansion of employment depends on growth in the non-tradable sector as well as tradables.<sup>4</sup>

In economies where policy has previously discouraged export production by taxation and other disincentives, there are potential efficiency gains through resource re-allocation away from import-competing activities and non-tradables towards exportables. Such efficiency gains through trade enable greater consumption possibilities for a country for a given labour input. However, getting rid of bias against exports does not mean that import-competing activities and non-tradables can be neglected. Expansion of such income-earning opportunities is a significant component of total employment growth in an inclusive growth process.

Thus although economic growth without export expansion is likely to be unsustainable, economic growth which ignores the domestic market is not likely to be inclusive. Its importance is evident in analyses which estimate the relative importance of different demand-side components of economic growth – the growth of domestic demand, import substitution and export growth. Work by Chenery et al. (1986) on patterns of growth over the period 1950–1983, for example, shows that at the start of the development process the expansion of domestic demand contributed just under 75 per cent of economic growth in both small primary-oriented and small manufactures-oriented countries. In the Republic of Korea (1955–1971) and Taiwan Province of China (1956–1971), usually regarded as the best models of "export-led growth", expansion of domestic demand contributed to 68 per cent and 55 per cent of total economic growth respectively, and the contribution of export expansion was 35 per cent and 43 per cent respectively (Chenery, 1986: table 6.4).

Inclusive growth is also facilitated if export expansion is linked to growth in the rest of the economy, which occurs for example if there are positive synergies between exporting enterprises and local supplies of inputs, providers of services, subcontracting relationships and local purchases of wage goods. It is particularly important that export expansion helps to strengthen domestic linkages and development complementarities between agriculture, where the majority of the population currently earn their livelihoods, and emerging non-agricultural activities.

... But economic growth concentrated in an exportoriented enclave will not be inclusive. Moreover, it is also unlikely to be sustainable.

Although economic growth without export expansion is likely to be unsustainable, economic growth which ignores the domestic market is not likely to be inclusive.

# E. Conclusions

The central message of this chapter is that international trade can play a major role in poverty reduction in the LDCs. This is because there is generalized or mass poverty in the LDCs. In these circumstances, poverty reduction requires sustained economic growth, which in turn requires export expansion. Exports are important because the LDCs are import-sensitive economies and face tight foreign exchange constraints. Import bottlenecks hamper the full utilization and efficient development of domestic productive capacities. In some countries food security is also sensitive to the supply of imports.

Through exports it is possible to transform underutilized natural resources and surplus labour into imports which support economic growth. But although export expansion is a necessary condition, export expansion is not in itself a sufficient condition for sustained economic growth. This requires that export expansion be linked to the main engines of economic growth — increased investment and technological progress. Given the limited domestic resources available for financing investment, establishing a strong investment–export nexus is likely to involve increased trade and increased aid.

For economic growth to be poverty-reducing it must be inclusive as well as sustained. This requires a broad-based form of economic growth which substantially increases average household incomes through the creation of sufficient productive income-earning opportunities. This is difficult to achieve in the LDC context because even though LDCs' economies are very open (in the sense of the importance of trade for GDP) most people are not directly engaged in export activities. Indeed, the structure of production, enterprise and employment within LDCs is more likely to lead to enclave-led growth rather than a broad-based pattern of growth.

The key conditions which must be fulfilled for export expansion to be part of a process of both sustained and inclusive economic growth are the following:

- Export expansion enables imports of goods and services necessary for the full utilization and efficient development of productive capacities, and sustained economic growth.
- The relaxation of the foreign exchange constraint through increased export earnings is not offset by reduced aid inflows or greater debt service obligations.
- Export expansion reinforces, and is reinforced by, capital accumulation and technological progress in the domestic economy.
- There are developmental linkages between growing export activities and the rest of the economy, and in particular international trade strengthens the development complementarities between agriculture and non-agricultural activities.
- There is an economy-wide expansion of income-earning opportunities, encompassing export and import-competing activities, and non-tradables as well as tradables, which occurs at a rate that exceeds the rate at which the working-age population is growing.

When these conditions are met, export expansion should be poverty-reducing.

For economic growth to be poverty-reducing it must be inclusive as well as sustained. This requires a broad-based form of economic growth which substantially increases average household incomes through the creation of sufficient productive incomeearning opportunities.

# **Notes**

- 1. The sample includes countries for which data were available and covers low- and lower-middle-income countries with per capita private consumption levels below \$2,400 a year (in 1985 PPP dollars). This is the upper limit at which it is possible to make estimates of poverty for the \$2-a-day poverty line.
- Economic growth is also important for food security. For a conceptual framework which
  relates food security to economic growth, income distribution and the level of food
  prices, see Timmer (2000). The relationship between income growth and food security
  is analysed by Haddad et al. (2003).
- 3. The term 'enclave-led growth' is borrowed from Jones and Marjit (1995), who use it to refer to a more positive process in which the enclave acts to 'discover' human talent in a society.
- 4. Tradable goods are all domestically produced or domestically consumed goods which are perfect substitutes for internationally traded goods and could potentially enter into international trade. Non-tradables are all domestically produced and domestically consumed goods which have no perfect substitutes among traded goods and that are absorbed only internationally.

# **References**

- Bhalla, S. S. (2002). *Imagine There is No Country: Poverty, Inequality and Growth in the Era of Globalization*, Institute for International Economics, Washington DC.
- Berthélemy, J. C. and Morrison, C. (1989) *Agricultural Development in Africa and the Supply of Manufactured Goods*, OECD Development Center, Paris.
- Chenery, H., Robinson, S., Syrquin, M. (1986). *Industrialization and Growth: A Comparative Study*, Oxford University Press, New York.
- Dabee, B. (2002). The role of non-traditional exports in Mauritius. In: Helleiner, G. (ed.), Non-Traditional Export Promotion in Africa: Experience and Issues, Palgrave, Hampshire.
- Deaton, A. (2004). Measuring poverty in a growing world (or measuring growth in a poor world) (available at http://www.wws.princeton.edu/%7Erpds/downloads/deaton measuringpoverty 204.pdf).
- FAO (2003a). *The State of Food Insecurity in the World*, Rome, Italy (available at ftp://ftp.fao.org/docrep/fao/005/j0083e/j0083e00.pdf).
- FAO (2003b). Food Import Profiles of Least Developed Countries and Net Food Importing Developing Countries, Rome, Italy.
- Haddad, L., Aldermann, H., Appleton, S., Song, L. and Yohannes, Y. (2003). Reducing child malnutrition: how far does income growth take us?, *World Bank Economic Review*, 17:107–131.
- Helleiner, G. (1993). Trade, trade policy and economic development in very low-income countries. In: Nissanke, M., Hewitt, A. (eds.), *Economic Crisis in Developing Countries:* New Perspectives on Commodities, Trade and Finance: Essays in Honour of Alfred Maizels, St Martin's Press, London and New York.
- Jones, R. W., Marjit, S. (1995). Labour-market aspects of enclaved-led growth, *Canadian Journal of Economics*, 28 (special issue): S76–S93.
- Karshenas, M. (2004). Global poverty trends and the millennium goals, Employment Strategy Paper No. 2004/5, International Labour Office, Geneva.
- Mhone, G. C. Z. (2001). Enclavity and constrained labour absorptive capacity in Southern African economies, Paper prepared for the UNRISD meeting on "Rethinking Development Economics", 7–8 September 2001, Cape Town, South Africa.
- Pyatt, G. (2003). Development and the distribution of living standards: a critique of the evolving database, *Review of Income and Wealth*, 49 (3): 333–358.
- Ravallion, M. (2003). Measuring aggregate welfare in developing countries: how well do national accounts and surveys agree, Review of Economics and Statistics, 85 (3): 645–652.
- Sachs, I. (2003). From poverty trap to inclusive development in LDCs, background paper prepared for the *Least Developed Countries Report 2004*, Geneva.
- Timmer, C. P. (2000). The macro dimensions of food security: economic growth, equitable distribution, and food price stability, *Food Policy*, 25: 283–295.
- UNCTAD (1996). *Trade and Development Report, 1996*, United Nations publication, sales no. E.96.II.D.6, Geneva.
- UNCTAD (1998). *Trade and Development Report, 1998.* United Nations publication, sales no. E.98.II.D.6, Geneva.
- UNCTAD (2000). *The Least Developed Countries 2000 Report*, United Nations publication, sales no. E.00.II.D.21, Geneva.
- UNCTAD (2001). Growing micro and small enterprises in LDCs The "missing middle" in LDCs: Why micro and small enterprises are not growing, UNCTAD/ITE/TEB/5, Geneva.
- UNCTAD (2002). The Least Developed Countries Report 2002 Escaping the Poverty Trap, United Nations publication, sales no. E.02.II.D.13, Geneva
- UNCTAD (2003). *Trade and Development Report, 2003,* United Nations publication, sales No.E.03.II.D.7, Geneva.
- World Bank (2003). World Development Report, Washington DC.