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DEVELOPMENT AND INTERNATIONAL ECONOMIC CO-OPERATION:  
LONG-TERM TRENDS IN ECONOMIC DEVELOPMENT

Overall socio-economic perspective of the world economy  
to the year 2000

Report of the Secretary-General

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## I. INTRODUCTION

1. The overall socio-economic perspective of the world economy to the year 2000 is a periodic assessment of long-term development trends and an updating of the world economic outlook through the remainder of the century. It is intended to serve as a quantitative framework for examining long-term economic policy and renewing implementation of the policy measures contained in the International Development Strategy for the Third United Nations Development Decade (General Assembly resolution 35/56 of 5 December 1980, annex).

2. Analytical work relating to long-term trends in economic development was initiated by the General Assembly in its resolution 3508 (XXX) of 15 December 1975. The first comprehensive report (A/37/211 and Corr.1, 2 and 4 and Add.1), prepared in May 1982, was submitted to the Assembly at its thirty-seventh session. In accordance with Assembly resolution 37/249 of 21 December 1982, the report was revised and updated in May 1984 for the process of review and appraisal of the International Development Strategy. The Assembly also requested that the next comprehensive report be prepared in 1985 and submitted to its fortieth session, through the Economic and Social Council. A summary of the present report (E/1985/102) was submitted to the Council at its second regular session of 1985.

3. Although forward-looking, the present socio-economic perspective also attempts to place recent trends in a longer term historical context in order to assess broad shifts in development patterns and progress or problems in achieving the goals and objectives of the United Nations development decades. Section VI of the present report reviews briefly the 25-year experience from 1960 to the mid-point of the Third United Nations Development Decade and highlight the following four broad themes that have guided the selection of particular policy scenarios and of critical issues for more detailed analysis:

• (a) Real economic growth, while satisfactory during the 1960s, has fallen far short of targets and decelerated in absolute terms since then;

(b) Structural change and development, as contrasted to overall growth, ground almost to a halt in the early 1980s; capital formation is being hampered by a more hostile international monetary and financial environment, and exports face markets that are expanding more slowly and show disturbing signs of increasing protectionism;

(c) Least developed and other disadvantaged countries have never fully participated in development progress of any kind that has been achieved elsewhere;

(d) Social development and the development of human resources require greater attention, even at a time when economic problems may seem overwhelming and pressures for fiscal retrenchment greatest.

4. The analyses of the socio-economic perspective in sections III to V are organized in terms of two benchmark horizons, the years 1990 and 2000, and are

presented in terms of broader outlook for the world economy through those respective years, as well as in greater detail for selected critical issues. The medium-term outlook, extending through 1990, comprises the baseline projection, which is an extrapolation of current conditions, indicating gradual recovery of the world economy, and of present, relatively cautious and restrictive, policy stances. 1/ Several alternative scenarios of policy change designed to strengthen and sustain world economic recovery and to promote more rapid growth in developing countries for the medium term are also examined. The long-term outlook, extending through the year 2000, assesses longer-term possibilities for development, especially the feasibility of financing the levels of investment and real growth specified in the International Development Strategy. The implications for attaining the major social or socio-economic objectives specified in the Strategy by the year 2000 2/ are also assessed.

5. Among the selected critical issues considered in the present socio-economic report is the crisis in Africa (see sect. VII). The analysis highlights the broader problems affecting the least developed countries, many of which are in sub-Saharan Africa. The report also reviews trends in military expenditures and various aspects of the relationship between disarmament and development and assesses the costs and benefits of pursuing alternative policy options (see sect. VIII).

6. Although the present report has been prepared in the Department of International Economic and Social Affairs, extensive co-operation has been provided by related United Nations specialized agencies as well as the regional commissions, academic and research organizations and individuals.

#### Notes

1/ Current global trends and policies and the short-term outlook are presented in the World Economic Survey 1985: Current Trends and Policies in the World Economy (E/1985/54), issued as a United Nations publication. (Sales No. E.85.II.C.1).

2/ The current situation with regard to social development is presented in the 1985 report on the world social situation (E/CN.5/1985/2), to be issued as a United Nations publication.

## II. OVERVIEW

### A. Experience of the United Nations development decades

#### 1. Overall objectives and experience

7. In each of the United Nations development decades a clear target was specified for aggregate economic growth, defined in terms of a minimum annual rate of growth for the developing countries as a whole. Also implicit in the International Development Strategy for the Third United Nations Development Decade is an expectation of 4 per cent real growth among developed economies, an expectation on which the target rate for developing countries is based, in the absence of major structural change. The growth rate target set for the first United Nations Development Decade of the 1960s was 5 per cent per year. This amounted to a substantial increase and was then regarded as a bold and challenging goal. Successive decades have established even more ambitious targets: 6 per cent for the 1970s and 7 per cent for the 1980s.

8. These ambitious targets reflect considered assessments of what is necessary to stimulate equitable world-wide development; nevertheless, the experience of the past 25 years has shown that growth rates are not only unable to keep up with targets but are also falling in absolute terms (see table 1). Aggregate output growth of all developing countries collectively has decelerated over the period 1960-1985 from 5.8 per cent during the 1960s to 5.4 per cent during the 1970s and is now less than 2 per cent for the first half of the 1980s. Indeed, economic growth in developed regions has also been substantially below expectation since the mid-1970s. The significant achievements of the first Development Decade are in sharp contrast with the dismal performance during the first half of the Third Development Decade, which witnessed the longest recession (1980-1982) since the end of the Second World War and a recovery of limited scope and intensity.

9. The core question for the socio-economic perspective is whether this disturbing trend can be expected to persist or whether the experience of the mid-1970s through the mid-1980s is temporary and the world economy can return to at least the expansion experienced in the 1960s if not the expectation set by the International Development Strategy for the 1980s.

Table 1. Economic growth in the world economy, 1961-1985 a/  
(Average annual rate of increase in gross domestic product)

Country group	1961-1985	1961-1970	1971-1980	1981-1985
World <u>b/</u>	3.6	5.1	3.6	2.2
Developed market economies	3.4	4.9	3.2	2.2
USSR and Eastern Europe	4.7	6.7	4.8	3.0
Developing countries	4.4	5.8	5.4	1.8
Least developed economies	2.9	2.9	3.1	2.7
<u>Memorandum item</u> : Target rates of growth for developing countries as a group		5.0 <u>c/</u>	6.0	7.0

Source: Department of International Economic and Social Affairs of the United Nations Secretariat.

a/ Growth of gross domestic product measured in 1975 prices and exchange rates.

b/ Does not include China because data are not available for the 1960s and early 1970s.

c/ Minimum rate of economic growth at the end of the first Development Decade.

## 2. Structural change and development

10. Beginning especially in the Second Development Decade, increasing attention has been given to international development targets other than overall real economic growth. Derived from the desire to modernize and diversify the production structure of developing economies, quantitative objectives have been set for production and for the mobilization of resources for capital formation. In addition, an accelerated expansion of international trade has been cited as a prerequisite for balanced economic growth. These goals reflect widely shared concerns about the progress of structural change and economic development as contrasted to sheer economic growth.

11. During the period 1965-1980 the composite rate of growth of manufacturing output for all developing countries, while not approaching the 8 to 9 per cent indicated in the International Development Strategies, was considerably above that for gross domestic product (GDP) as a whole. However, in most of the low-income developing countries the share of manufacturing in GDP changed little. The share

of capital formation in GDP in all groups of developing countries, with the exception of the least developed, rose from 1960 to 1980 to levels prevailing in economically advanced countries (see table 2). However, the quickening pace of capital formation was brought nearly to a standstill in the 1980s owing to high interest rates and tighter monetary conditions globally, debt crises and lower foreign investment and aid, and the adverse impact of higher oil prices and the global recession. Some of those factors are also responsible for the decline in absolute terms in world trade for an unusually long period from 1981 to 1983 and, consequently, the rising levels of protectionism that may choke off the exports of precisely those manufactures that have enabled much of the structural change in the past.

Table 2. Share of capital formation in gross domestic product, 1960-1983 a/

(Percentage)

Economies	1960	1970	1980	1983
Developed market economies	21.2	23.0	22.5	20.8
Developing countries	18.9	20.4	24.2	23.3
Least developed economies	9.8	11.1	14.9	15.1

Source: Department of International Economic and Social Affairs of the United Nations Secretariat.

a/ Measured in current prices and exchange rates.

12. Therefore, the structural development issue of the moment is not as much related to the internal dynamics of structural change as to the external feasibility, whether or not a supportive international trade system and a reliable international financial system permit a return to levels of investment and capital formation necessary for sustained real growth and development.

## B. World economic prospects for the 1980s and 1990s

### 1. Baseline projections

13. For developed market economies, the economic recovery was led mainly by the United States of America and has spread widely, though unevenly, by now. Medium-term growth rates are projected at 2.9 per cent for the period 1985-1990; long-term rates projected for the 1990s are at about 3 per cent per annum (see table 3). These estimates result mainly from the expectation that monetary

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and fiscal policies will remain cautious for the foreseeable future. The regaining of growth rates of about 3 per cent is likely, but there is little evidence supporting the return of growth rates of 4 per cent or higher for countries of the Organisation of Economic Co-operation for Development (OECD). As a consequence, and because persistent labour market rigidities produce upward pressure on real wages even in the face of continuing high unemployment rates, employment is projected to remain low and unemployment rates high (but not increasing) through the year 2000, particularly in Western Europe. Short-term interest rates under the baseline projections are expected to increase moderately during the next few years and then decline slowly, so slowly that interest rates not less than 7 per cent are projected for the year 2000. Since inflation in OECD countries is projected to remain stable at about 4 per cent, short-term real rates in excess of 3 or 4 per cent are projected for the foreseeable future.

Table 3. Real world output: annual growth rates of GDP  
(Percentage change from previous year)

Economy group	1976- 1980	1985	Baseline projections			
			1986	1987	Average 1988-1990	Average 1985-1990
World	4.0	3.2	3.0	3.5	3.6	3.5
Developed market economies	3.5	2.7	2.4	2.9	3.1	2.9
USSR and Eastern Europe <u>a/</u>	4.0	4.0	3.9	3.9	4.0	4.0
China <u>a/</u>	5.3 <u>b/</u>	6.9	7.2	6.9	6.0	6.4
Developing countries	5.0	3.6	3.5	4.3	4.7	4.3
Africa	4.4	3.1	2.7	3.5	3.4	3.3
East and South Asia	6.0	5.5	5.4	5.2	5.6	5.5
West Asia	4.0	3.0	3.2	3.8	4.6	4.2
Latin America	5.2	2.8	2.7	4.3	4.3	3.9
Oil-exporting countries	...	3.0	3.1	4.0	4.5	3.9
Non-oil exporting countries	...	3.8	4.1	4.8	4.8	4.6

Source: Department of International Economic and Social Affairs of the United Nations Secretariat, based on projections from international sources, particularly those of Project LINK (as of April 1985).

a/ Growth rates of net material product (NMP).

b/ For the period 1978-1981.

14. The centrally planned economies of Eastern Europe have improved external balances and are showing strong performances in the industrial sector. Economic growth has been gaining momentum with growth rates for net material product (NMP) steadying at around 4.0 per cent per annum. There are good prospects for continued growth at these rates although in some Eastern European countries, debt burdens and external balance constraints will continue to be felt for years to come.

15. The projected long-term growth rate for developed market economies is below the 4 per cent per annum expectation on which the International Development Strategy is based, while the 4.25 per cent real growth per year that is projected for developing countries for the remainder of the decade is much lower than the International Development Strategy target of 7 per cent. Moreover, the 4.5 per cent real growth rate projected for the 1990s is a significant downward revision of projections made during the past few years. Growth prospects for developing countries are constrained not only by the lower OECD growth, but also by weak commodity prices and reduced levels of export earnings, severe cutbacks in external aid and capital flows, increasing protectionism, and a rising debt burden. These factors have been aggravated in some cases by inappropriate domestic policies as well.

16. The current situation and prospects in developing countries vary among country groups and regions. In Latin America and the Caribbean, the rising debt-service burden and the package of austerity programmes accounted for the sharp economic contraction and the decline of per capita income in the first half of the 1980s. At present the strong dollar and the recovery in the United States have stimulated exports, and the adverse effects of austerity programmes can be expected to abate, but the debt burdens will remain; projections for Latin America are for about 4 per cent real growth for the rest of the decade and 4.5 to 5 per cent during the 1990s. Economic problems in Africa have been the result of many factors, including weak world demand for primary commodities, deterioration in the commodity terms of trade, reduced external aid and capital inflows, and three consecutive years of severe drought. Even if harvests improve rapidly, projections of less than 3 per cent real growth in the aggregate indicate that economic growth per capita in Africa can be expected to remain near zero or negative, on average, through the year 2000.

17. The decline in West Asian domestic product, in both aggregate and per capita terms, during the period 1981-1983, was due mainly to the drastic decline in oil exports and to the prolonged military conflict between the Islamic Republic of Iran and Iraq. Real growth is projected to recover to about 4 per cent in the period 1985-1990 and to over 4.5 per cent during the 1990s. South and East Asia are the only developing regions that have weathered the storm of global economic recession with relative success; their growth in per capita income has been positive, if lower than was achieved in the 1960s and the 1970s. This was due partly to the economic resilience and export-oriented policies of the major manufactures exporters in the region, which have been able to make prompt and timely adjustments to external shocks and changes in external demand, and partly to improvements in agricultural performance and success with import substitution (in energy for example) in some large and self-contained economies such as India. The baseline scenario projections are for continued expansion at rates between 5 and 5.5 per cent per year.

18. Under baseline projections, development according to the standards of the International Development Strategy is clearly not attainable. The investment ratio to GDP for all petroleum-importing countries collectively, for example, is projected to be only 24 per cent by 1990 and less than 25 per cent by the year 2000, compared to the Strategy target of 28 per cent. Furthermore, GDP, exports and imports are projected to increase at rates of 4.6, 5.5 and 5.4 per cent, respectively, during the period 1985-1990, which are all much lower than the corresponding target rates of 7, 7 and 8 per cent, respectively. In short, although baseline projections represent a considerable improvement over the performance during the first half of the 1980s, the picture for the developing countries is one of uncertainty and disappointment. Still, analyses indicate that mechanisms promising considerable improvement are available, but sufficient international resolve will be needed to implement them.

## 2. Appraisal of opportunities for the second half of the 1980s

19. The approach used to appraise growth prospects to 1990 was to start with the baseline projections mentioned above that assume "no-change" in the existing and expected government policies (e.g., monetary, fiscal, trade and aid) and then to formulate policy scenarios indicating alternative development paths. In this exercise, global econometric models of the Department of International Economic and Social Affairs and those maintained by academic and research institutions, notably the econometric models of the LINK Project and the Fugii Global Macroeconomic Model, have been used.

20. Several policy scenarios have been simulated in order to assess the impact and efficiency of the various policy measures in raising the growth prospects of both the developed and developing economies. The simulated scenarios include: (a) co-ordinated OECD monetary and fiscal policies to result in a reduction of interest rates (by 3 percentage points for the United States, 2 percentage points for Western European countries and 1 percentage point for Japan) compared with those assumed in the baseline for the years 1985-1990; (b) trade liberalization policies (a 5 per cent reduction in non-tariff barriers of OECD imports) starting in 1985; (c) achievement of the official development assistance (ODA) target (0.7 per cent of donors' GNP) through reductions in defence expenditure by 1990; (d) increased transfer of technology to developing countries; (e) increased direct private investment in developing countries; and (f) progress in global disarmament, among other factors.

21. The single most effective scenario in raising the economic growth of the industrialized countries would be that involving the reduction in interest rates. This would increase the GDP growth rate of industrial countries by 0.3 percentage points in the period 1985-1990, as compared with the baseline projections (see table 4). The corresponding increase for the developing economies would be 0.1 percentage points only. However, achievement of the ODA target of 0.7 per cent of donors' GNP by 1990 would have the effect of raising the GDP growth rate of developing countries by 0.3 percentage points in the period 1985-1990, compared with the baseline, while that of the industrial countries would remain unaffected. The ODA target scenario appears to be particularly effective in raising the GDP

Table 4. Alternative policy scenarios I: deviation of GDP growth rates of alternative scenarios from baseline projections, 1985-1990  
(Percentage points)

Scenario a/	Average annual deviation of scenario from the baseline a/						
	Developed market economies	Developing countries					Latin America
		Total	Oil-exporting	Africa	South and East Asia	West Asia	
1. Reduction of interest rates in OECD countries	0.3	0.1	0.3	0.1	0.1	0.2	0.2
2. Reduction of trade barriers in OECD countries by 5 per cent of total import cost	0.1	0.1	0.1	0.1	0.1	0.1	0.2
3. Achievement of ODA target 0.7 per cent of GNP by 1990	0.0	0.3	0.2	1.4	0.2	0.5	0.3
<u>Composite scenarios:</u>							
A (= 1 + 2)	0.5	0.2	0.3	0.3	0.2	0.3	0.2
B (= 1 + 2 + 3)	0.5	0.5	0.5	1.7	0.3	0.7	0.5

Source: Department of International Economic and Social Affairs of the United Nations Secretariat, based on simulations with the econometric models of the LINK Project.

a/ Deviation = scenario growth rate - baseline growth rate.

growth rate of non-oil exporting developing countries in Africa, which would be increased by no less than 1.4 percentage points, above the baseline projections, for the period 1985-1990. If the first three scenarios, viz., co-ordinated OECD interest rate reduction, a 5 per cent reduction of OECD non-tariff barriers to trade and achievement of the 0.7 per cent ODA/GNP target, are combined together, respectable and mutually beneficial effects would be obtained: the GDP growth rates of both the developed and developing countries would be enhanced by 0.5 percentage points in 1985-1990 above the baseline and that of the world as a whole would be raised by 0.4 percentage points.

22. For the developing countries, the most effective policy for raising economic growth would be an increase in the transfer of technology from the industrialized countries. This scenario would entail infusion of a significant amount of external capital (both private and official) and an extremely favourable international environment, as well as supportive domestic policies in the developing countries to facilitate technology transfer and manpower training and development. This scenario would raise the GDP growth rate of developing economies by 1.02 percentage points, without any significant effect on the GDP growth rate of the developed economies as compared with the baseline, in the period 1985-1990 (see table 5).

23. Another promising scenario for raising the GDP growth rate of developing countries in the latter half of the 1980s is the scenario calling for mobilization of resources, foreign and domestic, public and private, for increased investment in the developing countries, in which it is assumed that the developed countries will expand their private direct investment in developing countries by an additional 0.25 per cent of their GNP, starting in 1985, over and above the baseline projections, while the developing countries will also expand their investment in other developing countries by 0.5 per cent of their GDP annually. The results are highly encouraging in that they would raise the GDP growth rate of the developed countries by about 0.08 percentage points for the period 1985-1990 over the projected baseline levels, while increasing the GDP growth rate of developing countries by 0.7 percentage points.

24. Another scenario that significantly raises the GDP growth rates of developing countries is the disarmament scenario, in which it is assumed that all countries of the world would freeze their defence expenditures at the 1984 level, starting in 1985. Fifty per cent of the financial resources released from such a reduction in defence expenditure in the developed countries (both market and centrally planned) are assumed to be channeled into official development assistance to the developing countries, while the remaining 50 per cent would be used to improve the welfare of the population of these countries. In the case of developing countries it is assumed that the financial resources freed from the defence burden would be used to increase domestic capital investment. This scenario is found to be very powerful in raising the GDP growth rates of developing countries (i.e. by 0.72 percentage points, compared with the baseline projections for 1985-1990), while increasing the corresponding GDP growth rates of the developed countries (by 0.13 percentage points).

Table 5. Alternative policy scenario II: Deviation of GDP growth rates of alternative scenarios from baseline projections, 1985-1990 (Percentage)

Scenario	Average annual deviation of scenario from the baseline a/		
	Developed market economies	Developing countries	Oil-exporting Oil-importing
1. Reduction of international interest rates	0.26	0.18	0.39
2. Trade liberalization in OECD countries	-0.01	0.13	0.27
3. Achievement of 0.7 per cent ODA/GNP target by 1990	0.02	0.02	0.21
4. Increased direct private investment b/	0.08	0.74	0.68
5. Debt rescheduling	0.01	0.04	0.07
6. Increased transfer of technology and manpower development in developing countries	-0.05	1.57	0.75
7. Progress in global disarmament	0.13	0.52	0.81
<u>Composite scenarios:</u>			
A = 1 + 2	0.25	0.54	0.66
B = 1 + 2 + 3	0.27	0.69	0.87
C = 1 + 2 + 3 + 4	0.36	1.36	1.52
D = 1 + 2 + 3 + 4 + 5	0.37	1.42	1.59
E = 1 + 2 + 3 + 4 + 5 + 6	0.35	1.87	1.71
F = 1 + 2 + 3 + 4 + 5 + 6 + 7	0.25	2.38	2.27

Source: Department of International Economic and Social Affairs of the United Nations Secretariat, based mainly on simulations using the Fugl Model.

a/ Deviation = Scenario growth rate - baseline growth rate.

b/ Scenario 4 does not take into account the effects of profit repatriation that do not arise if all profits are reinvested in developing countries.

25. The simulation exercise reveals that the impact of a composite policy scenario is usually stronger than the sum of the effects of individual policy measures that constitute that scenario. Among the composite scenarios simulated, the most promising appears to be the one that incorporates the following elements: increased transfer of technology and manpower development, trade liberalization in OECD countries, achievement of the 0.7 per cent ODA/GNP target by 1990, mobilization of resources for investment and success in debt renegotiations including lowering of interest rates. This composite scenario would raise the GDP growth rates of developing countries by 1.9 percentage points per year in the period 1985-1990 compared with the baseline projections, while increasing the corresponding GDP growth rates of developed countries by 0.3 percentage points. When the additional 1.9 percentage points GDP growth is combined with the baseline projection, the annual GDP growth rate of the developing countries during the period 1985-1990 would be raised to 6.2 per cent for the period in question. This would be no mediocre achievement, but the task of implementing technological transfers and a massive mobilization of resources for investment is gigantic in that it requires a further increase in domestic savings rates in developing countries and massive infusions of external capital both official and private.

### 3. Projections to the year 2000

26. In assessing longer-term development possibilities, to the end of the century, the focus is on two key questions. First, is the long-term outlook sufficiently robust to allow for reasonable development performance even in the presence of recurring crises like those that have arisen from the early 1970s to the present day, or is progress in achieving world development aspirations dependent on stable world economic conditions like those that prevailed during the 1960s and early 1970s? Secondly, what are the implications of the long-term outlook for the International Development Strategy of the Third United Nations Development Decade or the prospective fourth decade?

27. Table 6 presents a higher-growth scenario (relative to the baseline) in which investment effort and capital efficiency in developing countries are assumed to move gradually towards the targets of the Strategy, and this evolution is intended to take place within the framework of generalized world expansion that includes developed as well as developing countries. In contrast to the baseline projection, the higher-growth scenario is a normative scenario that assumes progressive achievement of accelerated growth and development; the intention is to measure when the International Development Strategy targets may be reached and to evaluate the financial feasibility of meeting the targets, given that that is possible in physical terms.

Table 6. Higher-growth scenario: projections of growth rates of GDP, 1986-2000 a/

(Real growth rate in percentage)

Economy group	1965-1985	1986-1990	1991-2000 <u>b/</u>	
World	3.9	4.6	4.9	(3.3)
Developed market economies	3.2	4.1	4.2	(3.1)
USSR and Eastern Europe	4.8	4.9	4.9	(4.0)
China, Romania and Yugoslavia	6.9	7.0	7.1	(5.5)
Developing countries	5.3	5.1	6.2	(4.6)
Latin America	4.9	4.6	6.1	(4.7)
Africa	4.2	3.9	5.7	(2.8)
West Asia	5.9	4.9	6.2	(4.6)
South and East Asia	6.0	6.4	6.8	(5.3)
Petroleum-exporting	5.4	5.0	6.1	(4.6)
Petroleum-importing	5.2	5.3	6.4	(4.7)

Source: Department of International Economic and Social Affairs of the United Nations Secretariat.

a/ Net material product for planned economies.

b/ Baseline projection in parentheses.

28. For each developing country in which the investment share in GDP is less than the International Development Strategy target of 28 per cent and/or where the incremental capital-output ratio is above the target of 4.0 per cent, either or both of these are adjusted (gradually) until the target values are reached. Further, explicit adjustments to assumptions for developed countries are made which result in long-term growth rates on the order of the International Development Strategy expectation of 4 per cent as contrasted with the baseline projection of 3 per cent. Finally, it was assumed that no significant deterioration in the terms of trade would occur and that there would be no appreciable increase in protectionism. The general conclusion that emerges is that 7 per cent real growth for developing countries, taken as a whole, is achievable, but not until the mid-1990s.



29. The analysis includes a detailed assessment of financing the external balance of the petroleum-importing countries, which would require about \$155 billion (in 1975 prices) by the year 2000 under the higher-growth scenario. Official development assistance, assuming that ODA targets are met, and concessional assistance of the Organization of the Petroleum Exporting Countries (OPEC), at current rates, would generate \$123 billion or nearly 80 per cent of the required financing. Private capital flows and/or improvements in the terms of trade can plausibly be expected to cover the balance.

30. There is an open question whether productivity of capital and labour would increase sufficiently to achieve the growth envisioned in the higher-growth scenario. In fact, the overall deterioration in performance from the 1960s to the 1980s may be attributed in part to progressively increasing inefficiency in the utilization of capital and/or to inadequate manpower retraining. Savings rates and investment as a fraction of GDP both increased substantially from 1960 to 1980, but sheer capital formation is not sufficient. Moreover, the task of implementing suitable technological transfers and a massive mobilization of resources for investment are certainly not easy in the medium-term but should be made part of a long-term goal.

31. The financial aspect includes two particularly important issues. First, will ODA increase to the level required, even though many of the developed countries are beset with serious unemployment and some are preoccupied with reducing the scale of government? Second, will the necessary private capital flows to developing countries be forthcoming or will they dry up or carry onerous interest rates at the first sign of a crisis situation? Failure to meet these requirements would limit rather than promote structural development and growth.

32. Table 7 presents a lower-growth scenario in which the growth rate of developing countries to the year 2000 is projected to remain as low as that experienced during the period 1974-1985. Since the baseline projection implicitly assumes considerable background stability and since the period 1974-1985 was characterized by considerable instability, the lower-growth scenario may be regarded as a test of the robustness of the baseline scenario to unforeseen crisis. It emerges that the lower-growth scenario is significantly more pessimistic than the baseline. Average real growth rates of 2.5 and 3 per cent per annum would be the norm for many countries, not only for those in Africa.

Table 7. Lower-growth scenario: projections of growth rates of GDP, 1986-2000 a/  
 (Real growth rate in percentage)

Economy group	1965-1985	1986-1990	1991-2000
World	3.9	3.1	3.2
Developed market economies	3.2	2.5	2.6
USSR and Eastern Europe	4.8	3.8	3.9
China, Romania and Yugoslavia	6.9	5.3	5.5
Developing countries	5.3	3.6	3.9
Latin America	4.9	3.3	3.4
Africa	4.2	2.6	2.7
West Asia	5.9	2.6	3.0
South and East Asia	6.0	5.1	5.2
Petroleum-exporting	5.4	3.1	3.4
Petroleum-importing	5.2	4.0	4.1

Source: Department of International Economic and Social Affairs of the United Nations Secretariat.

a/ Net material product for planned economies.

### C. Socio-economic perspectives

33. Successive General Assembly resolutions establishing the three United Nations development decades have expressed clear concerns and objectives for social development and the development of human resources. The need for more equitable distribution of income and wealth and the need for improved education, health, nutrition and housing are expressed as clear concerns of the International Development Strategy for the Second United Nations Development Decade (see Assembly resolution 2626 (XXV) of 24 October 1970). The Strategy for the Third Decade (resolution 35/36, annex) incorporates a wide range of social goals in the area of employment, education, health and shelter to be met by the year 2000. Collectively, these objectives have as their purpose the eradication of extreme poverty and the satisfaction of basic needs of all the world's people by the end of the century. Therefore, even though economic problems may seem overwhelming at present, it is important to consider the socio-economic consequences of the prospective economic outlook.

34. The present report compares the implications of the scenarios of higher and lower economic growth for employment, school enrolment of children aged 6 to 11, literacy and the availability of drinking water and sanitation. The results of a similar analysis of undernutrition by the Food and Agriculture Organization of the United Nations (FAO), are also presented. These social aspects of development would improve at significantly higher rates from 1985 to 2000 with the higher-growth scenario than with the lower-growth scenario, but even with high growth there would still be large gaps between the levels likely to be achieved by 2000 and some of the goals set in the International Development Strategy. (This conclusion also applies to the Strategy target for shelter, as discussed in the previous overall socio-economic perspective report (A/37/211, paras. 305-312).) Major policy initiatives and related institutional developments will be needed, therefore, to increase the quantity and efficiency of public and private expenditure targeted to achieving most of the social development goals of the Strategy.

35. Achievement of full employment by the year 2000 in many developing countries will be very difficult, as the large number of children now under 14 years enter the working age population (aged 15 to 64) between 1985 and 2000 and as an increasing share of the women of working age are expected to seek employment. Additional pressures will be generated by continuing rural-urban and international migration. Based on the limited available data on employment levels and labour force participation rates in the developing countries, approximate projections of employment to the year 2000 have been made, based on the assumption that productivity will grow 2 per cent per year from 1980 to 2000 (see table 8). For the developing market economies as a whole, total employment (including many under-employed workers) was about 93 per cent of their labour force in 1980; since 1980 it has fallen much lower. Under the lower-growth scenario, the employment rate would recover somewhat by 1990, but fall back by the year 2000, reflecting the rapid growth of the labour force. Under the higher-growth scenario, in contrast, the employment rate would recover rapidly and would reach 100 per cent in the mid-1990s. This implies that achievement of the higher GDP growth rate up to the year 2000 would require average productivity growth greater than 2 per cent per year and/or increases in the labour force participation rate greater than those currently projected by the International Labour Organisation (ILO). Such increases seem quite possible when the implied employment levels are measured in relation to the projected working age population (see table 9).

36. Despite considerable increases in the number and percentage of children attending school in the developing countries, the number of illiterate people is still increasing. With the sharp acceleration in the projected growth of GDP under the higher-growth scenario, rapid increases in the enrolment rates of children aged 6 to 11 would continue. However, only modest acceleration would occur by the year 2000 in the rising trend in literacy rates, particularly in low-income countries, if the present relations continue among the literacy and enrolment rates and the levels of per capita expenditure on primary education and per capita GDP. More significant acceleration would occur between the years 2000 and 2010, reflecting the rapid growth of GDP and enrolment in the 1990s. Under the lower-growth scenario, primary enrolment would increase much less, especially in the low-income countries, and the illiteracy rate would decline very little.

Table 8. Employment as a percentage of the labour force in developing countries, 1980-2000

Country group/Scenario	1980	1985	1990	1995	2000
<b>Developing countries</b>					
Lower growth	--	--	88.1	84.9	83.5
Baseline	93.3	82.9	90.6	90.2	92.0
Higher growth	--	--	95.4	102.5 <u>a/</u>	113.9 <u>a/</u>
<b>Least developed economies</b>					
Lower growth	--	--	77.6	70.8	65.8
Baseline	89.7	81.5	77.7	70.9	66.0
Higher growth	--	--	81.0	83.4	91.8

Source: Department of International Economic and Social Affairs of the United Nations Secretariat, based on ILO historical country data and projections of labour force participation rates.

a/ For explanation, see para. 35 above.

Table 9. Employment as a percentage of the working age population in developing countries. 1980-2000

Country group/Scenario	1980	1985	1990	1995	2000
<b>Developing countries</b>					
Lower growth	--	--	55.4	53.3	51.8
Baseline	62.0	53.5	56.9	56.7	57.1
Higher growth	--	--	60.0	64.4	70.7
<b>Least developed economies</b>					
Lower growth	--	--	60.8	55.3	50.2
Baseline	72.6	64.6	60.9	55.4	50.3
Higher growth	--	--	63.4	65.1	70.1

Source: Department of International Economic and Social Affairs of the United Nations Secretariat, based on ILO historical country data.

37. Although the causes of malnutrition are complex and not yet fully known, it is generally held that first consideration must be given to the adequacy of calorie intake. The growth of average calorie supplies per capita gives an idea of the nutritional trends, but does not indicate the number of undernourished people, which depends crucially on the distribution of income and food supplies. Based on calorie intake levels below which an individual's ability to carry out minimum necessary activity is seriously impaired, FAO has estimated that as of 1974-1976 there were 436 million undernourished people in 90 developing countries. If present trends continue, their number will reach 590 million by the year 2000, or even more if food imports are not greatly increased. However, if the targets of the Strategy for the growth in agriculture and food production are achieved and appropriate national food distribution policies are implemented, the number of undernourished people would fall to about 260 million.

38. Lack of safe drinking water and adequate sanitation are major causes of the death of millions of children every year in the developing countries; nearly half the population of the developing countries suffers from health problems that can be traced to unsafe water and inadequate sanitation. Although the percentage of population with access to safe water and adequate sanitation increased significantly in many of the developing countries from 1970 to 1980, nearly three fifths of the population in the developing countries (excluding China) still did not have access to safe drinking water in 1980, and only about one fourth had any kind of sanitary facility. Most of the developing countries will have to make major increases in their investment in water supply and sanitation facilities, as a percentage of their total investment, if they are to reach the goal of 100 per cent (set for 1990 in the International Development Strategy) even by the year 2000. A continuation of the historical relationship between the percentages of people with water and sanitation, total investment per capita, population growth and urbanization would leave most of the developing countries far below the goal of 100 per cent in the year 2000, even if aggregate investment increases at the rates envisaged under the higher-growth scenario.

#### D. Least developed countries and the crisis in Africa

39. Concern for the plight of the poorest developing countries has always been implicit in the United Nations development decades, but in the past two strategies special measures have been explicitly specified in favour of the least developed and other disadvantaged countries to enable these countries to overcome their special problems and participate fully in the process of development. Those measures anticipated the possibility that the poorest developing countries would not and did not share in whatever basic development progress that had been achieved.

40. In spite of the fact that total output in developing countries expanded faster than that in developed economies from 1960 to 1985, per capita GDP rose at a slower rate, widening already large disparities in standards of living between developed and developing countries. Moreover, relative per capita income differentials widened within the developing countries as well, between the least developed group and all others. Over the past 25 years, output growth in the newly industrializing economies averaged 6 per cent a year, whereas growth in least developed countries

averaged less than 3 per cent per year. Given high rates of population growth in many of the latter countries, standards of living have effectively stagnated for nearly a quarter of a century.

41. The plight of the least developed countries is most starkly seen in Africa, the only continent where standards of living have declined during the past decade, continue to decline and are projected to decline in the baseline projections through the year 2000. However, a comparison of the higher- and lower-growth scenarios shows relatively little improvement for Africa in contrast to other regions. Unless the recent decline in Africa is quickly checked and growth and development are put back on a rapid and sustained course, there may soon unfold a human drama of poverty, hunger, desperation and political strife in Africa, more intense and widespread than the world has ever seen before.

42. Africa includes a large number of the poorest countries in the world. The average annual percentage change in per capita GDP in Africa has been negative since 1973: -1.0 over the period 1973-1979 and -1.6 subsequently. While not all countries of Africa have fared equally badly, most African countries have suffered declining real per capita GDP since 1980, and most of the low-income sub-Saharan countries have suffered large declines in real per capita GDP since 1970. The real per capita GDP of these countries was about 16 per cent less in 1983 than in 1970.

43. At the end of 1984, many countries in Africa faced exceptional food problems; per capita grain production in these countries has declined by about 2 per cent per year ever since 1970 and dipped below the 140 kilograms considered a minimum for a healthy diet in 1975, and it has continued to fall since then. In 1984, grain production in Africa fell below 100 kilograms per capita for the first time. The causes of the food crisis in Africa are threefold. First, Africa is experiencing a higher rate of population growth than any other continent. Secondly, Africa may be undergoing climatic changes and soil erosion on a scale that is perhaps not yet fully appreciated. Third, African Governments have given inadequate and misdirected attention to agriculture since independence. These three factors are now converging and reinforcing each other in a devastating fashion.

44. Scarcity of investment resources and of the foreign exchange required to import needed raw materials, intermediate products and capital goods severely limited the rate of socio-economic development in Africa. While these constraints are present in all developing countries, they are particularly serious in a region as poor as Africa. The share of consumption in GDP was over 94 per cent for the low-income African countries, as compared with 77 per cent for the low-income Asian countries and 76 per cent for all developing countries as a group.

45. With their export earnings growing slowly - as compared with historical rates and the growth of export earnings of other developing countries and with the need for imports even greater than in the latter - African countries had to limit severely the amount of goods imported. This, in turn, severely constrained their rate of development, particularly during the past decade. Thus, while the foreign debt of the Latin American countries is much larger in absolute terms, African countries also face an unmanageable foreign debt burden.

46. According to the long-term projections to the year 2000, the rate of increase in real aggregate GDP in Africa is projected to be 2.7 per cent per year between 1986 and 1990 and 2.8 per cent between 1990 and the end of the century. The scenario is one of declining real per capita GDP in Africa, though the decline is expected to diminish gradually by the end of the decade. This will be accompanied by an investment-savings gap rising from 3.9 per cent of GDP between 1985 and 1990 to 4.1 per cent between 1990 and 1995 and finally to 4.4 per cent in the period 1995-2000.

47. There is today a consensus among the African countries themselves, the African regional organizations (such as the Economic Commission for Africa (ECA) and the African Development Bank (ADB)), the United Nations and other international organizations (such as the World Bank and the International Monetary Fund (IMF)) on the proper domestic policies and international actions required to overcome the deepening crisis and put Africa back on the development path. Since agriculture is the mainstay of sub-Saharan African economies, improving agricultural performance is essential to ameliorate economic conditions and stimulate development in Africa. ECA and ADB have also concluded that the performance of agriculture in Africa can be improved substantially by providing adequate farm credit facilities, sufficient supply and timely delivery of inputs, adequate marketing, infrastructural and storage facilities, and effective extension services. <sup>1/</sup> Although many African countries have already adopted policies on some of these matters, much remains to be done and a far greater effort must be placed on implementing the policies.

48. At the international level, action is required to ensure (a) greater access for the African products in industrialized country markets, (b) higher and more stable prices for African exports and (c) a much larger flow of foreign aid on concessionary terms, not only for emergency purposes, but more importantly for the long run, to support domestic reform programmes designed to increase economic efficiency. The Committee for Development Planning has recently emphasized that:

"There is technical agreement that domestic policy reform and improved external support make up an inseparable package. Increased support for agriculture, through restructured institutions and incentives, is the crux of the required domestic policy change. Restored levels and more appropriate and flexible forms of official assistance constitute the essential external requirements. Domestic or external policies alone are each unlikely to avert the recurrence of future disasters. There is, therefore, a joint responsibility for securing a better future in Africa." <sup>2/</sup>

#### E. Military expenditure, disarmament and development

49. The first half of the Third United Nations Development Decade witnessed a new phase of accelerated growth in world military expenditures. These expenditures consume scarce resources and divert them from productive to non-productive uses in all countries. Significant disarmament would release vast resources, even a fraction of which could accelerate development and the establishment of a more sustainable international economic and political order.

50. From 1980 to 1984, world military spending grew from \$564 billion to \$649 billion (in 1980 prices), a growth rate of over 3.5 per cent. Military spending in 1983 was over 5 per cent of world output and 27 times as large as all ODA provided by the OECD countries in that year. It was much more than the total value of gross fixed capital formation in all the developing countries combined and about the same as global public expenditure on education. International trade in arms reached an estimated \$39 billion in 1982, and has become a significant share of exports of some of the developing countries as well as the developed countries.

51. Global expenditure on military research and development in 1980 was approximately one quarter of all expenditures on research and development. Approximately 20 per cent of the world's qualified scientists and engineers were engaged in military work during the 1970s; that number is probably even higher now, given the emphasis by all countries on developing or acquiring the most technologically advanced weapons available. Military research and development, with their long lead-times, create uncertainty about the future military capabilities of potential adversaries. This has led to the development by States of new weapons on the "action-reaction" assumption that others are also engaged in this process, even though there is often no tangible information on this during the early stages of the research and development work on such national projects. The technological arms race has greatly complicated the process of risk assessment and increased the efforts needed to control the whole arms race through negotiations.

52. The arms race is obviously irrational from a global point of view, but can be understood as a consequence of countries' concerns about the national security and their distrust of the intentions of potential adversaries. It is in the area of "confidence-building" that much more intensive work for disarmament should be done, such as the promotion of mutual trade, cultural exchange, prior notification of military exercises etc. This could create a more favourable environment for genuine progress in arms reductions.

53. Although a significant level of disarmament would require major conversion or re-deployment of resources from the production of military goods and services, some investigations suggest that, as a creator of jobs, military expenditure is less efficient than non-military expenditure in the developed countries. In the less developed economies, the job-loss effects of higher military spending may be even more far-reaching, because the sustained emphasis on technological sophistication in the military sector diverts a large share of these countries' most skilled workers. Estimates indicate that a freeze in military spending could result in a significant increase in world GDP and capital stock by the year 2000, with gains for both the developed and the developing countries. A gradual reduction in military spending would lead to even greater benefits.

#### Notes

1/ African Development Bank and Economic Commission for Africa, Economic Report on Africa 1984 (Abidjan and Addis Ababa, 1984), p. 47.

2/ Official Records of the Economic and Social Council, 1985, Supplement No. 9 (E/1985/29), annex I, para. 4.



### III. WORLD ECONOMIC PROSPECTS FOR THE BALANCE OF THE DECADE OF THE 1980s

54. The first half of the 1980s witnessed a period of severe recession (1980-1982), the longest of several since the end of the Second World War, and a subsequent recovery of limited scope and intensity. The world economy in 1985 reflects some progress, but still gives cause for much concern. Uncertainties remain and problems need to be resolved, particularly with reference to the contradictions in objectives of government policies, viz., the desire to increase labour productivity, with the need for decreasing unemployment; the world-wide search for foreign markets and export dynamism, with the efforts to reduce imports aimed at solving balance-of-payments problems; the obligation of debtor countries to repay and service debts, and refusal to admit the latter's exports into the domestic markets of creditor countries; and the need to balance objectives of achieving faster growth and price stability, to mention just a few.

55. The present section provides a brief overview of recent trends of the world economy and assesses growth prospects for the balance of the decade of the 1980s. A baseline scenario assumes "no-change" or a continuation of present policies at the national and international levels, and alternative scenarios explore the impact of policy changes aimed at strengthening world economic recovery and accelerating growth in developing countries.

56. Among the analytical tools used for this exercise are global multi-country econometric models of the United Nations Secretariat and those maintained by academic and research institutions, notably the econometric models of the LINK Project and the Fugui Global Macroeconomic Model of Soka University, Tokyo. 1/ These models differ in their scope and structure but provide mutual checks on the results of the projections and policy simulations. In evaluating growth prospects, similar projections for the medium term by the World Bank IMF have also been taken into account. 2/

#### A. Trends in the first half of the 1980s 3/

57. In the two decades between 1960 and 1980, the developing countries made adequate economic progress, growing at 5.8 per cent per year between 1961 and 1970 and a still acceptable 5.4 per cent between 1971 and 1980. These rates were higher than those of the developed market economies in the same periods.

58. This achievement has been put in jeopardy by the world recession that began in 1980 (the strong economic performance of the United States in 1984 notwithstanding). As table 10 shows, the story of the 1980s is slow or negative growth tempered by mild recovery in 1984. A few bright spots include India and China among the poorer countries, East Asian middle-income economies and (though the trends are far from clear) the export-led resurgence of Brazil and a few other countries in 1984. For the rest of the developing world, the recent record has been bleak.

Table 10. Real world output: annual growth rates in GDP  
 (Percentage change from previous year)

Country grouping	1980	1981	1982	1983	1984	1985 (forecast)	Average 1981-1985
Developed market economies	1.3	1.6	-0.2	2.5	4.5	2.7	2.2
USA and Canada	-0.2	2.1	-2.0	3.7	6.5	2.9	2.6
Japan and Australia	4.2	2.8	3.1	2.8	5.8	3.9	3.7
Europe	1.3	-0.1	0.5	1.3	2.3	2.3	1.2
Developing countries	3.4	1.3	-0.4	0.2	2.9	3.6	1.5
Africa	1.9	-0.2	-0.6	-0.5	1.5	3.1	0.6
East and South Asia	6.0	6.6	3.5	5.5	5.2	5.5	5.3
West Asia	-2.9	-3.5	-4.6	-1.3	1.2	3.0	-1.0
Western Hemisphere	5.3	0.7	-1.4	-2.6	2.6	2.8	0.5
Centrally planned economies <u>a/</u>	3.3	2.3	3.7	5.2	5.5	4.6	4.3
USSR and Eastern European countries	2.9	1.8	2.8	4.1	3.6	4.0	3.3
China	5.2	4.8	8.3	9.1	12.0	6.9	8.2
World <u>b/</u>	2.0	1.5	0.6	2.6	4.4	3.2	2.6
<b>Memorandum items:</b>							
World exports (real)	1.5	-0.8	-2.5	2.0	8.5	6.9	2.8
Developed market economies							
Inflation rates	12.9	9.1	7.2	5.3	5.0	4.5	6.2
Unemployment rates	5.8	6.7	8.0	8.6	8.7	8.7	8.1

Source: Department of International Economic and Social Affairs of the United Nations Secretariat, based on data from national and international sources, including projections of Project LINK for 1985.

a/ Covers USSR, Eastern European countries and China.

b/ Represent weighted averages, the "weights" used being: developed market economies 0.6565; developing countries 0.1494; centrally planned economies 0.1851.

59. At root, the poor growth performance of developing countries is caused by the economic slump of the industrialized world. Growth in OECD - the main source of demand for third world exports - was fairly steady in the 1960s, but fluctuated violently in the 1970s and 1980s in the wake of the global recessions. A deeper trend was the decline in growth in productivity in the industrialized economies. Productivity increases started to slow several years before 1973 and have yet to recover.

60. The terms of trade between imports and exports of developing countries - the key determinants of their short-run trade account - followed a complicated trajectory. They hit a long-term peak after the 1973 oil price rise, but went down violently following the 1979 increase and remained low through 1984. This long price trough has led some observers to detect a secular deterioration in third world export prices. The factors influencing the terms of trade are complex - cycle and growth in the OECD countries, supply changes and the strength of the dollar (since most primary commodity prices are denominated in that currency) - and forecasting long-term shifts has proved impossible in the past. However, for the immediate future there are few signs that the terms of trade will strongly recover. Five to 10 years of low prices are an ominous portent for third world primary commodity exporters.

61. The sudden rise in external debt of the developing countries was the most publicized economic event of the late 1970s and early 1980s - the "crisis" which began in 1982 still dominates financial markets. The manoeuvres of the creditors and debtors - "money center" banks and countries such as Argentina, Brazil, Mexico, and the Republic of Korea - have been documented in the press. The plight of smaller, poorer borrowing countries is less well-known. Their future possibilities for growth, highly dependent on the deployment of imported machinery and equipment, are correspondingly dim.

62. Improvements in redressing external imbalances of some major debtor countries were made in 1984, through a combination of import cuts and export expansion, with limited success in import substitution. These, however, may not prove sustainable. For some countries in the group, the ratio of debt service to exports was over 50 per cent. With high real interest rates and a strong dollar, the debt-service burden will continue to be the main constraint on growth in the medium term.

63. The situation in Africa deserves special mention. Its economic crisis is due, among other factors, to weak world demand for primary commodities, deterioration in commodity terms of trade, slowdown in the growth of external aid and capital inflows, and three consecutive years of drought. A number of countries in the region have begun to put more emphasis on agriculture by adopting policy measures, including price reform and new incentives for producers, to promote agricultural production. However, it will take some years to bring in new technologies, remove price distortions, introduce new incentives and improve planning and management. The relative level of debt and debt-service burden for the developing countries of Africa is the second highest among developing regions, next to Latin America, with a ratio of external debt to exports at 216 per cent and a ratio of debt-service payments to exports at 24 per cent, respectively, in 1984. 4/ An additional

disadvantage is that for the smaller African debtors, the room for manoeuvring to diversify and expand exports is limited and the leverage with which debt rescheduling on more favourable terms could be negotiated is almost non-existent. For most economies of the African region, the revival in commodity prices, relatively large inflow of concessionary aid and grants in addition to private direct investment, and improvement in agricultural production are prerequisites for faster growth in the medium term.

64. Although South and East Asia is the only developing region that has weathered the storm of the recent world economic recession with relative success, owing partly to the economic resilience and export-oriented policies of the main exporters of manufactures in the region, which have been able to make prompt and timely adjustments to external shocks and changes in external demand, and partly to improvements in agricultural performance and success in import substitution in some countries, not all is well with countries of the region. Some countries are facing the increasingly intractable external debt-servicing and balance-of-payments problem and have had to adopt austerity measures to reduce imports, investment and growth; while countries in the low-income group are currently being confronted with the same problems as countries in other developing regions, such as weak commodity prices, low-level and stagnant inflow of capital, and increasing protectionism in the developed countries.

65. In varying degrees, the centrally planned economies were also adversely affected by the recession of 1980-1982, depending on the degree of "openness" of their individual economies. Several countries in Eastern Europe were constrained by external imbalances and debt-service burden not dissimilar to that of some developing market economies. Unfavourable weather conditions and bottlenecks in the supply of raw materials, energy and transportation service also played a part in the economic slowdown of these countries. As a result, the economic growth rate of the planned economies in Eastern Europe and the USSR as a group in 1981-1982 was reduced to almost half its level for the second half of the 1970s. From 1983 onward, however, with an improved external balance position and a strong performance of the industrial sector as a result of intensive development measures, including emphasis on productivity gains through improved planning and management systems and on research and development activities, coupled with modest increases in investment, economic growth in those countries has been gaining momentum, with growth rates of net material product (NMP) steadying at about 4.0 per cent per year. Their prospects for continued growth in the medium term are good, even though for some of the countries, debt-service burden and external balance constraint will continue to be felt for some years to come.

66. In the case of China, its external sector, though fast growing, still constitutes a relatively small portion of its total product. With the exception of 1981, when the country's NMP growth rate was below par, the remaining years of the first half of the 1980s have shown satisfactory growth rates varying between 6 and 12 per cent per year. Policy measures to provide stimulus to growth have apparently started to bear fruit and its medium-term development prospects are good.

B. Some pressing problems and issues in the medium term

67. Although 1984 saw continued improvement in economic performance and recovery from the 1980-1982 recession, especially in the case of some of the major industrial economies, prospects for sustained recovery and growth for the world at large and the developing countries in particular are beset in the medium term with deep-rooted and seemingly intractable problems that would severely constrain and impede growth and development. Foremost among them are the continuing high nominal and real interest rates; volatile exchange rates and the "strong" dollar; declining commodity prices and deterioration in the terms of trade of developing countries; rapid rise in protectionist tendencies in the industrial countries; shrinkage in capital inflows to the developing economies; the increasing debt and debt-service burden; the need for adjustment measures and policies in both the developed and developing countries; and the apparent deterioration in the social situation.

1. High nominal and real interest rates

68. Owing largely to stringent monetary and fiscal policies pursued in a synchronized manner in the major industrial countries to fight inflation in the post-1979 period, interest rates rose sharply in both nominal and real terms (that is, adjusted for inflation). Although nominal short-term and long-term interest rates eased by an average of about 4 and 2 percentage points, respectively, from 1981 to 1983 in these countries, the decline did little more than match the parallel decline in inflation. Consequently, real interest rates remained at historically high levels with the result that real interest rates in the industrial countries now stand at the average of 4 per cent and 6 per cent, respectively, for short-term and long-term, with corresponding real rates for the United States being at slightly higher levels. The high levels of interest rates in industrial countries have had a direct and immediate impact on the debt burden of the developing countries. To the extent that these high interest rates are responsible for the strength of the dollar and the consequential depression in primary commodity prices, the export earnings of many of these countries are seriously affected. Moreover, in many cases there has been a reverse capital flow from developing countries thereby adding to their foreign exchange constraints.

2. Weakening primary commodity prices and deterioration in developing countries' terms of trade

69. Prices of primary commodities in terms of the United States dollar were on the rise over much of the decade of the 1970s, reflecting an underlying inflationary trend in the world economy. The subsequent fall in commodity prices between 1980 and 1982, which amounted to about 25 per cent in dollar terms (table 11), was due mainly to the economic recession in the developed market economies exacerbated by restrictive monetary policies. This sudden fall in commodity prices resulted in serious balance-of-payments difficulties for the majority of developing economies, but made a substantial contribution to the reduction of domestic inflation in the developed countries. With continuing restrictive monetary policies being pursued in the latter, the commodity-exporting developing countries have had to shoulder

Table 11. Indices of market prices of primary commodities in current dollars and annual changes, exported by developing countries

(Annual change in percentage)

	1981	1982	1983	1984 <u>a/</u>	1985 ( <u>forecast</u> )
Food	-17.0	-15.8	+3.3	+0.8	-7.5
Of which:					
Beverage crops	-18.8	-5.1	+7.1	+15.5	-6.7
Agricultural non-food	-10.8	-14.5	+12.0	+6.9	...
Minerals (excluding crude petroleum)	+11.3	+2.9	-7.7	+3.1	-2.1
Non-ferrous base metals	-16.9	-14.0	+3.7	-9.3	...
Total primary commodities (excluding crude petroleum)	-12.2	-12.6	+4.5	+3.6	-6.5
<u>Memorandum items:</u>					
Manufactures <u>b/</u>	-6.3	-2.0	-4.1	-2.9	+0.2
Terms of trade <u>c/</u> of primary commodities (excluding crude petroleum)	-6.5	-10.9	+10.0	+6.1	-7.6
Terms of trade <u>c/</u> of crude petroleum	+17.2	-2.3	-8.0	+0.5	-1.0

Source: Department of International Economic and Social Affairs of the United Nations Secretariat, based on data contained in United Nations Monthly Bulletin of Statistics, April 1985 (for 1980-1984), and OECD, Economic Outlook No. 36, December 1984 (for 1985 forecast).

a/ Provisional. Includes estimates for the month of December.

b/ Represents unit value of exports of manufactures by developed market economy countries.

c/ Commodity terms of trade are obtained by dividing market price indices for commodities by the United Nations unit value index for exports of manufactures as indicated in footnote b/ above.

/...

almost the entire burden of adjustment to the collapse in commodity prices. Commodity prices recovered somewhat (i.e., about 5 per cent) in 1983 and further advanced marginally in 1984 (by an estimated 3.5 per cent) as a result of the modest economic recovery that was set in motion in the latter half of 1982 in some of the developed economies, but the price level at the end of 1984 was still some 20 per cent below that of 1980. The outlook for commodity prices in the near term is not bright; in fact, a return to the trough levels of 1982 is expected for 1985.

70. As for the recent collapse of primary commodity prices, several reasons have been advanced to account for it. Some factors are of a short-term nature, such as the effects of the economic recession in developed market economy countries; high interest rates that have greatly increased the cost of holding commodity stocks, resulting in large decumulation of inventories in consuming countries; unusually good harvests of some crops in certain years, and so forth. On the other hand, studies 5/ have shown that there are long-term factors at work as well. In regard to the food, beverages and tobacco sector, for instance, the volume of imports into industrial countries was severely constrained over the past decade by continuing import substitution resulting from income-support for domestic farmers, by a secular shift in the pattern of food consumption and by a slowing in the rate of growth of total food consumption in those countries. In the case of industrial raw materials, the substitution of natural materials by synthetics has been continued in spite of the increases in the relative price of petrochemicals. The terms of trade of non-oil primary commodities against manufactures is expected to be further weakened to the extent of some 6.5 per cent in the course of 1985. 6/

### 3. Rise in protectionism

71. Protectionism has been on the rise in the major industrial countries during the past few years as an aftermath of the recent economic recession and rising levels of unemployment. Volatile fluctuations in exchange rates, which often render trade difficult and tariff considerations irrelevant, and the "strong" dollar, which involves the incurring of huge trade deficits and the loss of competitiveness and domestic jobs for the United States, have also contributed in that country to the strengthening of protectionist lobbies and the adoption of more restrictive non-tariff barriers to trade.

72. Recent trends in protectionism in the industrial countries have increasingly resulted in the adoption of non-tariff barriers negotiated on a bilateral basis outside the framework of the General Agreement on Tariffs and Trade (GATT) and have been extended or intensified, particularly in the textiles and clothing, steel, automobiles, electronics and agricultural sectors. According to the United Nations Conference on Trade and Development (UNCTAD), 21.8 per cent of the imports by the United States of agricultural and manufactured products from the developing countries in 1980 were subject to non-tariff barriers; the corresponding percentage for the European Economic Community (EEC) countries was 32.0 per cent; while the corresponding percentages for imports from the developed market economy countries were much lower, at 7.6 and 18.7 per cent, respectively. 7/

73. Protectionist measures in the industrial countries have affected the developing countries in various ways. Some measures are directed specifically against the developing countries, as in the case of the textiles and clothing sector where trade among industrial countries remains generally free of non-tariff restrictions, while restrictions against developing countries have been steadily stiffened. The successive Multifibre Agreements of 1974, 1978, and 1981 bear this out in an unmistakable manner. Other measures are not directed solely at developing countries but affect products of direct interest to them in that they have an existing or clearly emerging comparative advantage in these products. Included in this are agricultural products, footwear and other leather products, steel and certain other manufactures. Labour-intensive goods tend to encounter the highest application of non-tariff barriers within the manufactures sector. Within these product groups, textiles and footwear are among the most heavily protected manufactures in all of the industrial markets. 8/

#### 4. Sharp decline in capital flows to developing countries

74. Foreign capital inflows (ODA, commercial bank lending and direct private capital investment) have been a vital major source of finance for economic growth and development in developing countries. This is particularly true of the low-income and the least developed countries. During the 1970s, commercial bank lending, which went almost exclusively to the middle-income countries, grew at an average rate of over 20 per cent per year and provided about half of the total medium- and long-term capital inflows during the decade; ODA, accounting for almost 30 per cent of the total, grew at a slower pace of 18 per cent per year; and private direct investment, which accounted for only one seventh of the total, grew at 19 per cent per year.

75. The rapid growth of private bank lending to the developing countries in the 1970s coincided with a period of relatively low interest rates (and negative ones in real terms for some years), high export growth rates of the developing countries and availability of OPEC surplus funds for recycling purposes. The onset of the recession of 1980-1982, the extremely high interest rates that reached a peak in 1981 and the stagnation in the export earnings of the developing countries, due primarily to the sharp fall in commodity prices that took place in 1981 and 1982, greatly impaired the capacity to repay and service debts. Changed perceptions on the part of international financial markets resulted in a sharp cutback of net commercial bank lending, including "involuntary" lending by banks arranged under "rescue" packages. Both export credits and direct investment flows to developing countries have also gone through significant reductions. When all net capital inflows from the developed countries to developing countries are taken into account, such net transfer of resources to developing countries reached the figure of \$39.7 billion in 1981, with a drastic reduction to \$7.7 billion in 1982; a net reverse transfer of \$6.5 billion to the developed countries is estimated for 1984. 9/

76. With the decline in private capital flows, ODA has assumed increasing importance in the financing of investment and balance-of-payments deficits in the developing countries. Over the past 10 years, the average rate of increase in



world ODA (net disbursements from all sources to developing countries, that is, the Development Assistance Committee (DAC) of OECD, OPEC and the Council for Mutual Economic Assistance (CMEA) countries through both bilateral and multilateral channels) has been more than 4 per cent, measured in constant prices and exchange rates, reaching the level of over \$34 billion in 1983. However, the level of total net ODA has declined in real terms since 1981. In 1983, for the DAC members as a group, ODA represented 0.36 per cent of their GNP, corresponding figures for OPEC countries being at an estimated 1.5 per cent (table 12). Even with only about one third of ODA allocated to low-income countries it provided more than 75 per cent of their external capital during the 1970s. For the low-income countries in sub-Saharan Africa, ODA amounted to 8 per cent of their GNP and 40 per cent of their imports during the past few years, signifying the heavy reliance of these countries on such concessionary flows.

Table 12. Official development assistance (ODA)  
 to developing countries a/ b/

	1970	1975	1980	1981	1982	1983
ODA (billions of US dollars)						
Total (from OECD and OPEC countries)	7.35	20.09	36.85	34.07	33.62	33.04
Of which:						
OECD countries	6.95	13.85	27.26	25.54	27.73	27.56
OPEC countries	0.40	6.24	9.59	8.53	5.89	5.48
ODA (as percentage of donor GNP)						
OECD countries	0.34	0.36	0.38	0.35	0.38	0.36
OPEC countries	...	2.92	2.21	1.93	1.65	1.50

Source: OECD, Development Cooperation, 1980, 1983 and 1984.

a/ Refers to developing market economies only.

b/ According to statements made at the relevant bodies of the United Nations, data on ODA to developing countries (including both market and planned economies) from selected CMEA countries are available. For instance, ODA from the USSR accounted for 1 per cent of its NMP in 1976-1980, 1.3 per cent in 1981 and 1.27 per cent in 1982. Similar figures for the German Democratic Republic were 0.78 per cent in 1981 and 0.79 per cent in 1982, and for Czechoslovakia, 0.78 per cent of its national income in 1983. (Source: documents A/C.2/37/5 of 21 October 1982, A/C.2/39/14 of 7 December 1984 and letter of the Permanent Mission of the USSR to the United Nations dated 4 June 1984 addressed to the United Nations Statistical Office). The corresponding figure for Bulgaria in 1976-1981 was 0.79 per cent of NMP (Source: document A/38/258/Add.1-E/1983/82/Add.1 dated 19 September 1983).

5. The mounting debt and debt-service burden

77. Since the latter part of 1982, the debt problem that has confronted many developing countries and has been keeping the world on the brink of major financial crises has so far been managed on a piecemeal and case-by-case basis. The numerous makeshift "rescue" packages and adjustment programmes instituted under the auspices of IMF, in close collaboration with the debtor and creditor countries, have provided temporary relief to the debtor countries and have thus far averted major financial crises. Recently, the debt problem appears to have assumed a new dimension. There has been better than expected performance in improving current account balance positions in some major debtor countries through a combination of import contraction, and to some extent, import substitution in selected sectors of the economy, and a good showing in export growth expansion. A further favourable development lies in the recent conclusion of debt rescheduling arrangements for several major debtor countries, involving rescheduling of multiple years, with long maturities, lower spreads, and zero or low commission rates. This inevitably leads to the question: Has the world debt problem been overcome or simply further postponed by recent events?

78. It has been suggested by some that with satisfactory OECD economic growth (say, at 3 per cent per year), a decline in interest rates, a likely depreciating dollar and a maintenance of satisfactory export growth expansion and import substitution, the debt problem of the developing countries will in time be able to take care of itself. Others argue that this view overlooks important factors, such as import contraction, export expansion and a reverse net resource transfer from the poorer to the richer nations, that render a continuation of these positive measures unlikely to be sustained indefinitely.

79. In the years 1981-1983, the correction in most debtor countries' external imbalances took the form of import contraction, which amounted to 22.4 per cent for these countries as a whole and 45.6 per cent for countries in Latin America. <sup>10/</sup> During the same period, their export earnings declined by 6.5 per cent for the debtor countries as a group and 7.9 per cent for the Latin American debtor countries. It was not until 1984 that, because of the extraordinarily high import demand of the United States, mainly due to that country's expansionary fiscal policy and an "overvalued" dollar, a revival of the debtor countries' exports took place. Export growth in 1984, compared with the low levels of 1983, amounted to 13.7 per cent for the debtor countries as a whole; for Brazil it amounted to 21.0 per cent. Should a major devaluation of the dollar and a curtailment of United States imports take place without compensatory changes in other major industrial countries in Europe or Japan, with or without a surge of protectionist reaction in the United States against foreign low-cost producers' competition, it is doubtful that a continuing high export growth rate (much higher than the interest rate) could be maintained by the debtor developing countries. Further, the export recovery in 1984 failed to bring about rising commodity prices. This was due partly to continuing high interest rates that discourage the holding of stocks of raw materials; partly to the apparent "excess" of supply capacity in many commodities, a result of the investment undertaken during the inflationary 1970s; and partly to the substitution against commodities induced both by the relative price increases of the past decade and by longer-term trends in the composition of

production. The weakened balance-of-payments position of the supplying countries and their need to service debts have led to perverse increases in deliveries in spite of weakening commodity prices, as part of the economic and social cost to be paid by debtor countries in correcting their current account imbalances.

80. The factors that led to the 1984 recovery in the debtor countries' exports indicate that the export performance of 1984 is no reliable guide for future trends. On the import side, the possibility of continued import compression in future years may depend on whether recovery in developing debtor countries will encounter bottlenecks or inefficiencies requiring foreign inputs in considerable quantities. To control imports from the present lower level implies a continuing commitment to import substitution and a high degree of control over imports, thus impairing the possibility of pursuing more outward oriented and open policies by the debtor countries.

81. In addition, it may not be feasible for the debtor countries to sustain a continuing resource transfer to creditor countries of a relatively high percentage of their gross product without engendering economic haemorrhaging and social turmoil. A persistent surplus of the South with respect to the North on the order of \$200 billion per year for more than a decade would be required to pay off the debt and interest. Acceptance of such a contraction in the demand for imports on the part of the North and a diversion of scarce resources to extraneous uses on the part of the South seem quite unlikely.

82. There is also the problem of small debtor countries which have had and will continue to rely on import restraint and low growth rates to enable them to alleviate their balance-of-payments position. For these countries there is little hope of favourable debt rescheduling or of inflows of new capital. There is even limited incentive for lending from banks. Further, those countries do not enjoy the flexibility of the larger debtor countries in reallocating resources and in increasing their exports in response to changes in foreign demand and real effective exchange rates. With weak commodity prices, unfavourable terms of trade and shrinkage in capital inflows, the chances of their being able to cope with their debt repayment and debt service obligations and still maintaining the existing low level of living are very poor indeed.

#### 6. Volatile exchange rates and the "strong" dollar

83. The first decade under floating exchange rates, seems to have coincided with a period of lower growth in world GDP together with higher growth in money supply and higher rates of inflation and unemployment. In addition, the current system of floating rates has tended to generate volatile fluctuations in exchange rates and misalignments and has failed to exert pressure on nations to co-ordinate their economic policies. Under a floating system, exchange rates are determined not only by the balance of current supplies of and demand for currencies that arise from needs relating to trade transactions and long-term financial flows, but, what is even more important, by the demand and supply situation of currencies as capital assets, based on perceptions on future yields and exchange rate levels. There is thus a major speculative demand for or supply of currencies in addition to the

usual transactions demand; this has accounted for much of what has happened thus far and for the apparent malfunctioning of the current floating rates régime.

84. To indicate the extent of such fluctuations during the past decade, especially the past five years since 1980, the appreciation (or depreciation) of the dollar in terms of other currencies is given in table 13. It can be seen that in the 1970s, especially in 1973 and the years 1977-1978, the dollar depreciated against the SDR (special drawing right), which is a composite trade weighted index comprising the basket of five national currencies, including the dollar. <sup>11/</sup> The dollar depreciation amounted to about 10 per cent in each of the two periods in question. Between 1980 and 1984, the dollar showed a four-year appreciation against the SDR, amounting to 30.2 per cent during the period.

85. The resultant "strong" dollar since 1980 has been due to a combination of factors, including the higher real interest rates and the strong economic performance and widely perceived strong growth prospects in the United States, as well as the perception of that country as a safe haven for financial and other investments. Such perceptions can and do change over time. A sudden change thereof can work havoc in causing a flight from and an abrupt depreciation of the dollar, with attendant consequences. The strong dollar has seriously increased the external debt and debt-servicing burden of the developing countries and has contributed to reducing their export growth potential through depressed commodity prices in terms of dollars. On the other hand, some developing countries have been able to capitalize on improved competitiveness by increasing their export volume to the United States.

86. Volatile exchange rate fluctuations and prolonged misalignments among the world's major currencies can impede expansion in world trade and decision-making in world-wide investments in the medium and long term. They certainly would cause serious problems of debt and reserve management in the developing countries. Besides, such exchange rate misalignments can and do become cumulative in one direction for some time, in the sense that these misalignments fail to reverse the trend in the short term and continue to accelerate the deviations from what can be considered the "equilibrium rate".

Table 13. Percentage changes in the value of the dollar  
in terms of SDRs a/

	SDR per US dollar (end of period)	Index (1972 = 100)	Annual Percentage change
1972	0.92105	100.0	-
1973	0.82895	90.0	-10.0
1974	0.81676	88.7	-1.4
1975	0.85422	92.7	+4.5
1976	0.86071	93.4	+0.8
1977	0.82324	89.4	-4.3
1978	0.76758	83.3	-6.8
1979	0.75911	82.4	-1.1
1980	0.78406	85.1	+3.3
1981	0.85914	93.3	+9.6
1982	0.90653	98.4	+5.5
1983	0.95515	103.7	+5.4
1984	1.02020	110.8	+6.8
1985 (January)	1.02564	111.4	+6.5 <u>a/</u>

Source: Data contained in IMF, International Financial Statistics, various issues.

a/ Annual rate.

C. The near- and medium-term economic outlook

87. Using the LINK system, a baseline scenario has been projected for the balance of the decade, based on the assumption of a "no-change" in existing or expected governmental policies (monetary, fiscal, trade, aid). These projections are compared with those of other sources, namely Fugl, IMF and the World Bank, in table 14. The underlying assumptions of the baseline scenario from these sources differ somewhat from source to source; they are detailed in the annex to the present section.

Table 14. Comparison of projections: GDP growth rates in the 1980s  
 (Average annual percentage change)

Period and item	World	World (excluding centrally planned economies)	Developed market economies	Developing countries	Eastern Europe and USSR	China
1981-1985 <u>a/</u>	2.6	2.2	2.2	1.5	3.3	8.2
1986-1990						
LINK: Baseline <u>b/</u>	3.5	3.4 <u>c/</u>	2.9 <u>c/</u>	4.4	3.2	6.3
Fugl: Baseline	3.7	3.5	3.3	4.1	4.2	6.1
IMF: Central scenario <u>d/</u>	...	3.5 <u>c/</u>	3.25	4.6 <u>e/</u>	...	...
World Bank <u>d/ f/</u>						
Low	...	2.9 <u>c/</u>	2.5	4.7	...	...
High	...	4.5 <u>c/</u>	4.3	5.5	...	...

Source: Department of International Economic and Social Affairs of the United Nations Secretariat, based on projections from various sources.

a/ Refers to the five years 1981-1985. Data for 1985 represents projections.

b/ The LINK projections are those of April 1985.

c/ Weighted averages calculated by the Department of International Economic and Social Affairs.

d/ For definitions of the high and low cases of the World Bank and the IMF central scenario, see annex to the present section.

e/ For non-oil exporting developing market economies.

f/ Refer to the period 1985-1996.

/...

1. Gross domestic product and its components

88. A world GDP growth rate of 3.0 to 3.7 per cent per year is projected for the second half of the decade, compared with the meagre growth of 2.6 per cent per year in the first half. This has been made possible by the economic recovery in the major industrial countries and the centrally planned economies since 1983. So far as the developing countries are concerned, the baseline scenario indicates an average of 4.3 per cent per year in GDP growth for the second half of the 1980s, compared with the dismal performance of only 1.5 per cent for the first half. The LINK baseline projections forecast a "growth recession" in 1986, when the average OECD growth rate of real GDP would fall from 2.7 per cent in 1985 to 2.4 per cent in 1986 as a result of inventory stock adjustment processes, due to inventory stock-building, followed by stock decumulation. Apart from the expected "growth recession" of the OECD economies in 1986, which will have repercussions on the developing economies, the growth rates of world GDP will revert to the growth path of 3.6 per cent a year until the end of the decade (table 15).

89. In line with growth in economic activity, a recovery of growth in world trade is also forecast. The LINK projections indicate a growth in world export volume of 6.9 per cent in 1985, on top of an estimated growth rate of 8.5 per cent in 1984 (table 15). For the balance of the decade, world export growth (in volume) is projected to average 4.7 per cent per year. If these projections are realized, the elasticity of world trade to world product for the years 1985-1990 would attain the figure of 1.34, which is almost the same as the historical average for the period 1965-1983. The projections of growth in the volume of world exports depend, among other things, on the growth of economic activity, the level of protectionism and the manner in which the external debt problem of developing countries is resolved.

90. For the medium term and the foreseeable future, the levels of economic activity of the developed market economy countries will continue to be the dominating force of world economic growth by reason of the group's sheer weight and its influence in international trade and financial flows. As shown in table 15 the developed market economies are expected to grow at 2.7 per cent in 1985 (after a growth rate of 4.5 per cent in 1984), 2.4 per cent in 1986 and 2.9 per cent in 1987, with an average annual growth rate of 2.9 per cent for the period 1985-1990. A major role is expected to be played by North America (especially the United States) and Japan, while the average annual growth rate for Western Europe is estimated at some 2.6 per cent during the same period. Uncertainties over the medium term relate mainly to the sustainability of the economic recovery in the United States, which in the past two years accounted for about 70 per cent of the demand growth in the other OECD countries, on account of the fiscal and external deficits of the United States. Other major concerns that could vitiate the baseline projections include the situation of the heavily-indebted developing countries and the prevalence of interventionist trade policies.

Table 15. Real world output: Annual growth rates in GDP  
 (Percentage change from previous year)

	1976-		Projections			
	1980	1985	1986	1987	Average 1988-1990	Average 1985-1990
Developed market economies	3.5	2.7	2.4	2.9	3.1	2.9
North America	3.5	2.9	2.6	3.4	3.2	3.1
Europe	2.8	2.3	2.0	2.4	2.8	2.6
Japan and Australia	5.1	3.9	3.1	3.1	3.3	3.2
Developing countries	5.0	3.6	3.5	4.3	4.7	4.3
Africa	4.4	3.1	2.7	3.5	3.4	3.3
East and South Asia	6.0	5.5	5.4	5.2	5.6	5.5
West Asia	4.0	3.0	3.2	3.8	4.6	4.2
Western Hemisphere	5.2	2.8	2.7	4.3	4.3	3.9
Oil-exporting	...	3.0	3.1	4.0	4.5	3.9
Non-oil exporting	...	3.8	4.1	4.8	4.8	4.6
Centrally planned economies <u>a/</u>	4.2	4.6	4.6	4.5	4.4	4.5
USSR and Eastern European countries	4.0	4.0	3.9	3.9	4.0	4.0
China	5.3 <u>b/</u>	6.9	7.2	6.9	6.0	6.4
World	4.0	3.2	3.0	3.5	3.6	3.5
<u>Memorandum items:</u>						
World export volume	6.0	6.9	4.3	4.5	4.4	4.7
Developed market economies:						
Inflation rate <u>c/</u>	9.6	4.5	4.4	4.5	4.8	4.6
Unemployment rate	5.6	8.7	8.8	8.8	8.5	8.6

Source: Department of International Economic and Social Affairs of the United Nations Secretariat, based on projections from international sources, particularly those of Project LINK (as of April 1985).

a/ Net material product (NMP).

b/ For 1978-1981.

c/ Private consumption deflator.



91. The baseline projections of unemployment rates indicate that the overall unemployment rate in the developed market economies will remain high, at about 8.7 per cent in 1985, compared with 5.8 per cent for 1980, and will remain at that level through 1989. It will not be until the end of the decade that a slight dip in the unemployment rate is expected. The underlying causes of such a relatively high level of unemployment rates in the developed market economies can be traced to both the demand and the supply side. An insufficient demand for labour is considered to be the result of stringent fiscal and unaccommodating monetary policies followed by governments, while on the supply side it is thought that several factors, including the insufficiency in capital formation in the 1970s, the high level of real wages, a mismatch between capital and labour skills and lower labour union power to oppose labour sharing in times of high unemployment etc., cause structural high unemployment in the developed market countries, particularly those in Western Europe. A shorter working week has sometimes been suggested as an interim solution to the persistent high unemployment problem.

92. In the baseline scenario, the "strong" dollar is expected to be only gradually modified in the medium term. The expected weakness of commodity prices (including the prices of oil) in terms of dollars, together with a moderation in wage demands and a continuing restraint on monetary and fiscal policy stance, will ensure a low rate of inflation in the developed market countries. The LINK projections indicate an average inflation rate of only 4.6 per cent for this group of countries over the period 1985-1990, with a low rate for North America (4.3 per cent) and Japan (2.3 per cent), and a somewhat higher rate for major developed market economies in Western Europe (4.9 per cent).

93. The developing countries as a group, even with the existing and expected unfavourable external environment (monetary, fiscal, trade and aid policies of the developed countries), are projected to grow faster in the second half of the decade, at about 3.6 per cent in 1985, 3.5 per cent in 1986, reflecting in part the impact of the "growth recession" of OECD countries in that year, and a return to 4.3 per cent growth in 1987. For the years 1985-1990 as a whole, the average growth rate for the developing countries is projected at 4.3 per cent a year, which is even below the unsatisfactory performance of 5.0 per cent for the latter half of the 1970s and the 6.0 per cent growth performance of the 1960s. Projected growth rates differ considerably among various groups of developing countries (table 17), and among the major developing regions (table 15). Baseline projections of growth in GDP by economic activity and by type of expenditure for the world's main country groups are given in tables 16 and 17 for the period 1985-1990.

Table 16. Baseline projections: growth of gross domestic product by economic activity

(Average annual percentage change, 1985-1990)

	GDP	Agriculture	Industry		Services
			Total	of which Manufacturing	
World	3.5	2.8	3.8	3.4	3.9
World (excluding centrally planned economies)	3.4	2.3	3.5	3.4	3.6
Developed market economies	2.9	1.6	2.7	2.6	3.4
USSR and Eastern European countries	4.0	1.6	4.0	...	5.3
China	6.4	5.0	6.4	...	10.3
Developing countries	4.3	2.7	5.2	5.6	4.0
Oil-exporting	3.9	3.5	4.6	4.4	3.4
Oil-importing	4.6	2.7	6.0	6.4	4.6
Newly industrializing countries	5.6	3.1	7.8	7.6	4.9
Other oil-importing	4.2	2.6	5.0	5.6	4.5

Source: Department of International Economic and Social Affairs of the United Nations Secretariat, based mainly on projections from Project LINK and the Fugl Model.

Table 17. Baseline projections: growth of gross domestic product, private consumption, government consumption, investment, exports and imports  
 (Average annual percentage change, 1985-1990)

	GDP	Private consumption	Government consumption	Investment	Exports	Imports
World	3.5	3.5	2.2	5.2	4.7	4.6
World (excluding centrally planned economies)	3.4	3.5	1.7	4.8	4.5	4.5
Developed market economies	2.9	3.0	1.4	4.1	4.4	4.1
USSR and Eastern European countries	4.0	3.3	5.8	5.2	5.7	5.4
China	6.4	4.6	7.9	8.2	6.9	6.0
Developing countries	4.3	4.3	3.7	5.9	4.6	5.5
Oil-exporting	3.9	4.6	2.6	5.6	2.9	5.7
Oil-importing	4.6	4.3	4.4	6.2	5.5	5.4
Newly industrializing countries	5.6	4.5	6.8	7.6	6.1	5.9
Other oil-importing	4.2	4.2	3.4	5.6	5.0	5.1

Source: Department of International Economic and Social Affairs of the United Nations Secretariat, based mainly on projections from Project LINK and the Fugl Model.

94. The developing countries of Africa are projected to register a low GDP growth rate of only 3.3 per cent a year in the second half of the decade, which is marginally above the population growth rate of 2.8 per cent; this in sharp contrast to the growth rate of 4.4 per cent in the second half of the 1970s and 6.1 per cent in the 1960s. The projected low growth rate for the developing countries of Africa is closely connected with the weak commodity prices (including oil) on the world markets, falling export revenues, balance-of-payments difficulties, cutbacks in imports and investment expenditure and, above all, the long drought that has reduced agricultural production (a decline of 22 per cent in cereals production during the period 1980-1984) and has necessitated substantial food imports. With

developed market economies accounting for three quarters of Africa's external trade and intra-African trade accounting for less than one tenth of the total, the dependence of the developing countries of Africa on those countries for growth and development is evident. Debt servicing is expected to pose a burden on many smaller economies in Africa; for several countries the ratio of debt service to exports is in the region of 40 to 50 per cent.

95. The GDP of the Latin American and the Caribbean economies is projected to grow at a modest annual rate of about 2.8 per cent in 1985 and 1986 (compared with a growth rate of 2.6 per cent for 1984) and 4.3 per cent in 1987, with an average growth rate of 3.9 per cent a year for the period 1985-1990. This compares with the actual annual growth performance of 5.2 per cent in the second half of the 1970s and the annual growth rate of 5.8 per cent in the 1960s. The secretariat of Economic Commission for Latin America and the Caribbean (ECLAC) has recently estimated that as a result of debt servicing, the region experienced a net transfer of resources (defined as the excess of net remittances of interest and profits over the net inflow of capital from abroad) to the rest of the world of \$26.7 billion in 1984 (\$31.0 billion in 1983), equal to a reduction in the region's import capacity for some 24 per cent of its exports of goods and services. The heavy debt burden, due to high interest rates, depressed terms of trade and the size of the large debt, constitutes the single most important constraint on economic growth of those countries in the medium term. With recent successful longer-term debt reschedulings for the major debtor countries in the region and a relative easing in interest rates in the developed countries, faster growth is feasible. High inflation rates (double-digit and even treble-digit in some countries) and high unemployment rates, often accompanied by deteriorating social conditions and misery, remain important problems.

96. The region of South and East Asia, because of the resilience and diversity of many of its economies, is projected to show GDP growth at an average annual rate of 5.5 per cent during the period 1985-1990. This rate is lower than the growth performance of 6.0 per cent in the second half of the 1970s and 6.4 per cent for the decade of the 1960s. Many economies of the region are highly dependent on world demand of primary commodities (including oil), and the newly industrializing countries are especially sensitive to protectionist pressures on manufactured goods in the developed countries. The ratio of debt service to exports, for the region as a whole, is relatively low with the exception of several major debtor countries. About three fifths of its total external debt consists of official loans at concessionary rates. Nevertheless, debt servicing aggravates the balance-of-payments problem of many countries, especially the low-income countries, in the region.

97. With economic recovery expected to continue in both the developed and the developing countries, the world demand for oil is projected to recover also, with a beneficial effect on the growth performance of the oil-exporters as well as the oil-importers of West Asia, of whose total GDP the oil-exporters account for almost two thirds. The GDP of West Asia as a whole is projected to grow at an annual rate of from 3.0 to 3.2 per cent in both 1985 and 1986, after four consecutive years of negative output growth since 1980 and a mere 1.2 per cent growth in 1984. During the period 1987-1990, the growth rate of the region should be a steady 4.4 per cent annually. Military conflicts and disturbances in the region continue to have an adverse effect on its growth performance in the medium term.

98. The USSR and Eastern Europe have experienced accelerated growth after registering an average annual growth of over 3.8 per cent in NMP in 1983 and 1984 and are projected to grow at the steady average annual rate of 4.0 per cent in the period 1985-1990. This is rather low compared with the actual performance of the second half of the 1970s (4.2 per cent) and the impressive growth in the first half of that decade (6.3 per cent). For this group of countries the economy of the USSR is expected to play a leading role, with that country's emphasis on improved planning and management systems and economic reforms and productivity gains, while some East European economies, though with improved external balances and creditworthiness, will still feel debt servicing as a constraining factor on growth in the short and medium term. China registered an upsurge in the economic growth rate (an average annual rate of over 9.5 per cent) during the period 1982-1984, reflecting the gains from economic reforms carried out in the rural sector and the emphasis placed on material incentives and the use of the market. Barring unforeseen circumstances, China's economic growth is projected at an average annual rate of 6.4 per cent for the period 1985-1990.

## 2. Trade and current account balance

99. The volume of world exports recorded an unexpectedly rapid expansion of 8.5 per cent in 1984 following its rather mild upturn of 2.0 per cent in 1983 from the prolonged stagnation during 1980-1982 (table 10). Subsequently, along with the expected slowdown of world economic growth, the volume of world exports is projected to increase at a slower rate of 6.9 per cent in 1985 and 4.3 per cent in 1986 (table 18). Its growth for the balance of the decade is projected to average about 4.7 per cent per year, which still is measurably below the annual growth rate of 5.7 per cent recorded in the 1970s. A rapid expansion in imports by the United States in response to unexpectedly strong demand and dollar appreciation, was a major thrust to the global trade expansion in 1984 but, with a time lag involved in the international transmission, relatively more significant contributions from the other developed countries are expected in 1985.

100. Reflecting the stronger than expected economic activity, the current account deficit of developed countries as a whole worsened significantly to \$38.8 billion (excluding official transfers) in 1984 from its near balance (\$7.5 billion per year) in 1981-1983 (table 19) and, under the baseline, is projected to be \$17.8 billion per year on average for the balance of the decade (1985-1990). Although the baseline projections envisage the narrowing of the overall imbalances among the countries of this group over time, the distribution of the overall current account deficit among individual developed countries is rather uneven. For the United States, the strong expansion of its domestic demand and the weakened competitiveness of its trade owing to the continued strong appreciation of the United States dollar caused a drastic surge in imports and the widening of its current account deficit to \$84.3 billion in 1984 from a deficit of \$3.8 billion in 1982 and \$35.5 billion in 1983; this huge current account deficit is expected to continue for the rest of the decade. With this order of magnitude, the current account deficit of the United States dominated the overall current account balance of developed countries as a whole and is likely to continue to do so in the near- and medium-term future. At the same time some developed countries, such as the Federal Republic of Germany, Japan, and the United Kingdom of Great Britain and

Table 18. Trade volume and terms of trade of the world  
and its groups, 1971-1990 a/  
(Percentage)

	Average 1971-1979	Actual average 1975-1980	Average 1981-1984	Forecast			Average 1985-1990
				1985	1986	1987	
<b>World exports</b>							
Volume	5.7	6.0	1.8	6.9	4.3	4.8	4.7
Unit value	13.8	11.5	-2.8	-0.5	2.5	5.0	3.7
<b>Developed market economies</b>							
Export volume	6.5	6.5	3.1	...	...	...	4.4
Export price	11.7	9.8	-3.3	0.2	3.0	5.0	3.9
Import volume	5.5	5.7	3.4	...	...	...	4.1
Import price	13.3	12.3	-3.9	-0.5	2.4	5.0	3.7
Terms of trade	-1.4	-2.1	0.7	...	...	...	...
<b>Developing market economies</b>							
Export volume	3.2	3.0	-0.4	...	...	...	4.6
Export price	20.6	17.8	-2.5	-2.0	1.5	5.0	3.2
Import volume	7.6	5.1	1.1	...	...	...	5.5
Import price	13.3	11.8	-2.3	-0.1	2.7	5.0	3.8
Terms of trade	6.4	4.8	-1.1	...	...	...	...
<b>Oil-exporting developing economies</b>							
Export volume	0.5	-0.6	-8.8	...	...	...	2.9
Import volume	14.8	9.3	3.8	...	...	...	5.7
Terms of trade	16.5	10.8	-0.2	...	...	...	...
<b>Non-oil exporting developing economies</b>							
Export volume	7.0	7.5	7.5	...	...	...	5.5
Import volume	5.5	3.1	0.4	...	...	...	5.4
Terms of trade	-2.0	-6.1	-1.6	...	...	...	...
<b>World trade price</b>							
Manufactures	10.7	9.8	-3.9	1.5	3.0	5.0	4.1
Oil	40.3	25.3	-2.2	-2.0	0.0	5.0	3.0
Non-oil primary commodities	12.4	11.1	-4.4	-4.5	4.2	5.0	3.3

Source: UNCTAD, "Trade and Development Report", 1984 draft, IMF, World Economic Outlook, Occasional Paper 32, 1984 and projections of the project LINK.

a/ The world total covers the centrally planned economies also. However, separate data for those economies are not shown above owing to unavailability.

Table 19. Balance of payments on current account, 1981-1990 a/  
(Billions of United States dollars)

	1981	1982	1983	1984	1985	1986	1987	Average 1985-1990
<b>Developed market economies</b>								
Exports (f.o.b.)	1 239.1	1 165.6	1 154.3	1 245.8	1 303.1	1 399.5	1 531.1	1 624.3
Imports (f.o.b.)	1 270.8	1 191.3	1 169.2	1 295.1	1 341.7	1 428.9	1 559.0	1 651.8
Trade balance	-31.6	-25.7	-14.9	-49.3	-38.6	-29.4	-27.9	-27.5
Current account balance (excluding official transfers)	-8.2	-9.5	-4.8	-38.8	-29.0	-20.4	-18.4	-17.8
Current account balance (including official transfers)	-27.7	-30.4	-23.7	-57.6	-48.2	-39.2	-37.6	-37.0
<b>Developing countries b/</b>								
Exports (f.o.b.)	551.1	483.1	451.8	503.0	515.1	545.5	597.2	635.3
Imports (f.o.b.)	502.5	467.2	430.7	457.2	481.8	521.2	575.9	615.9
Trade balance	52.6	15.8	21.1	45.8	33.3	24.3	21.3	19.4
Current account balance (excluding official transfers)	-43.6	-91.3	-66.1	-48.9	-64.4	-77.7	-84.7	-90.0
<b>Oil exporting</b>								
Exports (f.o.b.)	294.2	235.9	197.1	207.3	209.1	215.6	232.6	245.2
Imports (f.o.b.)	174.0	166.9	140.2	140.9	149.4	162.5	179.9	192.6
Trade balance	120.2	68.9	56.9	66.4	59.7	53.1	52.7	52.6
Current account balance (excluding official transfers)	39.4	-19.1	-12.5	-3.6	-11.1	-17.7	-18.1	-18.2
<b>Non-oil exporting b/</b>								
Exports (f.o.b.)	260.9	247.2	254.7	295.7	306.0	329.9	364.6	390.1
Imports (f.o.b.)	328.5	300.3	290.5	316.3	332.4	358.7	396.0	423.3
Trade balance	-67.6	-53.1	-35.8	-20.6	-26.4	-28.8	-31.4	-33.2
Interest income, net	-28.6	-37.2	-37.2	-39.9	-43.4	-47.7	-52.7	-56.6

Table 19. (continued)

	1981	1982	1983	1984	1985	1986	1987	Average 1985-1990
Other services and private transfers	13.2	18.1	19.4	15.2	16.5	16.5	17.5	17.2
Current account balance (excluding official transfers)	-83.0	-72.2	-53.6	-45.3	-53.3	-60.0	-66.6	-72.6
Current account balance (including official transfers)	-72.3	-62.2	-44.6	-35.2	-43.2	-49.9	-56.5	-62.5
USSR and Eastern European countries								
Exports (f.o.b.)	156.1	167.3	175.1	189.9	206.4	220.4	237.2	252.8
Imports (f.o.b.)	152.6	153.5	158.1	176.4	193.1	211.4	227.5	242.5
Trade balance	3.5	13.8	17.0	13.4	13.4	9.0	9.7	10.3
Current account balance <sup>c/</sup> (including official transfers)	-2.4	4.2	9.9	7.2	7.3	2.7	3.6	4.8
China								
Exports (f.o.b.)	21.6	21.9	22.2	24.5	26.8	30.0	35.7	38.6
Imports (f.o.b.)	19.8	17.4	19.6	22.3	25.2	29.2	35.0	38.8
Trade balance	1.8	4.5	2.6	2.2	1.6	0.8	0.7	-0.2

Source: Department of International Economic and Social Affairs of the United Nations Secretariat, based on national and international sources including projections of LINK, Fugi model, IMF, UNCTAD, Wharton Econometric Forecasting Associates Inc. and staff estimates.

<sup>a/</sup> The apparent statistical discrepancy in the world current account balance is due mainly to the errors and omissions in recording the transactions and to asymmetries in timing of the transactions.

<sup>b/</sup> Excluding China.

<sup>c/</sup> Include only convertible currency invisibles. For 1981, invisibles flows among these socialist countries are excluded.



Northern Ireland, have registered a sizeable current account surplus. (Japan, in particular, recorded a surplus of \$36.4 billion in 1984 compared with \$8.8 billion in 1982 and \$22.2 billion in 1983.) The favourable current account balance of these economies is expected to continue as long as the United States dollar remains strong vis-à-vis their currencies.

101. The value of imports by developed countries is projected to grow at an average annual rate of 7.8 per cent during the period 1985-1990 (4.1 per cent in volume and 3.7 per cent in price). The projected growth rate of volume of imports by developed countries (4.1 per cent) is rather moderate compared with the annual rate of 5.5 per cent during the 1970s, which is inconsistent with the projected slower rate of economic growth of these economies than in the earlier decade. Considering the still high rate of unemployment in these economies, various intensified trade deterrents are likely to remain unabated and to restrain their imports for a while. Imports by the United States, which played a locomotive role for the world trade expansion in 1984, are likely to slow down in the near term before they begin to recover moderately in 1987 following the expected global economic cycle as envisaged in the baseline.

102. Under the baseline scenario, the current account deficit of the non-oil exporting developing countries is projected to be \$72.6 billion per year on the average for the period 1985-1990. The improvement of the current account deficit experienced by non-oil exporting developing countries during the period 1981-1984 was achieved through the stringent import restraint and export promotion. Although the current account deficit is projected to increase overtime, much of the increase is ascribed to Asia. In other developing regions, current account deficits are expected to remain more or less unchanged except in the Latin American and Caribbean region where the current account deficit is expected to be nearly zero in 1990, implying a continuation of large trade surpluses. Emerging from these baseline projections is the assumption that the mix between adjustment and financing will remain in the direction of more adjustment and less financing for the remainder of the decade. Alternative scenarios are examined in paragraphs 121-138 below.

103. As regards the components of the current account of non-oil exporting economies, export earnings are projected to be about \$390.1 billion per year on the average during the period 1985-1990, which is higher than the annual average of \$264.6 billion during 1981-1984. This increase in export earnings corresponds to an average annual increase of 8.9 per cent (5.5 per cent in volume and 3.4 per cent in price) during the same period.

104. The relatively lower growth rate of export volume projected for the balance of the current decade, as compared to a growth rate of 7.0 per cent per year during the 1970s, is mainly due to the expected mild growth of demand in developed countries and the likely continuance of intensified trade impediments that are geared toward the labour-intensive goods.

105. The export volume of non-oil primary commodities from the non-oil exporting developing countries is expected to grow at an average annual rate of 2.6 per cent for the period 1985-1990. Exports of manufactures are expected to grow at a faster

rate of 9.6 per cent in the same period. In both cases the growth of exports is lower than the corresponding rates during the 1970s (3.3 per cent for non-oil primary commodities and 12.2 per cent for manufactures exports). In view of the moderate increase in world demand for exports combined with expected sluggish commodity prices, prospects for increased export revenue of commodity exporters are not very bright. Export earnings of low-income developing countries in Africa, in particular, will continue to be affected measurably by the expected mildness of the world commodity market and sluggish and uncertain commodity prices owing to their heavy dependence on narrow lines of exports of non-oil primary commodities. Exports of manufactures by non-oil exporting developing countries, especially by the newly industrializing countries in East Asia and large debtor countries in Latin America, have made strong progress in 1984, but this rapid pace of export growth is less likely to be sustained as the growth of the United States economy is expected to decelerate in the near term. Faced with intensified trade impediments and stiff competition in labour-intensive goods, exporters of manufactures in developing countries are expected to continue their export-oriented development strategy and to restructure their industries and diversify their economies into more capital- and technology-intensive and high value-added industries. This movement will have significant implications on their medium- and long-term trade and development.

106. The rate of increase in total export prices underlying the baseline projections, viz., an average annual rate of 3.4 per cent during the period 1985-1990, reflecting a generally subdued world inflation rate, is substantially lower than the rate of 11.4 per cent during the 1970s. Prices of non-oil primary commodities and manufactures are expected to increase at a significantly reduced rate of 3.3 per cent and 4.1 per cent per year, respectively, compared with the corresponding rates of 12.4 per cent and 10.7 per cent per year during the 1970s. Owing to the moderate recovery of aggregate demand in developed countries combined with their low income elasticities, high storage costs (high interest rates), the existence of large commodity production capacities and intensified competition among commodity exporters, the overall price increase of non-oil primary commodities during the recent expansion has been rather moderate and has not fully recovered the price decline suffered during the recent recession. As most of these basic underlying conditions are not likely to change easily, price increases for those commodities are expected to remain modest for the balance of the decade. Price increases of manufactures exports of developing countries are also likely to be modest, as pressures from both external demand and domestic input costs are expected to remain moderate.

107. Import bills by the non-oil exporting developing countries are expected to be about \$423.3 billion per year during the period 1985-1990, corresponding to the projected average annual rate of increase of 9.1 per cent (5.4 per cent in volume and 3.7 per cent in price). The projected rate of growth of their imports (5.4 per cent) is lower than the 6.8 per cent rate during the 1970s, reflecting the likely continuance of external financial constraints on their imports and moderate economic growth in their economies. The prolonged compression of imports, especially capital goods imports, will adversely affect their medium- and long-term growth potential. In many of the least developed economies in Africa, severe food shortages created by the prolonged drought necessitated increases in food imports,

which is likely to add additional strains on their already tight financial constraints and further cut into their essential imports, which in turn will reduce their ability to make adjustments to their external imbalances. Further, in some smaller debtor countries, the external imbalances are still severe and needs will continue to exist for tight import restraints.

108. With values of both exports and imports growing at about the same rate (8.9 per cent and 9.1 per cent, respectively), the trade deficits of the non-oil exporting developing countries would average \$33.2 billion per year for the balance of the decade, compared with an annual average deficit of \$44.3 billion during 1981-1984 (table 19). The improvement in their trade balance in 1984 was mainly due to export growth rather than import restraint and this tendency is likely to continue.

109. Reflecting the expected increase in interest payments on the increasing external indebtedness and expected stagnation in labourers' wages, the invisible account deficit of non-oil exporting developing countries during the period 1985-1990 is expected to be \$29.3 billion (\$39.4 billion excluding official transfers) per year, which is still significantly larger than the average annual deficit of \$9.3 billion during 1981-1984. The expected deficit on this account is almost the same as the merchandise deficit (\$33.2 billion per year). During the period 1985-1990 net interest payments are projected to be \$56.6 billion per year, substantially larger than the annual level of \$35.7 billion during 1981-1984, and appear to dominate the invisible account deficit of these economies. The increase in their external debt through postponement of principal repayment combined with the expected accumulation of current account deficit, as well as their expected reserve build-up, seem to more than offset the favourable effect from the reduced share of variable rate short-term commercial loans and improved financial terms on the outstanding debt. Should interest rates decline significantly in the future, however, this deficit would be moderated. Net receipts for other services and private transfers are expected to remain stable through the end of the decade. It is estimated to be \$17.2 billion per year on the average during the period 1985-1990, compared with \$16.5 billion per year during the period 1981-1984. Given the modest prospects for the export earnings of the oil exporters, one major component of the invisible account, labourers' wages, is likely to continue its stagnation.

110. The current account balance of the oil-exporting developing countries is projected to be a deficit of about \$18.2 billion per year on the average during the period 1985-1990 compared with an average surplus of \$1.1 billion during 1981-1984 (table 19). This projected deficit is mainly due to the expected sluggish growth in export revenues of 5.9 per cent per year (2.9 per cent in volume and 3.0 per cent in price) during 1985-1990. It reflects the expected moderation of global economic activity, the likely continuation of energy-saving efforts, increase in oil supply by other oil producers (oil-producing developed countries and other oil-producing developing countries) as well as expected sluggish oil prices. Rapid inventory build-up by oil-consuming countries and the significant contributions of that build-up to the oil export revenues are less likely as long as the storage cost (interest rate) remains high. The average annual export revenue corresponding to the above growth rate would be \$245.2 billion, as against

\$233.6 billion during 1981-1984. The average annual import bill of the oil-exporting developing countries is expected to be about \$192.6 billion during 1985-1990 compared with \$155.5 billion during the period 1981-1984. This corresponds to an increase in the average annual rate of import value of 9.6 per cent (5.7 per cent in volume and 3.9 per cent in price) during the period 1985-1990. The growth rate of import volume was far below the rate of 14.8 per cent recorded in the 1970s. Owing to the payment constraints faced by these economies, their imports will continue to be restrained for some time to come (especially the low absorbers), although to a lesser degree than in the recent past. With their import bill growing slightly faster than their export revenue, the resulting average annual trade balance would be \$52.6 billion, a significant decline from the \$78.1 billion during 1981-1984. With investment income receipts offsetting the subdued outflow of labourers' wages, the invisible account balance of these countries (excluding official transfers) is assumed to remain close to the average annual level of \$70.8 billion during 1981-1984, resulting in a current account deficit of \$18.2 billion.

### 3. External debt and debt service

111. The current account deficit of non-oil exporting developing countries is projected to average \$62.5 billion (including official transfers) per year during the period 1985-1990. Allowing for a reasonable build-up of international resources, they will need net flows of external finance well in excess of the principal repayment obligation on their already existing debts. Assuming that all of the amortizations on their external debts are rescheduled, the total outstanding external debt of non-oil exporting developing countries as a whole would grow 9.3 per cent per year during the period 1985-1990 compared with 13.0 per cent per year during the period 1979-1984. The debt-export ratio during 1985-1990 would become 187.3 per cent on the average, which is larger than the 171.1 per cent experienced in 1979-1984 (table 20).

112. The recent conclusion of multi-year rescheduling arrangements for Mexico marked a new phase of seeking long-term solutions to the debt service problem. Owing to the possibility of more rescheduling arrangements in the future, however, the exact profile of their principal repayments and of debt service payments is very difficult to predict. If the rescheduling arrangement for Argentina, which was concluded in principle in December 1984, becomes effective in 1985, the near-term debt service profile of these economies would improve somewhat. There is some danger that debt service payments of this group of countries will be especially heavy in 1987 and 1988 as their principal repayments are expected to peak during this period when the grace period of four to five years of the rescheduling arrangements concluded earlier is over. According to the recent World Bank's projections of their debt service schedules (as at March 1985), however, the problem appears less serious as far as the covered overall debts are concerned (table 21). As rescheduled debts add to their future outstanding total debt, interest payments (in general not rescheduled) will continue to rise and remain dominant in their overall current account deficit. The baseline scenario projects the net annual interest payments on their debts as \$56.6 billion on the average during 1985-1990 compared with \$35.7 billion per year during 1981-1984. Within this period their interest payments are expected to increase over time in step with their increasing total indebtedness as long as interest rates remain high.

(Billions of United States dollars)

	1979	1980	1981	1982	1983	1984	1985	1986	1987	Average 1985-1990
Total outstanding debt of non-oil exporting developing countries	294.8	358.1	419.2	479.6	506.9	536.3	579.5	629.4	685.9	730.6
Short-term debt	41.5	62.0	70.0	84.1	80.2	72.1	57.9	...	...	...
Long-term debt	253.3	296.1	349.2	395.5	426.7	464.2	521.6	...	...	...
Official creditors	117.4	136.0	151.9	168.7	189.6	208.2	238.6	...	...	...
Private creditors	135.9	160.1	197.3	226.8	237.1	256.0	283.0	...	...	...
Debt service payments	42.0	51.8	66.3	72.0	62.9	68.7	...	...	...	...
Interest payments	18.6	26.4	37.8	42.9	40.1	40.5	...	...	...	...
Amortization	23.4	25.4	28.5	29.1	22.8	28.2	...	...	...	...
Debt/export ratio (percentage)	146.1	145.2	160.7	194.0	199.0	181.4	189.4	190.8	188.1	187.3

Source: Calculations of the Department of International Economic and Social Affairs of the United Nations Secretariat, based on IMF and various national and international publications.

a/ The World Bank's most recent estimate of the total external debt outstanding of all developing countries at end 1984 (World Debt Tables, 1984-85) was \$895 billion. The above estimate of the total external debt of non-oil exporting developing countries in 1984, \$537.8 billion, may possibly have underestimated the "true" figure by about 5 per cent.

Table 21. Debt service projections on public and publicly guaranteed external debt of non-oil exporting developing countries a/

(Billions of United States dollars)

	1984	1985	1986	1987	1988	1989	1990
Total debt services	54.2	58.8	62.8	60.7	56.0	47.4	38.2
Principal repayments	30.5	35.4	41.4	42.0	40.3	34.9	28.4
Interest payments	23.7	23.4	21.4	18.7	15.7	12.5	9.8
Official creditors	18.8	21.5	23.3	23.2	22.8	21.8	20.6
Principal repayments	10.9	12.8	14.5	14.6	14.6	14.3	13.8
Interest payments	7.9	8.7	8.8	8.6	8.2	7.5	6.8
Private creditors	35.4	37.3	39.5	37.5	33.2	25.6	17.6
Principal repayments	19.6	22.6	26.9	27.4	25.7	20.6	14.6
Interest payments	15.8	14.7	12.6	10.1	7.5	5.0	3.0

Source: Calculations of the Department of International Economic and Social Affairs of the United Nations Secretariat, based on World Bank and other national and international sources.

a/ Excludes amortization and interest payments due on short-term debts and on long-term debts not guaranteed by public authorities or entities as of end 1983. Further, they do not include debts owed by non-reporting countries.

113. Among the sources of external debt, the commercial bank debt (especially that of large debtors in Latin America) has shown the most drastic changes in recent years. As a result of a decrease in demand for commercial credit through the adopted austerity adjustment measures combined with the increased reluctance of banks to make additional loans, the short-term commercial bank debt has been greatly reduced in recent years and thus the share of the short-term commercial debt in their total debt declined significantly. On the other hand, the commercial medium- and long-term debt (and their share in total debt) increased as short-term debts were consolidated into long-term debts in the debt rescheduling process. A significant portion of the increase in the latter, however, was involuntary bank lending made as part of the rescheduling arrangements under the auspices of IMF. By 1984, through a series of successful rescheduling arrangements, both maturity structures and general lending terms have improved significantly: maturities lengthened and spreads and financial fees were reduced. As a result, both the interest payments and the rate of increase in amortization payments on commercial bank debts declined significantly.

114. Despite the progress made during the past two years, the prospects for the growth of commercial bank debt are rather dim. In particular, the growth of the

spontaneous portion of this debt is less likely to accelerate significantly owing to the concern of banks over their high exposure (although markedly reduced recently) in combination with the intensified monitoring by bank supervisory authorities. As the grace periods (4 to 5 years) of the rescheduled debts from the rescheduling arrangements concluded in 1982 and 1983 will end in 1987 and 1988, there may be a hump in the amortization, which adds additional uncertainties about the capabilities of non-oil exporting developing countries to meet their debt service obligations. Multi-year packages, like the recent rescheduling arrangement concluded for Mexico that postpones the repayment of the debt due beyond 1990, would reduce the possibility of this new difficulty but it is not clear just how many non-oil exporting developing countries will be able to make such an arrangement in their future debt renegotiations. The practice of approaching the debt problem on the basis of individual countries is likely to continue. Owing to the need to keep large borrowers from default, substantial involuntary bank lending has been unavoidable in the recent rescheduling arrangements and it will take a while for normal and spontaneous bank lending to take over without involving the official entities.

115. Along with the reduction of variable rate short-term commercial bank debt since late 1982, interest payments are lightened somewhat, but the burden of interest payments is still high and expected to rise with the growth of external debt as long as interest rates remain high. Interest rates on bank debts will depend significantly on the development in the United States financial market as United States banks continue to play a dominant role in international banking both as lenders and borrowers. As a significant portion (slightly less than half) of the total long-term debt and debt service are denominated in United States dollars, changes in the dollar exchange rate will also have an important impact on the debt burden.

116. Other alternative private financial sources, such as issues of bonds and foreign direct investment, have partially offset the decline in bank lending in the past but their potential contribution as future financial sources appears limited. Except for some developing countries in Asia, access to international and foreign bond markets by non-oil exporting developing countries will continue to be negligible.

117. Official debt (ODA, official trade credit and IMF lending) did not escape the overall financial constraints faced by donor countries (their fiscal deficits and balance-of-payments deficits, in particular); as a result, total official debt grew at a modest annual rate of 12.4 per cent during the period 1981-1984 as against 18.2 per cent in the 1970s. Considering the rather somber prospects for the donors' future financial conditions (both developed countries and major oil exporters), a significant increase in official debt flows is not likely in the near and medium term. They may maintain the current rate of growth and remain unchanged in real terms during the period 1985-1990. Among the components of the official debts, official trade credits and bilateral ODA are expected to increase at a more rapid rate than other components.

118. The average interest rate on official debt (about 4 to 5 per cent) is significantly lower than the commercial rate, owing mainly to the concessionary

components of the debt. This is expected to continue and interest payments on official debts will thus continue to be less than those paid on a comparable amount of commercial debt. As for the repayments of principal, owing to the rescheduling of official debt whose typical new maturity is up to 10 years, including a grace period of up to 5 years, some debtors may encounter a bunching of amortization in 1987 and 1988.

119. The ODA component of official debt is expected to grow at about the same or possibly a lower rate than that of the recent past, which is in turn far below the annual rate (18 per cent) recorded during the 1970s. As export revenue prospects of oil exporters are modest and most of DAC members are under pressure to reduce their public expenditures, assistance from both sources (except those from Nordic countries) is not likely to increase significantly in the near and medium term.

120. The bulk of the debt of low-income countries (least developed countries of Africa in particular) was accounted for by ODA, which carries lower interest rates. Thus they have not suffered directly from the rapidly rising interest rates during the recent debt crisis. However, many of them are primary commodity exporters and were, as noted earlier, adversely affected by depressed commodity prices and sluggish demand for their narrow range of commodity exports during the recent prolonged recession. Despite the low interest rates on official debt of those countries, an increasing portion of their export earnings therefore had to be diverted from other imports to service their debts, and a significant number of them had to go through rescheduling. The appreciation of the United States dollar also worked against their export earnings. The rebound of their export earnings during the recent recovery was moderate compared with earlier recovery phases and they did not recover the loss incurred during the recession. The future prospects for their commodity exports are not very bright either, and thus their payment difficulties are expected to continue through the end of the decade. The sub-Saharan least developed countries, which are in the worst economic situation owing to the prolonged drought, have recently received a rising share of ODA (about 30 per cent in 1983 compared with 25 per cent in 1975) and this tendency is expected to continue at least in the near term.

D. Alternative development scenarios for the balance of the decade

121. The discussion below presents the empirical results of alternative scenario simulations aimed at measuring the impact on growth in world GNP of policy changes in critical areas of the North-South dialogue. The simulations have been carried out with the aid of the econometric models of Project LINK and the Fugji Global Model, referred to earlier. In particular, the scenarios attempt to assess the likely impact on growth of the following individual policy actions:

1. Reduction of interest rates to be brought about through co-ordinated appropriate monetary and fiscal policies in OECD countries;
2. Trade liberalization in OECD countries;



3. Achieve ODA aid target of 0.7 per cent of GNP by 1990;
4. Increased direct private investment;
5. Debt rescheduling;
6. Increased transfer of technology to and manpower development in developing countries;
7. Progress in global disarmament;
8. Depreciation of the United States dollar;
9. Composite scenarios;
10. Expansion of South-South trade.

122. In addition to the individual policy measures listed above, the impact has also been assessed of several policy packages consisting of different combinations of these individual measures. The results of the simulations of these scenarios based on the Fugl Global Macro-economic Model are given in tables 22 and 23, while those based on the econometric models of Project LINK are given in tables 24 and 25. Brief descriptions of the assumptions underlying the various scenarios are given in the annex to the present section.

Table 22. Simulations using the Fugl Model: deviation of GDP growth rates of alternative scenarios from baseline projections, 1985-1990

(Percentage points)

Scenario	Average annual deviation of scenario from the baseline <sup>a/</sup>			
	Developed market economies	Developing countries		
		Total	Oil-exporting	Oil-importing
1. Reduction of international interest rates	0.26	0.32	0.18	0.39
2. Trade liberalization in OECD countries	-0.01	0.22	0.13	0.27
3. Achieving the ODA target by 1990	0.02	0.15	0.02	0.21
4. Increased direct private investment <sup>b/</sup>	0.08	0.70	0.74	0.68
5. Debt rescheduling	0.01	0.06	0.04	0.07
6. Increased transfer of technology to and manpower development in developing countries	-0.05	1.02	1.57	0.75
7. Progress in global disarmament	0.13	0.72	0.52	0.81
<u>Composite scenarios:</u>				
A = 1 + 2	0.25	0.54	0.31	0.66
B = 1 + 2 + 3	0.27	0.69	0.33	0.87
C = 1 + 2 + 3 + 4	0.36	1.36	1.05	1.52
D = 1 + 2 + 3 + 4 + 5	0.37	1.42	1.08	1.59
E = 1 + 2 + 3 + 4 + 5 + 6	0.35	1.87	2.19	1.71
F = 1 + 2 + 3 + 4 + 5 + 6 + 7	0.25	2.38	2.59	2.27

Source: Department of International Economic and Social Affairs of the United Nations Secretariat, based mainly on simulations using the Fugl Model.

<sup>a/</sup> Deviation = Scenario growth rate - Baseline growth rate.

<sup>b/</sup> Scenario 4 does not take into account effects of profit repatriation, which do not arise if all profits are reinvested in developing countries.

Table 23. Baseline projections and scenario simulations using the Fugji Model: annual growth rates of real GDP, 1985-1990

(Percentage points)

	Baseline projections <u>a/</u>	Deviations of scenarios from baseline <u>b/</u>					
		A	B	C	D	E	F
World	3.5	0.3	0.3	0.5	0.5	0.5	0.7
World (excluding centrally planned economies)	3.4	0.3	0.4	0.6	0.6	0.7	0.7
Developed market economies	2.9	0.3	0.3	0.4	0.4	0.3	0.3
Centrally planned economies	4.5	0.0	0.0	0.0	0.0	0.0	0.5
USSR and Eastern European countries	4.0	0.0	0.0	0.0	0.0	0.0	0.8
China	6.4	0.0	0.0	0.0	0.0	0.0	0.0
Developing countries	4.3	0.5	0.7	1.4	1.4	1.9	2.4
Oil-exporting	3.9	0.3	0.3	1.1	1.1	2.2	2.6
Oil-importing	4.6	0.7	0.9	1.5	1.6	1.7	2.3
Newly industrialized countries	5.6	1.6	1.7	2.0	2.1	2.1	2.4
Other oil-importing	4.2	0.2	0.5	1.3	1.3	1.5	2.2
Africa	3.3	0.1	0.4	1.5	1.5	1.8	2.1
Africa south of Sahara	3.0	0.0	0.1	0.9	1.0	1.3	1.7
South and East Asia	5.5	0.3	0.6	1.3	1.3	1.6	1.9
West Asia	3.7	0.1	0.1	0.4	0.4	2.6	3.1
Latin America and the Caribbean	3.9	1.3	1.3	2.1	2.2	1.9	2.8

Source: Department of International Economic and Social Affairs of the United Nations Secretariat, based on projections and simulations using the Fugji Model.

a/ The figures shown above under "Baseline projections" represent assessments by the Department of International Economic and Social Affairs of the United Nations Secretariat, based on several sources.

b/ Deviation = Scenario growth rate - Baseline growth rate.

Scenarios A through F are defined as follows: (a) scenario A: reduction of international interest rates + trade liberalization in OECD countries; (b) scenario B: equals scenario A + achieving the ODA target by 1990; (c) scenario C: equals scenario B + increased direct private investment policy; (d) scenario D: equals scenario C + debt rescheduling; (e) scenario E: equals scenario D + transfer of technology and manpower development in developing countries; and (f) scenario F: equals scenario E + progress in global disarmament.

Table 24. Deviations of GNP growth rates in recovery scenarios from baseline projections, 1985-1990

(Annual averages in percentage)

	Baseline projections	Deviations of scenarios from baseline <u>a/</u>				
		1	2	3	A	B
World exports, real	4.7	0.5	0.5	0.4	1.1	1.5
GNP growth rates:						
World	3.5	0.2	0.1	0.0	0.3	0.4
Industrial countries	2.9	0.3	0.1	0.0	0.5	0.5
USSR and Eastern European countries	4.0	0.0	0.0	0.0	0.0	0.0
Developing countries	4.3	0.14	0.1	0.3	0.2	0.5
Oil-exporting	3.9	0.3	0.1	0.2	0.3	0.5
Non-oil exporting	4.6	0.1	0.1	0.2	0.2	0.5

Source: Department of International Economic and Social Affairs of the United Nations Secretariat, based mainly on simulations of the LINK Project.

a/ The scenarios are the following:

Scenario 1: reduction of interest rates in OECD countries.

Scenario 2: reduction of trade barriers in OECD countries by 5 per cent of total import cost.

Scenario 3: achieving ODA target of 0.7 per cent of GNP by 1990.

Scenario A: combination of scenarios 1 and 2.

Scenario B: combination of scenarios 1, 2 and 3.

Table 25. Simulations using LINK Model: deviation of GDP growth rates of cumulative deviations from baseline projections, 1985-1990

(Percentage points)

Scenario	Average annual deviation of scenario from the baseline <sup>a/</sup>										
	Developed market economies					Developing countries					
	Total	Oil-exporting	Total	Africa	South and West Asia	West Asia	South and East Asia	Total	Africa	South and West Asia	Western Hemisphere
1. Reduction of interest rates in OECD countries	0.3	0.1	0.3	0.1	0.1	0.2	0.1	0.1	0.1	0.2	0.2
2. Reduction of trade barriers in OECD countries by 5 per cent of total import cost	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
3. Achieving ODA target 0.7 per cent of GNP by 1990	0.0	0.3	0.2	0.4	1.4	0.2	0.2	0.5	0.5	0.3	0.3
<u>Composite scenarios:</u>											
A (= 1 + 2)	0.5	0.2	0.3	0.2	0.3	0.2	0.3	0.2	0.3	0.3	0.2
B (= 1 + 2 + 3)	0.5	0.5	0.5	0.5	1.7	0.3	0.3	0.7	0.7	0.7	0.5

Source: Department of International Economic and Social Affairs of the United Nations Secretariat, based on simulations with the econometric models of LINK Project.

<sup>a/</sup> Deviation = Scenario growth rate - baseline growth rate.

## 1. Reduction of international interest rates

123. In this policy simulation it is assumed that the major OECD countries would implement appropriate monetary and positive fiscal policies to bring down interest rates by about 2 percentage points (3 percentage points for the United States, 2 percentage points for most Western European countries and 1 percentage point for Japan) between 1985 and 1990, compared with the baseline projections. The Fugii results show an increase of 0.3 percentage points in GDP growth rates of the developed market economies in 1985-1990, compared with the baseline projections, while corresponding increases in GDP growth for the developing economies are about the same, i.e., 0.32 percentage points (table 22). Similar results are obtained with the LINK simulations (i.e., 0.3 and 0.14 percentage points increase in average annual GDP growth rates for the developed and developing countries, respectively) (see table 24, scenario 1). The LINK simulations further indicate that the volume of world trade would increase by 0.5 percentage points above the baseline projections for the period 1985-1990. In this scenario the OECD countries, on average, reduce their trade balances because many of them have strong propensities to import. The developing countries and, in particular, the OPEC countries appear to be beneficiaries in terms of trade balance. The centrally planned economies also participate in trade gains. This scenario further shows that in the industrial countries there are principal gains in labour markets in North America, with a small gain in Western Europe. In this simulation inflation rates are down in OECD countries at first and rise slightly in later years of this decade.

## 2. Trade liberalization in OECD countries

124. The formulation of this scenario differs between Project LINK and the Fugii Model. Project LINK assumes a reduction of trade barriers by OECD countries on their imports from the developing countries to the extent of 5 per cent starting from 1985. The Fugii Model assumes that the North will increase its imports from the oil-importing developing countries by 5 per cent a year above the baseline projections, and that South-South trade will increase by 10 per cent a year above the baseline projections during the period 1985-1990. The Fugii simulations indicate a slight negative influence on the GDP growth rate of the developed countries (-0.01 percentage points), but a positive growth rate of 0.22 percentage points above the baseline projections for the developing countries (table 22). Results of the LINK simulations (see tables 24 and 25) show that 5 per cent trade liberalization will raise the estimated volume of world trade by 2 to 3 per cent (to be more precise, 0.5 percentage points for 1985-1990 above the baseline growth rate). GDP growth rates both in the OECD countries and in the developing countries are estimated to go up by 0.1 percentage points in 1985-1990. Unemployment rates in the OECD countries would be lower, as a consequence of the higher production levels. The inflation effects are small.

### 3. Achieving the ODA target by 1990

125. This scenario assumes that the DAC countries of OECD would systematically expand their ODA transfers to developing countries, starting in 1985, in order to reach the 0.7 per cent of GNP target by 1990 and that the increased ODA would be financed by increased tax revenues (in the case of the Fugui Model) or reduction in defence expenditure (in the case of Project LINK) in most developed countries. The Fugui results show that, as a result of increased ODA transfer, GDP growth rates of the developed and developing countries would be enhanced above the baseline projections, by 0.02 and 0.15 percentage points respectively (see table 22).

126. In the case of the LINK simulation, it is assumed that the transfer of ODA funds, estimated at \$5.9 billion in 1985 rising in a more or less linear fashion to \$53.9 billion in 1990, will be distributed to the individual developing countries in proportion to their 1983 shares. The results of this transfer scenario show world trade expanding, on average, by 0.4 percentage points above the baseline for the period 1985-1990. The GDP growth rate for the developing countries would be raised in 1985-1990 by 0.3 percentage points above the baseline, and that of Africa by no less than 1.4 percentage points (see tables 24 and 25), a clear indication of the potential effectiveness of this scenario for the least developed countries.

### 4. Increased direct private investment

127. This scenario, simulated with the Fugui Model, assumes appropriate domestic policies to encourage a substantial increase in direct private investment in developing countries. The scenario does not take into account the effects of profit remittances that do not arise if all profits are reinvested in developing countries. In this simulation developed countries expand their direct foreign investment in developing countries by 0.25 per cent of their GDP, starting from 1985, over and above the projected levels, while developing countries also expand their direct investment in other developing countries by 0.5 per cent of their GDP annually, starting from 1985. The results show that the GDP growth rate of the developed countries would rise for 1985-1990 by about 0.08 percentage points over the projected baseline levels, while the GDP growth rate of developing countries would increase by a significant margin (i.e., by 0.7 percentage points) (see table 22).

### 5. Debt rescheduling

128. This scenario simulated with the Fugui Model assumes rescheduling of short-term debt to medium- and long-term by an average of 10 to 15 years at an average "spread" of 1.0 to 1.25 per cent over the London interbank offered rate and the granting of a grace period of 2 to 3 years on new loans during which only debt interest will be paid. The results of this scenario show a positive impact on GDP growth rates for both developed and developing countries (0.01 and 0.06 percentage points above the baseline projections for 1985-1990, respectively) (see table 22). Such debt reschedulings appear to have a rather small impact and may need to be accompanied by substantial improvements in financing terms to have a noticeable effect on growth.

6. Increased transfer of technology to, and manpower development in, developing countries

129. This scenario, simulated with the Fugii Model, assumes that the labour productivity of developing countries as a group will be increased during the period 1985-1990 by about 0.75 percentage points per year compared with that of the baseline projection, through concerted efforts of both the developing and developed countries for the development of technology and manpower. It is assumed that direct private investment from the developed countries and transfer of technology through technical co-operation would play a vital role in raising labour productivity in developing countries. This scenario involves a total additional capital expenditure of \$374 billion (or \$256 billion constant 1975 dollars) for the 6 years 1985-1990 to be financed through (a) increased direct private investment by 0.25 per cent of the GDP of the developed countries; this source will account for about 39 per cent of the total; (b) increased official technical co-operation, involving a transfer of funds to developing countries by reducing 10 per cent of the military expenditure of the developed countries; this source accounts for about 46 per cent of the total; and (c) increased government expenditure on education and health and on research and development activities in the developing countries, made possible through a reduction of 10 per cent of military expenditures of these countries; this source accounts for about 15 per cent of the total. The results of this scenario indicate an increase of 1.02 percentage points above the baseline projection in the GDP growth rates of the developing countries in 1985-1990, and a negligible effect for the developed countries (see table 22). The scenario thus illustrates the effectiveness of this policy action in accelerating the growth of developing countries.

7. Progress in global disarmament

130. For this scenario, it is assumed that all countries would freeze their defence expenditures at the 1984 level starting in 1985. Fifty per cent of the financial resources from such a freeze in defence expenditure in most of the developed countries (both market and centrally planned economies) are assumed to be channeled into ODA to the developing countries, while the remaining 50 per cent would be used to improve the welfare of the population of the developed countries (e.g., in reducing budget deficits and increasing research and development etc.). In the developing countries and the centrally planned economies of Asia, it is assumed that the financial resources freed from the defence burden would be used to increase domestic capital investment. Such hypothetical policy actions appear to be most effective in raising economic growth rates: by 0.72 percentage points in developing countries and by 0.13 percentage points in the developed countries (see table 22).

8. The dollar depreciation scenario

131. This scenario, simulated with the econometric models of Project LINK, assumes a rapid depreciation of the dollar (by 10 per cent in 1985 and 20 per cent in 1986, over and above the moderate depreciation assumed in the baseline scenario), caused by a precipitous net capital outflow from the United States, accompanied by an increase in short-term interest rates in the United States and a rise in oil prices



to compensate for the dollar depreciation. As a result, the industrial countries' GDP growth rate would be reduced by 0.4 percentage points in 1985-1990 compared with the baseline (with more severe effects on the United States and Japan than on Western Europe), and that of the developing countries would be reduced by 0.2 percentage points, while the GDP growth rate of the centrally planned economies would be little affected. The volume of world trade would decrease by 0.3 percentage points during 1985-1990 compared with the baseline projections. Inflation rates in local currencies in the OECD countries would be lowered by 0.5 percentage points, while the unemployment rate would be raised by 0.5 percentage points, with more several adverse effects on employment in the United States.

#### 9. Composite scenarios

132. In addition to the individual policy scenarios described above, a number of composite scenarios, each one consisting of several of the individual policy scenarios, have also been simulated with both the Project LINK and the Fugii models. The impact of these composite scenarios on the GDP growth rate of the developed and developing economies is shown in tables 23 and 25.

133. Among the policy packages simulated with the Fugii Model, the most promising package appears to be scenario E, 12/ which would raise the world GDP growth rate during the period 1985-1990 by 0.5 percentage points per year compared with the baseline projections. The corresponding margins of increase in growth rates for the developed and developing countries for the period are 0.3 and 1.9 percentage points, respectively (see table 23). Composite scenario E of the Fugii Model includes such policy measures as reduction of international interest rates, trade liberalization, achievement of the 0.7 per cent ODA target by 1990, intensified transfer of technology and manpower development policy and an increase in direct private investment.

134. If composite E scenario is fully realized, it would add 1.9 percentage points to the baseline projected annual GDP growth rate of developing countries for the period 1985-1990 (i.e., 4.3 per cent), resulting in an average GDP growth rate of 6.2 per cent for the period. It is no easy task to fully implement scenarios 4 and 6 (see table 22), as technology transfer and promotion of direct private investment would require huge amounts of capital inflows into the developing countries, but the possibilities are there to be explored by the international community and the developing economies concerned. In this endeavour, the developed countries, because of their technological lead and financial strength have a particularly important role to play.

#### 10. Expansion of South-South trade

135. A potential source of additional foreign exchange is through expansion of South-South trade. In the two decades prior to 1980, trade among developing countries grew steadily, especially within the Western hemisphere and Asia, and between Africa and the rest of the third world. For many countries, imports of non-capital goods from the South rose to 50 per cent or more of purchases from the North, while capital goods flows still came largely from the North. On the side of

exports, the main developing country purchasers of goods from the South were the more industrialized countries and oil-exporting countries. On the basis of this historical experience, it is fair to examine prospects for further expansion of South-South trade in the future.

136. For analytical purposes, it is useful to consider balanced increases of trade between developing countries for non-capital goods and services (on the assumption that regional import substitution of capital goods will be technically out of reach for at least the medium term). If, for example, developing countries A and B, each export a million dollars' worth of non-capital goods or services to the other in place of purchases from the North, then both countries gain a million dollars of foreign exchange that can be used for additional capital goods imports, provided that there is a slack supply constraint in both developing countries. The North remains in trade balance (its reduced non-capital goods exports to A and B being replaced by capital goods), and if the developing economies acquire the saving counterpart of the increased investment represented by the new imports of capital goods, they can grow faster. Thus, diversion of trade from North to South can be used to support economic growth under a binding foreign exchange constraint. (This result differs from normal predictions of customs union theory, which implicitly assumes that foreign exchange bottle-necks can always be avoided by shifts in levels of competitive trade. The problem with this theory is that most imports of developing economies are essential intermediates or capital goods, which cannot be reduced without directly affecting output or growth.)

137. Given the relatively high growth rates of South-South trade before 1980 and the resulting large import coefficients from the South, simple extrapolation suggests that further trade growth can support increases in the median GDP growth rate of about 0.5 per cent or more in the different developing regions. Corresponding incremental growth from higher exports to the North under plausible assumptions is of the same magnitude or less. Neither source is sufficient to overcome the growth rate reductions suffered by the South in the early 1980s, but balanced trade amplification can go some way toward undoing the damage.

138. The policy problems posed by such trade expansion are severe. Regional arrangements for trade co-operation have not fared well in the developing world, and potential trade imbalances have arisen between large and small economies (e.g., Brazil in the 1970s largely ran trade surpluses with Latin American neighbors to finance its petroleum imports). Since 1980, a further problem of trade finance has arisen. Financial clearing among developing countries has been blocked by lack of available foreign exchange in central banks. However, if relatively slow growth in the North continues, institutional forces toward greater South-South integration may be set in motion. Cultural and regional affinities may underlie continued expansion of trade in manufactures and services (as in fact they did in the two decades prior to 1980), and recovery of growth by the more industrialized developing countries can provide expanding markets for raw materials. If commercial banks pull back from lending to the South for a period of a decade or more, development of locally intermediated trade and finance (regionally and/or abetted by a South bank of some sort) may be a promising area of economic activity.

Notes

1/ Individual country models of the LINK Project, which comprises 25 country models for the developed market economies, 9 models for centrally planned economies, and about 35 models for developing market economies, linked with the Project's world trade model, developed and maintained at the LINK Centre at the University of Pennsylvania; and the Fugui Global Macroeconomic Model of the Soka University, Japan, which consists of 65 countries/regions models with a total of over 12,700 equations.

2/ World Bank, "World Development Report 1984", and IMF, "World Economic Outlook", Occasional paper No. 27, 1984.

3/ For more detailed discussion, see World Economic Survey, various issues.

4/ IMF estimates. Source: IMF, "World Economic Outlook", Occasional paper No. 27, 1984.

5/ See UNCTAD, Trade and Development Report, 1982 (United Nations publication, Sales No. E.82.II.D.12), part III, chap. 3.

6/ Projections of OECD. Source: OECD, "Economic Outlook" No. 36, December 1984, table 50.

7/ See UNCTAD, Trade and Development Report, 1984, United Nations publication, Sales No. E.84.II.D.23), part III, annex III, table X.

8/ UNCTAD, Trade and Development Report, 1984, part III, annex III, table VI. It has been estimated that about 60 to 80 per cent of European Economic Community import value of textiles and footwear from developing countries in 1980 was subject to non-tariff barriers. (For textiles: United Kingdom 81.3 per cent, France 70.3 per cent, Federal Republic of Germany 84.6 per cent, Italy 56.4 per cent. For footwear: United Kingdom 80.4 per cent, France 78.6 per cent, Federal Republic of Germany 72.8 per cent, Italy 76.2 per cent).

9/ Source: World Economic Survey 1985 (United Nations publication, Sales No. E.85.II.C.1), table V-3.

10/ Source: Morgan Guaranty Trust Co., of New York, "World Financial Markets", October/November, 1984. The data refer to 16 main debtor countries, which together account for \$500 billion of the total of \$812 billion of external debt (short- and long-term) owed by developing countries in 1984.

11/ Strictly speaking, the SDR (special drawing right) as such cannot be used as a proxy for other major currencies against which evolution in the exchange rate of the United States dollar over time should be measured. This is because the SDR itself is a composite trade-weighted currency unit of several currencies including the United States dollar. At present the SDR valuation basket consists of five major currencies, with weights broadly reflecting the relative importance of these currencies in international trade and finance (i.e., United States dollar

Notes (continued)

42 per cent, Deutsche mark 19 per cent and French franc, Japanese yen and pound sterling 13 per cent each).

12/ Composite scenario F of table 23 has a larger impact on GDP growth rates but is less realistic than scenario E.

ANNEX TO SECTION III

Assumptions underlying the baseline projections

1. The baseline projections for the LINK Project and the Fugui Model cover the years 1985-1990. Projections of the World Bank cover the period 1985-1995 and those of IMF relate to the period 1986-1990.
2. The baseline projections made with the LINK econometric model for the period 1985-1990 assume: (a) a neutral monetary policy and cautious restraint in fiscal policy in most of the major developed countries; (b) a slight easing in interest rates but on the whole, no substantial decline in interest rates over the period; (c) a depreciation of the effective United States dollar rate by about 15 per cent in 1987 compared with mid-1985; and (d) smooth movement in oil prices, according to which nominal oil prices are expected to show a reduction of 6 per cent in 1985, and remain flat in 1986, and then rise by 3 per cent in 1987, and subsequently by 5 per cent a year in line with the OECD rate of inflation.
3. For the Fugui Model's baseline projections, a continuation of present monetary and fiscal policies is assumed. The projections further assume that trade restrictions in OECD countries will remain at the level prevailing at end-1984 and that ODA assistance to developing countries will be at the same percentage level of the donors' GNP as in 1984. In addition, it is assumed that OPEC oil prices will, to a large extent, be related to the inflation rates, economic growth rates and the exchange rates of 10 selected developed countries, and that the price index for non-oil primary commodities will be a function of the weighted average export price index of developed countries, their economic growth rates and the United States short-term interest rate.
4. In the "low" growth scenario of the World Bank, it is assumed that the industrial countries will grow by only 2.5 per cent a year between 1985 and 1995, with adverse implications for trade and aid flows affecting the developing countries; an average inflation rate in developed countries at 6 per cent a year, and a real interest rate of 3.5 per cent, resulting in a nominal interest rate of 9.5 per cent. In the Bank's "high" growth scenario, the GDP growth of developed countries will be at 4.3 per cent a year, inflation would average 3.5 per cent, and nominal and real interest rates would be 6.0 and 2.5 per cent respectively.
5. In the "base" scenario of IMF, it is assumed that real GNP in the industrial countries will grow at 3.25 per cent annually during 1986-1990; import prices of manufactures are projected on the basis of assumptions about inflation in developed countries; the price of petroleum will remain constant in dollar terms in 1985 and constant in real terms thereafter; prices of primary commodities are projected so as to leave the terms of trade of non-oil exporting developing countries unchanged; interest rates on commercial credits to developing countries are assumed to remain unchanged in 1985, to be 2 per cent lower in 1986 and 1987, and to be an additional 1 per cent lower in 1988-1990; the level of severity of trade restrictions against exports from the developing countries will remain unchanged; the increase in private lending outstanding to developing countries is assumed to remain constant at its 1984 real level; and real exchange rates among major currencies are assumed to be unchanged over the scenario period. The IMF projections are for the non-oil exporting developing countries only.

#### IV. PROJECTIONS TO THE YEAR 2000

##### A. Introduction

139. The previous section reviewed elements of a consensus medium-term world outlook from the period 1985 to 1990. The present section assesses longer-term development possibilities, overlapping the medium-term outlook, from the present through the end of the twentieth century. (The projections shown for the period 1986-1990 differ slightly from those shown in section III on account of differing econometric models used in the exercise. The present assessment is based, in part, on versions of the LINK and Fugji models that have expanded country coverage, during the past two years, especially among the developing regions, and on a version of the Global Economic Model (GEM) of the Department of International Economic and Social Affairs with improved international trade linkages. It is also based in part, on a preliminary version of the Department's United Nations World Model (UNWM) which provides a new long-term counterpart to the GEM model emphasizing availabilities of investment and other financial flows in comparison to the corresponding requirements orientation of GEM.)

140. Although the world-wide recession of the early 1980s was largely a business-cycle phenomenon intensified by policy trade-offs in major developed countries, it influenced greatly the long-term growth prospects of developing countries. The present section focuses on the implications of the long-term outlook for two key questions that are central to the world development possibilities over the next 15 years. First, is the outlook sufficiently robust to allow for reasonable development performance even in the presence of recurring crises, like those that have arisen from the early 1970s to the present day, or is progress in the achievement of world development aspirations dependent on a stable world economic evolution, stability not unlike the stability of the 1960s? Second, what implications are implied by the long-term outlook for the International Development Strategy for the Third United Nations Development Decade and for a prospective fourth decade?

141. Sub-section B (paras. 146-159) describes the first of three scenarios, a baseline scenario that essentially reflects the extrapolation to the year 2000 of present trends and the present consensus medium-term outlook from section III. Two equivalent sets of policy assumptions, for the two models, are presented, which lead to similar long-run projections with about 3 per cent real growth in the developed market economies and 4 per cent in the developed planned economies; world trade is projected to grow between 4 and 5 per cent to the turn of the century. The developing market economies are projected to experience long-run growth rates of 4.2 per cent for the balance of the decade and 4.6 per cent for the 1990s.

142. Major long-term problems include expectations that nominal interest rates will decrease so gradually as to remain above 7 per cent by the year 2000 and expectations that unemployment in Europe will remain persistently high throughout the projection period. (More information on the unemployment problem in the developing countries is provided in section V.) In addition, the absolute level of real income per capita in least developed countries remains almost unbelievably

low. In Africa, for example, nearly half of the countries are projected to have real income less than \$300 per capita even by the end of the twentieth century. (More information on the African situation is found in section VII below.)

143. Sub-section C (paras. 160-163) compares the baseline scenario and a lower-growth scenario in which the recovery projected in the baseline is incomplete and the growth rates experienced during the period 1974-1985 prevail through the year 2000. As the baseline projections implicitly assume considerable background stability and as the period 1974-1985 was characterized by considerable instability, the lower-growth scenario may be regarded as a test of the sensitivity of the baseline scenario. The lower-growth scenario is significantly more pessimistic than the baseline: real growth rates of 2.5 per cent and 3 per cent are the norm. Comparison of these two scenarios suggests that steps to insure the stability of the world economy would not only support development efforts but also help prevent countries from entering long periods of such poor performance as to constitute human tragedy.

144. Sub-section D (paras. 164-183) presents an alternative, higher-growth scenario in which investment effort and capital effectiveness in developing countries gradually move in the direction of the targets of the Strategy for the Third Development Decade. The purpose is to examine the feasibility of the higher-growth scenario by exploring the capital requirements implied by the GEM model and the differences between this scenario and the baseline scenario. The general conclusion that emerges is that 7 per cent real growth for developing countries, taken as a whole, is achievable, but not until the decade of the 1990s. The negative component of this conclusion comes from comparing even the optimistic scenario to the Strategy target growth rate, 7 per cent for the decade of 1981-1990 as a whole. Applied to the entire decade (which is to say, requiring that poor performances be balanced by growth rates above 7 per cent), this target may well have been more of a reflection of necessity than feasibility. In any case, the original target is now clearly unattainable since it would require nearly 12 per cent real growth in the next five years to offset the poor results from the first half of the decade. Nevertheless, there is an important positive aspect of this conclusion in that significant progress is feasible and that the Strategy target rate could be met before the end of the century.

145. From these conclusions, it also becomes apparent that achieving the target growth rates of the Strategy requires a supportive world economy and international economic system. The first prerequisite is a stable evolution of the world economy, as noted above. If projecting stability is essentially wishful thinking the real prerequisite is a greater degree of international co-operation and even co-ordinated crisis management. Second, the attainment of growth rates as high as 7 per cent or more necessarily implies continuing conflict between the growth aspirations of developing economies, on the one hand, and external (or internalized) pressures to avoid inflation and excessive balance-of-payments deficits on the other. While the scenario indicates that it is feasible to finance the projected capital requirements from domestic resources, together with ODA and other private capital flows, it also indicates that the balance is very tight. Performance is likely to falter if ODA is not forthcoming or if private capital flows cease at each short-run crisis. Given the tensions necessary to spur development at this rate, crises are almost inevitable in some cases.

## B. Baseline scenario

146. The baseline projection is both a benchmark and an extrapolation of current conditions and of expectations for the near-term and medium-term from section III. Current conditions, in this respect, include both current and prospective economic policies and a return to normal conditions for other factors that affect the economy. There is not always general agreement as to the course of expected future policy initiatives; indeed, there is often considerable variation in opinion. The baseline reflects one view and, in discussing the baseline, major differences are noted. The lower-growth scenario discussed in paragraphs 160 to 163 below may reflect some of the uncertainties involved.

### 1. Policy assumptions

147. The core policy assumptions concern fiscal policy, monetary policy and exchange policy. The fiscal policy assumptions are relatively easy to explain. Extrapolation of present thinking suggests that fiscal policy in major developed countries will generally remain rather cautious through 1990 and become only marginally more expansionary thereafter. Monetary policy, on the other hand, is more complicated. Currently, higher interest rates are expected in the United States, as high as 10 per cent for 3-month Treasury bills by 1987, followed by gradual declines. Partly as a response to rates in the United States, projections for some other countries are similar but less pronounced. However, since these medium-term changes reflect fluctuations in real activity in the presence of relatively stable monetary expansion, interest rates may be expected to decline more or less continuously thereafter, but only very slowly. Extrapolation of these policies is unlikely to yield nominal rates much lower than 7 per cent even by the year 2000. Moreover, since inflation rates of OECD countries are projected to be stable in the 4 to 5 per cent range, high real interest rates may be expected to persist nearly to the end of the century.

148. Exchange rate policies that will be in effect in the future (or, alternatively but equivalently, the policies which affect exchange rates) are much more difficult to predict. In many medium-term forecasts, minor adjustments, such as the recovery of the pound sterling, appear to be widely expected. The dominating question, however, is the fate of the United States dollar on which debate is rampant and a consensus seems impossible to obtain. In accordance with the LINK model, the long-term scenarios assume a generalized appreciation of most currencies with respect to the dollar on the order of 15 per cent spread over the next two years. Exceptions are made for countries traditionally pegged to some currency or basket of currencies and for other countries with very high inflation rates relative to the world. This is a conservative assumption. After 1987, exchange rate movements are determined by relative inflation rates - purchasing power parity as applied to traded goods. In the long-term scenarios, therefore, relative price competitiveness does not appreciably affect export performance.

149. The GEM model depends on two main assumptions: the investment effort as measured by the share of investment in GDP and the effectiveness of capital as measured by the incremental capital-output ratio (ICOR). For all countries, the



investment share was set at the rate observed on average over the period 1974-1985. On the other hand, the ICORs for developed countries were assumed to revert gradually to long-term norms, the 1965-1985 average, while for developing countries the gradual change was toward an approximate midpoint between the more favourable 1965-1973 values and the less favourable 1974-1985 values.

150. Both assumptions rest in part on the fact that the most important world-wide structural break observed during the last 25 years is surely that between 1973 and 1974. The large transfer of wealth from oil-consuming to oil-producing countries had broad implications. Capacity, which depended on continued unrealistically inexpensive energy, was made economically obsolete virtually overnight. Inflation, which had already accelerated moderately, exploded. Governments turned to the need to combat inflation, even while trying to prevent the real consequences of the transfer of wealth. Ultimately policy trade-offs seemed to have been resolved in favour of austerity even at the cost of lost output and/or unprecedented unemployment, which persists in Europe until this day. If the period prior to 1973 (or perhaps 1971 with suspension of convertibility) was relatively calm, the subsequent period was characterized by significantly greater variability in real growth rates, inflation rates, interest rates and exchange rates, in many cases to a degree unseen since the 1930s. The model assumption about the investment fraction of GDP is based on historical observation, not on the pre-1974 experience, which clearly is of limited value, but on post-1974 observations.

151. In the longer term the ICOR (or simply the capital-output ratio, without the "incremental" qualifier) mainly reflects determinants of real productivity. These include the sectoral distribution of output (agriculture, industry, services etc.), the capital or labour intensity of production by sector, the quantity and quality of the labour force, and the state of technology and rate of technical progress. Moreover, the capital-output ratio, like each of the determinants, tends to change rather slowly. As a consequence, it is reasonable to suppose that the developed countries gradually achieve ICORs of the 1965-1985 period as the projected recovery proceeds.

152. The recovery among the developing countries, however, is lagging behind the recovery among the developed countries; given the slow changes in capital-output ratios, the recovery of the ICORs may be expected to be all the more gradual. Moreover, there are several factors in the world economic outlook, such as continuing high real interest rates, unfavourable terms of trade and a scarcity of food in certain developing countries, which will probably prevent developing countries from utilizing investment as effectively as in the past. Further, the robust growth of the 1960s includes the early development of the OPEC countries and what are now the newly industrialized countries. Of course, for these countries, the experience of the 1960s cannot be repeated in exactly the same way. Finally, developing countries face the predicament that the investment allocation yielding the highest return (and lowest ICOR) may not be optimal from a humanitarian point of view. This can happen if a modern sector is promoted which is closely linked to the rest of the world but only marginally supported by other domestic production. A relatively small proportion of the population will prosper while traditional sectors stagnate. Of course, the same trade-off exists in developed economies, but the much lower absolute levels of per capita income in traditional sectors of

developing countries make improvements in social conditions all the more urgent, even when policies operate to the detriment of overall growth.

## 2. Simulation results

153. The broad policy assumptions used in a number of traditional econometric models and the supply-side assumptions noted above lead to essentially similar long-term projections, salient features of which are provided in table 26. The GDP growth rate for developed countries is projected to be slightly more than 3 per cent over the next 15 years. <sup>1/</sup> This is consistent with the Fugui Model, although the latter shows 3.3 per cent in the period 1985-1990 and 3.1 per cent for 1990-2000. The LINK forecast terminates in 1990, but towards the end of the decade has growth rates only marginally higher than 3 per cent. The growth rate for developing countries as a group is 4.2 per cent for the balance of the decade and 4.6 per cent during the 1990s, which is consistent with the Fugui Model. The LINK medium-term forecast is higher, increasing from 4.5 per cent to just below 5 per cent. The only substantial difference emerges for the planned economies of Eastern Europe and the USSR - for which the medium-term LINK projections cluster around 3.2 per cent and the Fugui Model projections decelerate gradually from nearly 5 per cent during 1985-1990 to just below 4 per cent by 1995-2000, while the projection in table 26 is stable at 4 per cent throughout the period 1985-2000. Since the GEM is a real value model and tracks movements of production, it projects the stability of real production in these countries.

154. The previous long-term projections, made in 1982, were made for the 20-year period from 1980 through the year 2000 (see A/37/211, paras. 120-187). After adjustments for the actual experience of 1980-1985, rough comparisons are possible and instructive. The long-term growth rate previously expected for the developed countries was 3.4 per cent over the period 1980-2000; as 1980-1985 growth rates were just above 2 per cent, this would require a growth rate between 3.5 per cent and 4 per cent for the period 1985-2000. The present projection for 1985-2000 is less optimistic, owing to the fact that the recovery in the United States has filtered slowly to the other OECD countries and that fiscal and monetary policy stances are now expected to remain more cautious for an indefinite future. Similarly, the developed planned economies are also expected to grow slightly more slowly over the long run: a rate of 4.0 per cent is projected now, as compared to about 4.5 per cent in the previous report (A/37/211).

Table 26. Projections of growth rates of GDP, levels of per capita income and private consumption, and incremental capital-output ratios (Baseline projections) <sup>a/</sup>

	Real GDP growth rate (Percentage)			Income per capita (In 1975 US dollars)		
	1965-1985	1986-1990	1991-2000	1965	1990	2000
Developed market economies	3.2	3.0	3.1	4 176	7 807	9 918
Developing market economies	5.3	4.2	4.6	344	667	849
USSR and Eastern Europe	4.8	4.0	4.0	1 578	4 055	5 657
China, Romania and Yugoslavia	6.9	5.4	5.5	146	466	715
Latin America	4.9	4.1	4.7	830	1 411	1 801
Africa	4.2	2.7	2.8	337	415	406
West Asia	5.9	4.0	4.6	895	2 200	2 665
South and East Asia	6.0	5.2	5.3	164	372	525
Petroleum-exporting	5.4	4.0	4.6	651	1 342	1 651
Petroleum-importing	5.2	4.4	4.7	277	506	651
	Incremental capital-output ratio			Private consumption per capita (In 1975 US dollars)		
	1965-1985	1986-1990	1991-2000	1965	1990	2000
Developed market economies	7.2	7.4	7.5	2 469	4 707	5 911
Developing market economies	4.4	6.2	5.9	221	403	508
USSR and Eastern Europe	5.3	5.2	5.1	1 131	2 792	3 887
China, Romania and Yugoslavia	4.9	5.7	5.6	93	261	394
Latin America	4.6	5.9	5.6	535	929	1 173
Africa	5.6	9.9	9.8	221	246	238
West Asia	3.9	7.2	6.7	368	976	1 200
South and East Asia	3.9	5.0	5.0	124	244	337
Petroleum-exporting	4.3	7.1	6.6	321	701	873
Petroleum-importing	4.4	5.6	5.4	199	332	419

<sup>a/</sup> Net material product for planned economies.

155. What is most striking is the deterioration of the expected outlook for developing economies. In the 1982 socio-economic perspective report, 5.6 per cent real growth was projected for the period 1980-2000. Using 2.5 per cent as the best estimate for 1980-1985, this implies roughly 6.5 per cent growth for the period 1985-2000. The current expectation is far lower - about 4.5 per cent. The deterioration in this expectation is also traceable to the failure of the United States recovery to spread widely and to the consequences for developing countries of the more austere policy stances within OECD countries. It also hinges on the failure of the real interest rate to decline with decreasing inflation and on the austerity imposed, externally or internally, by many developing countries to meet debt obligations and/or to improve deteriorating balance of payments. Finally, these changes also reflect long-term repercussions of the widespread famine in Africa.

156. Under the baseline scenario, world trade is projected to grow at a rate of less than 5.0 per cent, slower than the historical experience of the 1960s but much better than during the early 1980s. Because of the relatively slow domestic expansion of developed market economies, their imports are projected to increase more slowly, at around 4 per cent, in comparison to about 5 to 5.5 per cent in the developing economies. However, export growth rates are more nearly equal, 4 per cent for developed market economies and 4.7 per cent for developing market economies.

157. The nominal trade deficit for the OECD countries as a whole (goods only, not total current account) is estimated at about \$52 billion for 1984. The corresponding surplus of the developing countries is estimated at \$45.8 billion. According to the LINK forecast, these are not expected to change significantly by 1990. Among the OECD countries, the important projection is a continued build-up of the United States trade deficit, to nearly \$200 billion, compensated by a continued increase in surpluses for the Federal Republic of Germany and Japan, from \$65 billion to \$120 billion together. For the oil-importing developing countries, collectively, the current account balance is more important; on the basis of partial information, the combined current account deficit of the major oil-importing developing countries appears to be about \$40 billion in 1984 and is projected to increase to roughly \$60 billion by 1990.

158. The baseline assumes that exchange rates will alter to equalize relative price inflation for tradeables after 1990. Therefore, the real growth rates for exports and imports may be applied to 1990 exports and imports to indicate projected trade balances in the year 2000. Given the relative import growth rates mentioned above, the combined trade balance of the slower-growing developed countries improves to become a surplus by the year 2000, while the faster-growing developing countries slip to a combined deficit, even measured by the goods balance. More detail on (real) external balances is provided in the capital requirements analysis in paragraphs 169-176 below, where the baseline and higher-growth scenarios are compared.

159. Projections of the absolute levels of GDP are also important. For example, although growth rates in Europe are projected to recover to about 3 per cent by 1990, they are insufficient to restore output to its former growth path. The

apparently permanent change in the growth path implies that labour demand, which fell during past recessions, will remain permanently lower. Therefore, it is not surprising, although it is troubling, that unemployment rates in Europe can be expected to remain persistently high throughout the projection period. (See section V for information on the unemployment problem in the developing countries.) Further, under the baseline scenario, the real per capita income of the developing countries as a group is projected to increase from about \$550 (measured in constant 1975 prices) in 1985 to nearly \$850 by the year 2000. Moreover, the average real per capita income of \$850 in the year 2000 for all developing countries disguises considerable differences among those countries. For example, per capita income in West Asian countries is projected as \$2,665 by the year 2000, whereas the average for the 49 developing countries in Africa is only about \$400, or one sixth of the estimate for West Asia. The baseline projections also imply declining real income per capita for Africa as a whole. Furthermore, within Africa real income is projected from as low as \$100 per capita to as high as \$10,000 per capita with population growth exceeding real income growth in many countries. Roughly half of the African countries are projected to have real incomes less than \$300 per capita in the year 2000.

### C. Lower-growth scenario

160. This section compares the baseline scenario with a lower-growth scenario in which the recovery of the OECD countries is incomplete and growth rates experienced during the period 1974-1985 prevail through the year 2000. This lower-growth scenario, therefore, may be regarded as one that might arise if shocks of the type experienced over the past 10 years should recur during the next 15. The comparison will indicate the sensitivity of the baseline scenario to potential shocks.

161. Since this analysis cannot be conveniently executed using standard econometric models, the GEM is used instead, assuming that investment ratios to GDP and ICORs will remain at the 1974-1985 levels. Since this scenario is an extrapolation of trends established in the period 1974-1985, it provides a rather pessimistic view of the outlook to the year 2000. However, it should be noted that economic growth in 1974-1985 was not uniformly depressed in all years nor in all countries. The region of South and East Asia maintained a GDP growth rate of 5.7 per cent during that period, which is very near the long-term growth rate of 6 per cent experienced in the entire period 1965-1985.

162. With these assumptions about investment and ICORs, world GDP grows at less than 3 per cent for the rest of the decade and at little better than 3 per cent for the remainder of the century. World trade is also slower. Since the recovery is not sustained in the OECD countries as a whole, problems of low and abject poverty persist in the developing countries throughout the projection period. Only the region of South and East Asia would continue to develop rapidly, owing to an apparent ability to expand even in the face of a generalized world-wide recession, as has been observed over the past few years (see table 27).

Table 27. Projections of growth rates of GDP, levels of per capita income and private consumption, and incremental capital-output ratios (Lower-growth projections) a/

	Real GDP growth rate (Percentage)			Income per capita (In 1975 US dollars)		
	1965-1985	1986-1990	1991-2000	1965	1990	2000
Developed market economies	3.2	2.5	2.6	4 176	7 476	9 054
Developing market economies	5.3	3.6	3.9	344	648	765
USSR and Eastern Europe	4.8	3.8	3.9	1 578	4 027	5 521
China, Romania and Yugoslavia	6.9	5.3	5.5	146	463	709
Latin America	4.9	3.3	3.4	830	1 367	1 548
Africa	4.2	2.6	2.7	337	408	394
West Asia	5.9	2.6	3.0	895	2 034	2 122
South and East Asia	6.0	5.1	5.2	164	372	519
Petroleum-exporting	5.4	3.1	3.4	651	1 271	1 405
Petroleum-importing	5.2	4.0	4.1	277	499	608
	Incremental capital-output ratio			Private consumption per capita		
	1965-1985	1986-1990	1991-2000	1965	1990	2000
Developed market economies	7.2	8.9	8.8	2 469	4 492	5 374
Developing market economies	4.4	7.0	6.6	221	395	468
USSR and Eastern Europe	5.3	5.7	5.6	1 131	2 772	3 792
China, Romania and Yugoslavia	4.9	5.7	5.5	93	259	391
Latin America	4.6	7.0	6.7	535	899	1 008
Africa	5.6	10.2	10.1	221	243	233
West Asia	3.9	10.7	9.4	368	945	1 037
South and East Asia	3.9	5.0	5.0	124	244	333
Petroleum-exporting	4.3	9.0	8.2	321	684	782
Petroleum-importing	4.4	6.0	5.8	199	327	390

a/ Net material product for planned economies.

163. Clearly, the period 1974-1985 as the basis for extrapolation is a period in which random shocks were, on average, detrimental to development aspirations. Nevertheless, the lower-growth scenario does indicate the value of the relative stability of the 1960s and the early 1970s or, equivalently, the cost of the relative instability of the late 1970s and early 1980s. In view of the fact that the baseline scenario is itself relatively pessimistic, this lower-growth scenario emphasizes the need for international co-operation, not only for the advancement and promotion of development but also for combating the shocks that seem inevitably to arise periodically. Comparing this scenario with the baseline indicates the clear need to prevent short-run problems from disturbing the stability of the international economic environment that is essential for the continued growth and development envisioned by successive United Nations development decades.

#### D. Higher-growth scenario

164. In contrast to the baseline, the optimistic scenario is a normative scenario, with progressive achievement of accelerated growth and development in all developing countries. The developing countries are assumed to recover gradually from the current world-wide recession to attain the targets of the Strategy for GDP growth in the Third United Nations Development Decade, within the framework of world-wide economic expansion. Such recovery and expansion appear to be feasible in physical terms, given sufficient international policy co-ordination, assuming that no major crises arise that cannot be dealt with by the existing mechanisms for international crisis management. The question that then remains is whether this scenario is feasible financially; the answer that emerges from the analysis is that, while there remains little room for manoeuvring, the financing can be achieved if the ODA targets are met.

##### 1. Assumptions

165. For each developing country where the recent (1974-1985) investment share in GDP is less than the International Development Strategy target of 28 per cent and/or where the ICOR is above the Strategy target of 4.0, it is assumed that these parameters adjust gradually, year by year beginning in 1986, until the target values are reached. Investment shares smaller than 28 per cent were assumed to increase 1 percentage point annually for countries with growth rates less than 7 per cent. ICORs above 12.0 were assumed to be 12.0 in 1986, and subsequently all ICORs adjust downward by 0.5 per year until the target value (4.0) is reached. (As 95 per cent of the countries have ICORs below 12 in 1985, the reduction to 12 for the remaining 5 per cent can be justified on the grounds that unusual conditions, often involving external effects on productivity, produced the high ICORs in the first place.) Implicit in these targets are assumptions that policies at the national and international levels will be directed at promoting the highest feasible level of growth in the developing economies and that national and international crisis management efforts will be successful in coping with occasional short-run crises that are likely to arise in such a high-growth environment.

166. The assumptions about future economic performance made in the Strategy imply a GDP growth rate gradually approaching 7 per cent for developing countries as a

whole. Obviously, an acceleration to this rate for the developing countries cannot occur in isolation. Exports from the developing countries will have to find markets that are also accelerating or at least increase penetration of current markets. Such a growth acceleration of the developing countries will also require substantially higher imports, both of raw materials and particularly of manufactures, which will stimulate the exports, and therefore the growth rates of the developed economies. To reflect these considerations within the context of the GEM, explicit adjustments to the assumptions made for developed countries were also incorporated. These result in long-term growth rates on the order of 4 per cent in the developed market economies and 5 per cent in the developed planned economies, rather than the baseline projections of about 3 and 4 per cent, respectively. These significant increases are consistent with the assumptions underlying the International Development Strategy.

167. Two further assumptions implicit in the optimistic scenario deserve mention. First, commodity prices remain firm; the secular terms of trade do not move systematically against developing countries as a whole. Such an assumption is consistent with the results of the baseline outlook, but would not be consistent with an alternative scenario in which supplies of primary commodities were greatly expanded but in which no appreciable change in demand were to emerge within developed countries. Nevertheless, if the developed countries were to share in a world-wide expansion, the terms of trade would not only remain stable, they might well turn in favour of developing countries. Second, there is no appreciable increase in the impact of protectionist measures, tariff or non-tariff; this would be possible if all countries, developed and developing, participated in a general expansion of the world economy.

168. Finally, there are financial implications of this optimistic scenario. Given a general expansion of world trade and world GDP as envisioned above, the development effort of developing countries must be financed by some combination of domestic and foreign resources. There is, however, no guarantee that sufficient resources would be made available from excess savings of developed countries and OPEC countries to cover the excess demand for funds on the part of developing countries. Indeed, the optimistic scenario is a normative calculation for precisely the reason that no such assumption is made. The main purpose in analysing the higher-growth scenario is to examine the feasibility of attainment by the developing countries of growth rates as high as the Strategy target of 7 per cent assuming that the developed countries will share in this expansion, and to assess the required foreign resources and the likelihood of such resources being made available.

## 2. Economic performance relative to the baseline scenario

169. Table 28 displays the main results of the higher-growth scenario in a format comparable to table 26 for the baseline scenario. Real growth for the developing countries, gradually approaching the Strategy target of 7 per cent, might be as high as 5 per cent for the remainder of the 1980s, and over 6 per cent on average for the 1990s. The target rate is actually reached by many developing countries, not instantaneously nor even by 1990 but, on average, sometime in the middle of the



Table 28. Projections of growth rates of GDP, levels of per capita income and private consumption, and incremental capital-output ratios (Higher-growth projections) a/

	Real GDP growth rate			Income per capita		
	(Percentage)			(In 1975 US dollars)		
	1965-1985	1986-1990	1991-2000	1965	1990	2000
Developed market economies	3.2	4.1	4.2	4 176	9 001	12 804
Developing market economies	5.3	5.0	6.2	344	702	1 046
USSR and Eastern Europe	4.8	4.9	4.9	1 578	4 616	6 993
China, Romania and Yugoslavia	6.9	7.0	7.1	146	537	957
Latin America	4.9	4.6	6.1	830	1 441	2 101
Africa	4.2	3.9	5.7	337	448	574
West Asia	5.9	4.9	6.2	895	2 353	3 324
South and East Asia	6.0	6.4	6.8	164	397	648
Petroleum-exporting	5.4	5.0	6.1	651	1 431	2 036
Petroleum-importing	5.2	5.3	6.4	277	529	802
	Incremental capital-output ratio			Private consumption per capita		
	1965-1985	1986-1990	1991-2000	1965	1990	2000
Developed market economies	7.2	5.9	5.8	2 469	5 383	7 338
Developing market economies	4.4	5.2	4.5	221	422	623
USSR and Eastern Europe	5.3	5.2	5.2	1 131	3 161	4 770
China, Romania and Yugoslavia	4.9	4.7	4.7	93	298	522
Latin America	4.6	5.4	4.6	535	950	1 374
Africa	5.6	7.4	5.4	221	264	334
West Asia	3.9	5.8	4.8	368	1 022	1 481
South and East Asia	3.9	4.2	4.1	124	260	414
Petroleum-exporting	4.3	5.8	4.9	321	740	1 070
Petroleum-importing	4.4	4.9	4.3	199	346	513

a/ Net material product for planned economies.

/...

1990s. As a consequence, the Strategy target for the 1980s will not be achieved; in fact the shortfall will exceed the shortfall for the 1970s by a considerable margin, given the poor performance in the early 1980s and the difficulties that most of the developing countries will experience in the next few years, as discussed in section III.

170. At the same time, it is critically important to recognize that, given sufficient time to adjust, the 7 per cent target rate of economic growth specified in the International Development Strategy is consistent with the past growth experience of developing countries taken as a group, assuming that suitable policies are adopted by national Governments and these are supported by the international community. This target could be reached if the slower-growing countries attain standards of performance already achieved by the faster-growing countries.

171. Under the higher-growth scenario, the share of investment in GDP for the developing market economies as a group will increase from 23.7 per cent in 1985 to 29 per cent by the year 2000; ICORs will decrease from 7.2 to roughly 4.5, achieving the equivalent of the Strategy targets. As income increases, the pool of discretionary income also increases, and countries therefore will be able to devote a greater fraction of income to domestic savings. Table 29 indicates that the national savings rate for all developing market economies is projected to increase from 20.8 per cent in 1985 to 25 per cent by the end of the century. The difference, or internal balance, is projected to be 3.0 per cent of GDP in the year 2000.

172. From table 29 it is also clear that the investment required and domestic savings available will differ widely among the different groups of developing countries. The petroleum-importing developing countries as a whole are projected to experience a combined internal balance amounting to nearly 5 per cent of GDP by the year 2000. For the low-income countries, the balance is 6 per cent, and for the least developed countries the gap is over 15 per cent of GDP. These differences reflect the differences in real income and discretionary real income per capita.

Table 29. Savings, investment and the internal gap  
(Percentage share of GDP)

	Historical		Projections			
			Baseline		Higher-growth	
	1970	1980	1990	2000	1990	2000
<b>Developing market economies</b>						
Gross national saving	26.1	24.2	24.8	25.6	25.2	25.8
Gross capital formation	19.2	25.7	26.4	27.7	28.2	28.8
Internal balance	6.9	-1.4	-1.6	-2.1	-3.0	-2.9
<b>Petroleum-exporting economies</b>						
Gross national saving	42.6	32.8	30.6	30.6	31.0	30.3
Gross capital formation	16.0	28.1	29.1	30.6	29.9	30.2
Internal balance	26.6	4.7	1.6	0.0	1.1	0.1
<b>Petroleum-importing economies</b>						
Gross national saving	16.6	19.0	21.2	22.4	21.4	23.0
Gross capital formation	21.0	24.2	24.8	25.9	27.2	27.8
Internal balance	-4.4	-5.2	-3.6	-3.5	-5.7	-4.9
<b>Low-income economies</b>						
Gross national saving	13.7	14.7	18.0	19.7	18.4	20.7
Gross capital formation	18.5	21.2	22.2	22.3	25.9	26.8
Internal balance	-4.8	-6.6	-4.1	-2.6	-7.5	-6.1
<b>Least developed economies</b>						
Gross national saving	4.8	5.4	5.9	6.4	7.3	9.5
Gross capital formation	13.1	14.1	13.8	13.7	19.2	25.1
Internal balance	-8.2	-8.7	-7.9	-7.3	-11.8	-15.6
<b>Deficit economies a/</b>						
Gross national saving	15.7	17.9	20.0	21.2	20.4	22.1
Gross capital formation	20.3	23.3	23.9	24.9	26.8	27.4
Internal balance	-4.5	-5.4	-3.9	-3.7	-6.4	-5.4

Source: See table 1.

a/ Deficit economies are petroleum-importing developing economies with negative external balance projected for the year 2000.

173. Table 30 contains corresponding external balances for the baseline and higher-growth scenarios. The two balances (external and internal) are, by definition, historically identical. For the future, if the external gap is large, the lack of accessible foreign exchange will limit development possibilities even if domestic savings are mobilized. For example, under the higher-growth scenario for the period 1990-2000, the external gap is projected as 7.2 per cent of GDP for the deficit economies, substantially greater than their 5.4 per cent internal gap (from table 29). Thus, the major constraint is the availability of foreign resources. However, over the next five years, 1986-1990, the external balance of the deficit countries is projected at 4.1 per cent in 1990, compared with an internal gap of 6.4 per cent. To understand the reversal, it is necessary to examine the different groups of developing countries shown in tables 29 and 30 and to distinguish between the recovery projected through 1990 and the steady, long-term development assumed for the period 1991-2000.

174. In order to meet the production targets of the higher-growth scenario, the main requirement for the next five years is to increase real investment as a fraction of GDP, especially in the low-income and least developed economies. The 1980 savings rate and investment share in table 29 are very low in the low-income petroleum-importing countries, compared to all petroleum-importing developing countries, and lower still for the least developed countries. Comparing the baseline and higher-growth scenarios in table 29, the investment share in 1990 would be 3.7 per cent lower under the baseline (22.2 per cent to 25.9 per cent) in the low-income countries and 5.4 per cent lower (13.8 per cent to 19.2 per cent) in the least developed countries. These differences are larger than the corresponding 3.0 per cent difference for all petroleum-importing developing countries together and are the dominant aspect of the whole comparison. Moreover, since savings are not very responsive to increased income at low absolute levels of per capita income, the average internal balance in 1990 for the low-income developing countries is projected as 7.5 per cent of GDP and 11.8 per cent for the least developed countries. These balances are much higher than the 5.7 per cent average for the oil-importing developing countries as a whole, and they also largely determine the total balance.

175. However, since the economic growth projected for the next five years is a recovery from a serious world-wide recession, rather than development from a high base, capital formation for developing economies will not be heavily dependent on imports of manufactured goods. Imports increase, but not as fast as investment. More important, since the OECD countries are projected to expand at an annual rate of 4 per cent, compared to 3 per cent under the baseline, real exports of developing countries also increase significantly. Therefore, over the next five years, the external balances with higher growth are not much different, as a per cent of GDP, than under the baseline.

Table 30. Exports, imports, and the external balance a/  
(Percentage share of GDP)

	Historical <u>b/</u>		Projections <u>b/</u>			
	1970	1980	Baseline		Higher-growth	
			1990	2000	1990	2000
<b>Developing market economies</b>						
Exports	27.0	25.5	28.9	29.2	28.7	26.9
Imports	20.1	27.0	29.4	30.8	28.6	30.0
External balance	6.9	-1.4	-0.4	-1.6	0.2	-3.0
<b>Petroleum-exporting economies</b>						
Exports	44.3	34.2	35.1	36.2	34.4	32.5
Imports	17.7	29.5	32.6	33.1	30.0	31.3
External balance	26.6	4.7	2.5	3.1	4.4	1.2
<b>Petroleum-importing economies</b>						
Exports	17.1	20.2	25.1	24.9	25.1	23.4
Imports	21.5	25.4	27.3	29.4	27.7	29.1
External balance	-4.4	-5.2	-2.3	-4.5	-2.6	-5.7
<b>Low-income economies</b>						
Exports	14.5	15.2	15.7	15.8	15.5	13.9
Imports	19.3	21.8	23.5	24.5	23.9	25.2
External balance	-4.8	-6.6	-7.8	-8.7	-8.4	-11.3
<b>Least developed economies</b>						
Exports	10.7	10.3	11.0	11.8	11.2	10.3
Imports	19.0	19.0	21.8	22.8	22.3	25.4
External balance	-8.3	-8.7	-10.9	-11.0	-11.0	-15.1
<b>Deficit economies <u>c/</u></b>						
Exports	17.8	20.9	22.1	22.0	22.2	20.5
Imports	22.6	26.2	25.8	27.4	26.3	27.7
External balance	-4.5	-5.4	-3.7	-5.5	-4.1	-7.2

a/ Exports and imports are measured inclusive of services and net factor income from abroad.

b/ Details need not add exactly to totals due to rounding of figures.

c/ Deficit economies are petroleum-importing developing economies with negative external balance projected for the year 2000.

176. However, during the 10 years from 1991 to 2000, this comparison is almost exactly reversed. As a share in GDP, real investment increases only slightly in the higher-growth scenario, since the 1990 value is often reasonably close to the ultimate target. At the same time, the share of savings continues to expand; therefore, the internal balances recede. (The least developed countries are an exception. Both their investment and savings are so weak that neither would be near the target rates even by the year 2000.) On the external side, imports as a fraction of real GDP increase significantly during the decade of the 1990s, while exports generally fall relative to GDP. The latter is a consequence of the fact that world trade, under the higher-growth scenario, is projected to grow no faster in the 1990s than in the period 1986-1990, while gradual achievement of the higher-growth targets implies that the developing countries will grow at a faster rate than real world trade. Therefore, by the end of the century external balances are much larger and foreign exchange constraints are critical.

### 3. Financing higher growth

177. The remaining major issue is how to finance the external balance of the petroleum-importing countries, which is projected to reach about \$135 billion (in 1975 prices) or 7.2 per cent of their combined GDP in the year 2000. To mobilize that amount of financing, it would almost certainly be necessary for ODA to increase to the Strategy target of 0.7 per cent of the donor countries' GNP. Under the higher-growth scenario, ODA would amount to \$104 billion by the year 2000 if the ODA target were achieved; this would cover over three quarters of the projected financing required. OPEC concessional assistance has currently represented an even higher percentage of donor GNP, from 1.5 to 2.5 per cent during the years from 1975 to 1981. At 1.5 per cent, this source would generate an additional \$19 billion by the year 2000. The general world recovery in the higher-growth scenario would stimulate energy use, thus firming or gradually raising oil prices and making the 1.5 per cent rate attainable.

178. Not only does world trade grow faster, but real balances on goods and services for the developed countries also improve, comparing the baseline scenario to the higher-growth scenario. This reflects the fact that the faster growth in the developing countries requires considerable new investment and, therefore, additional manufactured imports. However this implies that net foreign private sector assets for the developed countries taken as a group are projected to increase by very large amounts, culminating in a \$60 billion increment per year in real terms. Further, the combined external balance of the oil-exporting countries in the year 2000 is over \$10 billion more in the higher-growth scenario. Therefore, it is not unreasonable to suppose that a significant share of these incremental assets would be channeled into the more dynamic part of the world, namely the developing countries. While a quantitative estimate would be a sheer guess, a sufficient amount to cover the remaining \$12 billion (the \$135 billion external balance, minus the \$104 billion increase in ODA and minus the \$19 billion increase in OPEC assistance) is certainly reasonable.

179. A third possibility is that renewed growth on a significant scale would significantly improve the terms of trade of the developing countries as a group,

since demand for primary commodities is likely to increase more rapidly than supply. For all developing countries, including oil exporters, total real exports by the year 2000 are projected to be about \$946 billion and imports about \$1,002 billion. If export prices were to increase by 1 per cent and import prices to fall by 1 per cent, assuming the real flows to be unchanged, the financing requirement would be reduced by more than \$19 billion. Of course, this calculation is only indicative of the orders of magnitude involved, since real flows would reduce the financing requirement less than \$19 billion, but a 2 per cent change in the terms of trade, over a period of 15 years, is none the less very modest.

#### 4. Viability of higher growth

180. The overall conclusion, from analysis of the higher-growth scenario, is that achievement of the Strategy target of 7 per cent real growth in the developing economies over the 1980s is probably not possible, but reaching these growth rates during the 1990s is feasible, on both physical and financial grounds.

181. A major concern on the physical side is that ICORs will not decrease sufficiently or will decrease too slowly. In fact, the seeming overall deterioration in performance in the developing countries from the 1960s through the 1980s was caused not by poor savings performance, but rather by a loss of effectiveness in the utilization of investment. In large part this may reflect failure to adequately transmit modern technology or "appropriate" technology in some circumstances, or failure to upgrade the quality of the labour force, rather than failure to emphasize more capital intensive production techniques. (The importance of technology transfer and manpower development is discussed in section III above.) However, it also reflects the external economic environment of the developing countries, especially high international interest rates and decreasing terms of trade.

182. There are two major concerns on the financial side. First, will ODA commitments increase relative to GDP when Governments in OECD countries are preoccupied with reducing the scale of government and are beset by serious domestic unemployment problems, and perhaps moving in the direction of increased protectionism? Second, will private capital flows to developing countries disappear or carry onerous interest rates at the first sign of crisis? As the analysis has indicated, many of the developing countries will have to make major efforts to increase exports and savings in order to achieve the aspirations of the Strategy. Understandable miscalculations, even random occurrences, will make some crises inevitable, though unpredictable. More reliable ODA flows would serve as a much needed buffer, and private capital flows might be more stable if lenders were assured that international institutions could be relied upon in cases of crisis. In contrast, when ODA begins to slip and/or lenders begin to call in loans, developing countries in precarious balance will be unable to secure financing, thus precipitating further crises.

183. Finally, the results of the higher-growth scenario also indicate that special measures must be considered for the promotion of accelerated and equitable growth in the low-income developing countries, especially the least developed countries.

Standards of growth performance based on the past experience of many of these economies do not provide an adequate basis for achieving the growth target of the Strategy. For this reason, in order to achieve an acceleration of growth, substantial changes are required in present patterns of resource use and levels of investment effectiveness of those countries, together with significant international support.

Notes

1/ To simplify the presentation, only results corresponding to the GEM scenario are included although the text notes any substantial divergences between this and the other baseline scenarios.



## V. SOCIO-ECONOMIC PERSPECTIVES

184. The goals and objectives of the International Development Strategy include the reduction and elimination of poverty and a fair distribution of the benefits of development, the eradication of hunger and malnutrition, full and productive employment, longer life expectancy, and health, education, literacy and shelter for all. The Strategy also calls for the full and effective participation by the entire population in development, including equal status for women in both principle and practice and the integration into society of vulnerable population groups, especially children, youth and disabled persons. The time-frame specified in the Strategy for achieving these objectives generally extends to the year 2000.

185. The current social situation in a number of the developing countries recalls the social effects of the great depression of the 1930s in Europe and North America. Roughly one fifth of the total population of the developing regions lives in countries where there was an absolute decline in economic activity in the first three years of the 1980s. Another one tenth lives in countries where per capita output either stagnated or declined. Poverty spread not only in Africa and in the least developed countries as a group, but also in developing regions, particularly Latin America, which had experienced rapid growth, economic progress and social change during the previous decade. In about half of the developing countries austerity programmes are being implemented as part of their efforts to correct external and internal economic imbalances and to adjust to an unfavourable international environment. The decline in income has not only reduced current consumption but has also led to a curtailment in expenditures on social infrastructure, which has a long-term repercussion in loss of future welfare and increased vulnerability to external shocks.

186. The current situation with regard to social development is reviewed at length in the Secretary-General's 1985 report on the world social situation (E/CN.5/1985/2). 1/ The present section compares the implications of macro-economic aspects (especially the growth of per capita GDP and investment) of the higher- and lower-growth scenarios for several social or socio-economic aspects of development, including employment, literacy, school enrolment, nutrition and the availability of drinking water and sanitation. The major conclusion from this comparison is that these social aspects would improve significantly faster from 1985 to 2000 with the higher economic growth scenario than with the lower-growth scenario. Even with high growth, however, there would be large gaps between the levels achieved by the year 2000 and the goals set in the Strategy. Consequently, major policy initiatives and institutional developments would be needed to increase the quantity and efficiency of public and private expenditure targeted to achieving the goals in the Strategy for social development.

## A. Employment

### 1. Current situation and recent trends 2/

187. The International Development Strategy calls for full employment by the year 2000 and intensive efforts to increase opportunities for productive employment. In most developing countries the majority or a sizeable minority of people still make their living in traditional agriculture, small-scale trade and transport and low-productivity personal services. Small-scale self-employment, unpaid employment of family members and paid employment within the informal urban sector are significant sources of income. In the early phases of growth, these latter types of employment have increased in relative importance; at higher levels of development, growth has normally reduced the relative importance of such jobs while also making it possible to earn a better living in them. In the 1970s, with increasing urbanization, industrialization and the spread of commercial agriculture and public services, paid employment in organized (i.e., formal sector) establishments spread rapidly throughout the developing regions. While economic fluctuations in the past were reflected mainly in levels of income and the extent of underemployment in the developing countries, they have recently come to be more directly felt in open unemployment. Open unemployment in 1980 was estimated by ILO to be 6 per cent of the labour force of the developing countries as a group, excluding China (see table 31). The recession of the early 1980s has much increased such open unemployment and exacerbated the problem of under-employment.

188. Some unemployment rates, particularly in countries with high percentages of wage employment, reached high levels in the early 1960s, as in Sri Lanka and some Caribbean countries. Where rates were high in the 1960s, they have generally remained so. In most countries, recorded unemployment has been far higher for urban than for rural areas, higher for the young than for the old and frequently higher for the better educated (secondary school and university graduates) than for those who have never completed primary education. These tendencies support the idea that the incidence of open unemployment responds to the perceived range of job opportunities. Nevertheless, it is also true that for males, at least the picture in South Asia is that school-leaving children from poor families are more at risk from unemployment than those from better-off groups.

189. In Latin America the available statistical series of unemployment rates show no particular pattern up to 1980. In only 5 out of 14 countries did rates rise unequivocally. The unweighted average for all countries rose slightly, from 3.4 per cent in 1950 to 3.9 per cent in 1980. 2/ Since 1980, however, the growth of demand for labour has fallen below the growth of the economically active population and there has been a very sharp rise in open unemployment in the urban sector (see table 32). In some large Latin American countries, employment in the non-agricultural sector declined in absolute terms after 1980, following two decades of very rapid economic growth and job creation. Revival of employment will require a combination of improved export opportunities, a greater supply of imported inputs needed in production and revived investment confidence, all closely related to global recovery and the satisfactory resolution of major debt problems.

Table 31. Open unemployment: developing regions, 1980  
 (Percentage of labour force)

Group	Total	Male	Female
All developing countries <u>a/</u>	6.0	5.2	7.8
Latin America and the Caribbean			
Low-income countries	8.1	7.4	10.3
Middle-income countries	5.6	7.8	8.4
Asia			
Middle-income countries	3.4	3.4	3.4
India	4.6	3.3	7.3
Other low-income countries	4.5	2.3	10.2
Africa and the Middle East			
Low-income countries	14.8	15.9	12.6
Middle-income countries	7.7	4.7	8.7
Capital surplus oil producers	5.4	6.1	4.0

Source: ILO, World Labour Report, 1984, vol. 1, table 1.3, p. 7.

a/ Excluding China.

Table 32. Rates of open urban unemployment in  
 12 Latin American countries  
 (Percentage)

Country	1970	1978	1979	1980	1981	1982	1983
Argentina	4.9	2.8	2.0	2.3	4.5	4.7	4.0
Bolivia	...	4.5	6.2	7.5	9.7	9.4	12.1
Brazil	6.5	6.8	6.4	6.2	7.9	6.3	6.7
Chile	4.1	13.3	13.4	11.7	9.0	20.0	19.0
Colombia	10.6	9.0	8.9	9.7	8.2	9.3	11.8
Costa Rica	3.5	5.8	5.3	6.0	9.1	9.9	8.5
Mexico	7.0	6.9	5.7	4.5	4.2	4.1	6.9
Panama	10.3	9.6	11.6	9.8	11.8	10.4	...
Paraguay	...	4.1	5.9	4.1	2.2	5.6	8.4
Peru	6.9	8.0	6.5	7.1	6.8	7.0	8.8
Uruguay	7.5	10.1	8.3	7.4	6.7	11.9	15.5
Venezuela	7.8	5.1	5.8	6.6	6.8	7.8	9.8

Source: International Labour Review, vol. 123, No. 5, September-October 1984, p. 588.

190. In Africa, where only a limited proportion of total income is normally derived from employment in the modern sector, opportunities for gainful employment in both the modern sector and the rural economy have been shrinking rapidly. Critical shortages of skilled manpower continued to co-exist with low productivity and low levels of income in the rural areas and in the urban informal sector. Open unemployment has also increased in this region. New opportunities for gainful employment will need to be developed in an invigorated agriculture sector and the urban informal sector, as well as from more efficient use of the existing and future investment in industry and services in the formal sector.

191. In South-East Asia, slower expansion in exports of manufactures slowed employment growth; there was even a decline of employment levels in some countries. In the largest Asian countries, while industry continues to generate new employment opportunities, the long-term effects of technological changes on employment in agriculture remain uncertain. Some jobs in and out of agriculture have been gained by the introduction of the high-yielding varieties of crops and associated new techniques (the Green Revolution). Others, however, have been lost, the balance differing from area to area and from first introduction to widespread use of the new techniques. There has been a net gain in employment where the number of owner-cultivators substantially outnumbered tenants, squatters and other landless labourers before the introduction of the new techniques. Even in such favourable circumstances, some initial disruption has typically taken place. In those poor areas where the Green Revolution has not taken hold, conditions have been typically worse. Losses resulting from the subdivision of holdings, increasing incidence of landlessness and population pressure on labour markets were not offset in those areas by gains in off-farm employment and income-earning opportunities, nor by substantial increases in overall food supplies and seasonal food security. A major task remaining is to extend the coverage of the Green Revolution techniques by expanding the areas under irrigation, by institutional reforms to reduce the need for expensive inputs without lowering the yield of grains, and by further research into raising yields of lesser staples, especially those grown under rain-fed conditions.

192. For the developing world as a whole and for the international community the objectives of full employment present a difficult challenge. The labour force in the developing market economies will continue to expand at an annual rate well above two per cent - adding almost 20 million people per year in the 1980s and about 25 million per year in the 1990s - until the recent decline of fertility begins to decelerate this pressure somewhat after the year 2000. In addition to its effects on employment, rapid economic growth together with social mobility in the 1960s and 1970s created a climate of hope and dynamism in a number of developing countries that lessened the social and political consequences of poverty, unemployment and under-employment. Prolonging the economic stagnation of the early 1980s will have the opposite effect.

193. The causes and recent impacts of the foregoing aspects of employment are reviewed in detail in the 1985 report on the world social situation (see E/CN.5/1985/2, sect. VII). The present discussion focuses on the prospects for long-term growth of the labour force (labour supply) and of the demand for labour services as implied by the scenarios for GDP growth and possible rates of growth of labour productivity, defined as output of GDP per worker.

## 2. Labour force supply

194. The International Development Strategy for the Third Development Decade affirmed and the International Population Conference of 1984 reaffirmed that the achievement of a full employment by the year 2000 remains a primary objective. Yet the early years of this decade have witnessed increases in unemployment in both the developed and the developing countries. The purpose of the present discussion is

to examine the role played by demographic factors and to assess whether population policies, in conjunction with appropriate development policies and structural change, can contribute to the reduction of employment and under-employment. Paragraphs 195 to 202 present projections of the working age population for the period between 1980 and 2025. The discussion in paragraphs 203 to 237 examines the effects of fertility, mortality and migration on the supply of labour.

(a) Growth of the working age population

195. The world's working age population, defined as persons aged 15 to 64, is estimated to have been 2.6 billion in 1980 (see table 33), about 59 per cent of the total population. Thus the working age population in 1980 was larger than the entire population of the world in 1950 (2.5 billion). Most of the growth in the working age population since 1950 (1.1 billion) has occurred in the less developed regions. While the working age population increased by 39 per cent in the more developed regions (from 537 to 745 million) during this 30-year period, this age group increased by 95 per cent in the less developed regions (from 955 to 1,865 million). Consequently, the share of the working age population accounted for by the less developed regions increased from 64 per cent in 1950 to 72 per cent in 1980.

196. Between 1980 and the turn of the century, the world's working age population will grow by another 1.25 billion (nearly 50 per cent). Approximately 90 per cent of this growth (about 1.15 billion) will take place in the less developed regions. Among the major regions, the working age population will increase by 85 per cent in Africa, 66 per cent in Latin America, 64 per cent in South Asia, 44 per cent in East Asia and 80 per cent in the least developed countries. <sup>3/</sup> The corresponding increase for the more developed regions will be only 13 per cent.

197. Projections to the year 2025 indicate further rapid increases in the working age population of the less developed regions, accompanied by relatively small changes in the more developed regions. According to the medium variant projection, the working age population will be approximately 5.4 billion by 2025, or about double its current size; the proportion living in the less developed regions will increase from 72 per cent in 1980 to 84 per cent in 2025. At that time the working age population of the less developed regions is projected to be approximately equal to the current total population of the entire world.

Table 33. Population aged 15 to 64 years, including percentage of aged 15 to 19 years and percentage living in urban areas by region in 1980, 2000 and 2025 (medium variant)

Region <sup>a/</sup>	1980			2000			2025		
	Millions	Percentage		Millions	Percentage		Millions	Percentage	
		Urban	15-19		Urban	15-19		Urban	15-19
World	2 610	44	17	3 860	53	14	5 384	69	12
More developed regions	745	74	13	842	82	10	878	89	10
Less developed regions	1 865	32	19	3 018	45	15	4 505	65	13
Least developed countries	146	16	20	263	28	20	534	48	17
Africa	246	31	20	454	46	20	996	63	18
Americas	371	72	17	537	80	14	734	88	12
Latin America	204	68	20	338	78	16	517	85	13
Northern America	167	78	14	199	85	11	217	93	11
Asia	1 491	30	18	2 307	42	14	3 063	62	11
East Asia	703	35	16	1 013	46	10	159	70	9
South Asia	788	26	19	1 295	38	16	1 904	58	12
Europe	313	72	12	339	80	10	332	87	10
Oceania	14	78	14	20	83	10	26	89	12
Union of Soviet Socialist Republics	174	69	14	203	79	12	232	89	11

Source: The estimates and projections appearing in tables 33 and 34 are from World Population Prospects: Estimates and Projections as Assessed in 1982 (United Nations publication, Sales No. E.83.XIII.5). The only exception is the percentage of urban population. The proportions for 1980 and 2000 are from "Age and sex structure of urban and rural populations, 1970-2000: the 1980 assessment" (ESA/P/WP.81); the proportions for 2025 are extrapolations based on total population projections and ratios of urban to total population in 1980, 1990 and 2000.

<sup>a/</sup> More developed regions include Northern America, Japan, all regions of Europe, Australia, New Zealand and the Union of Soviet Socialist Republics. Less developed regions include all regions of Africa, all regions of Latin America, China, other countries of East Asia, all regions of South Asia, Melanesia and Micronesia-Polynesia. For the definitions of the sub-regional components of these regions, see World Population Prospects, pp. 38-39.

198. In the coming decades, a greater proportion of the working age population will be living in urban areas. Whereas less than one third of the working age population in the less developed regions lived in urban areas in 1980, by the year 2000 about 45 per cent will be urban, and by 2025 the proportion will be almost two thirds. Among the least developed countries, the proportion living in urban areas is projected to rise from 15.5 to 48.5 per cent between 1980 and 2025.

(i) New entrants to the working age population

199. The 15-to-19-year-old age group is of special interest, as it constitutes the new entrants to the working age population during each five-year period. At present about 80 per cent of this group are in the less developed regions, and this proportion is expected to increase to 84 per cent by the year 2000. Further, while the number of 15-to-19-year-olds in the less developed regions will increase by 63 per cent by the year 2025, the number in the more developed region is projected to decrease, from 96 million in 1980 to 90 million in 2025. In contrast, the 15-to-19-year-old age group in the 36 least developed countries is expected to triple over the next 40 years, from 29 million in 1980 to 91 million in 2025.

200. Among the more developed regions approximately 13 per cent of the working age population was in the age group 15 to 19 years old in 1980, while the corresponding proportion for the less developed regions was about 19 per cent, ranging from 16 per cent in East Asia to 20 per cent in Africa. Over the next four decades, the proportion of the working age population who are 15 to 19 years old is expected to decrease substantially in the less developed regions as a whole, falling to 15 per cent in 2000 and to 13 per cent in 2025. In the least developed countries and in Africa as a whole, the proportion is projected to remain close to 20 per cent in the year 2000 and to fall only to 17-18 per cent by the year 2025 due to continuing high rates of fertility.

(ii) Dependency ratios

201. An important dimension to consider when describing the working age population is age dependency. 4/ In 1980 the child dependency ratio (number of children under 15 years of age to 100 persons aged 15 to 64) in the less developed regions was about twice that in the more developed regions - 71.1 per 100 persons of working age versus 35.1 per 100 persons of working age, respectively; the ratio in the least developed regions is even higher, 89.8 (see table 34). The situation is reversed for the aged dependency ratio (those over 64 years of age to 100 persons aged 15 to 64): 17.4 in the more developed regions and 6.8 in the less developed regions. The total dependency ratio (the sum of the under-15 and the over-64 ratios) is considerably greater for the less developed regions than for the more developed regions, 77.9 versus 52.6; in the least developed countries it is 95.6.



Table 34. Age dependency ratio for total, under 15 years and 65 years and over by region in 1980, 2000 and 2025 (medium variant)

Region <u>a/</u>	Total			Under 15			65 and over		
	1980	2000	2025	1980	2000	2025	1980	2000	2025
World total	70.6	58.7	51.9	60.8	48.2	37.5	9.8	10.5	14.4
More developed regions	52.6	51.5	59.0	35.1	31.5	31.4	17.4	20.0	27.6
Less developed regions	77.9	60.8	50.5	71.1	52.9	38.7	6.8	7.8	11.8
Least developed countries	95.6	87.7	59.2	89.8	82.5	53.2	5.8	5.2	6.0
Africa	93.4	93.1	64.9	87.5	87.3	58.6	5.9	5.9	6.3
Americas	65.5	58.0	54.4	53.8	46.2	37.5	11.7	11.8	16.9
Latin America	77.5	62.7	52.2	69.9	54.3	39.7	7.6	8.4	12.4
Northern America	50.7	49.9	59.7	34.0	32.3	32.2	16.7	17.6	27.6
Asia	73.8	53.6	45.8	66.6	44.9	31.8	7.1	8.7	14.0
East Asia	68.2	45.2	46.3	59.6	34.3	27.0	8.5	10.9	19.4
South Asia	78.8	60.2	45.5	72.9	53.2	34.7	5.9	7.0	10.8
Europe	54.6	51.2	58.5	34.5	29.2	29.3	20.1	22.0	29.2
Oceania	59.9	54.4	54.7	47.2	40.4	35.5	12.7	14.0	19.2
Union of Soviet Socialist Republics	52.4	55.0	58.5	37.1	36.6	34.9	15.3	18.4	23.6

Source: See table 33.

a/ More developed regions include Northern America, Japan, all regions of Europe, Australia, New Zealand and the Union of Soviet Socialist Republics. Less developed regions include all regions of Africa, all regions of Latin America, China, other countries of East Asia, all regions of South Asia, Melanesia and Micronesia-Polynesia.

202. The currently large differences among the regions in the total dependency ratio are expected to diminish by 2000 and be reversed by 2025, as the ratio goes up slightly in the more developed regions and declines markedly in the less developed regions. By the year 2025, the total dependency ratio will range from 45.5 for South Asia to 64.9 for Africa, compared with 59.0 in the more developed regions. In all regions, the child (under 15) dependency ratio will decline and the old age (over 64) ratio will increase. In the more developed regions, the increase in the number of persons over 64 years of age will be greater than the decline in the number of persons under 15 years of age, and the working age population will increase slowly. Consequently, the total dependency ratio will increase to 59.0 in 2025 from 52.6 in 1980. In the less developed regions, in contrast, the decline in the child dependency ratio is expected to be much greater than the increase in the ratio of adults over 64; as a result, the total age dependency ratio is projected to be much lower in 2025 than it is currently - 50.5 versus 77.9.

(b) Demographic factors affecting the supply of labour and employment

203. In this section attention will be given to the possible affects of fertility, mortality, internal migration and international migration on the supply of labour and employment. To a considerable extent it is difficult, if not artificial, to only deal with a one-way causality. In most cases the relationship between demographic variables and the supply of labour is circular and not unidirectional. Consequently, mention is made of some of the feed-back effects as well.

204. From what follows it will become abundantly clear that one cannot make categorical statements about the effects of demographic variables on the supply of labour and employment. For example, fertility and participation of females in the labour force do not show any strong relationship in countries at the lowest level of development. However, this relationship becomes strongly negative in urban and industrial areas of developing countries. Still, in this latter situation, it appears that secondary education is more important as a predictor for participation of females in the labour force than for fertility. In general, it appears that the existence of an inverse relationship between fertility and the supply of labour depends on the level of development of a country and on the educational attainments of women.

205. In discussing the effects of mortality, a "pure" mortality affect was investigated. The results show that a typical decline in mortality will only marginally affect the proportion of the population that is of labour force age. Since mortality decline is normally positively correlated with fertility decline, one should nevertheless expect some effects, albeit indirect, of mortality on the supply of labour.

206. The young average age of internal migrants has immediate effects for the supply of labour in areas of origin and of destination. In fact, employment opportunities, either perceived or real, generally provide the impetus for migration. Consequently, there is a strong interdependence between internal migration and supply of labour and employment. For example, while rural to urban migration increases aggregate labour productivity, quite often the productivity differences between rural and urban areas are a consequence of economic and/or political investment decisions that generally favour urban areas.

207. In discussing the effects of international migration on the supply of labour, only legal international migration has been considered. In this context, it appears that governments of receiving countries can use this form of migration as a means of regulating the supply of labour, thereby avoiding constraints imposed by the size and composition of their national labour supply. The countries of origin do not appear to be able to influence the pace and magnitude of the labour migration flow. Furthermore, such labour emigration does not necessarily lead to a reduction in unemployment partly because the skills of those who leave are not always easy to replace.

(i) Fertility, labour supply and employment

208. Although a complicated set of methodological problems heavily affects research into interactions between employment and fertility, accumulated evidence to date seems to support the hypothesis that the impact of childbearing upon participation of females in the labour force changes during the course of industrialization. 5/ The magnitude and the predominant directions of causality in the relationship between fertility and economic activity depend crucially on the type of employment (job opportunities) 6/ as well as on a number of common antecedents, among which the level of education seems to be the most important in many developing countries.

209. In pre-industrial societies, fertility is likely to have little or no effect, whereas in early industrialization its constraining influence on participation of females in the labour force increases and, at a later stage, may become less important in highly industrialized economies.

210. Women's productive and reproductive roles tend to be compatible in rural areas of low-income countries, since family agriculture and cottage industries keep women close to the home, permit flexibility in working conditions and require low investment of the mother's time. 7/ Only the presence of infants significantly depresses the participation rate of females. Grandparents and older siblings are usually available for the care of younger children. In some cultures child-caring roles are also shared by other members of extended families. 8/ Moreover, as the economic contribution of both children and women is of prime importance for the family, 9/ any remaining incompatibility between child-care and work is often resolved by a woman's reducing her leisure time rather than her work time or family size. 10/ This is why the co-variation of fertility and female labour-force participation is found to be weak or non-existent in countries at the lowest level of development. 11/ Recent comparative analysis by the United Nations of 31 developing countries demonstrated that the association between the work status of women and their family size is statistically insignificant or very close to zero in agricultural settings whatever the country's level of development. 12/

211. The inverse relationship between fertility and participation of females in the labour force becomes more pronounced in urban and industrial areas of developing countries. 13/ This is assumed to be due to increased role incompatibility since most existing job opportunities in the modern industrial sector require rather inflexible working conditions outside the home and since most urban occupations also affect patterns of sexual division of labour within households. The greater availability and better quality of education for children in urban areas, coupled

with a widely held perception of education as a means of upward social mobility, strengthen the inverse relationship, especially where modern child-care facilities are not common. The same United Nations study found that women in high-status (white collar) jobs had lower fertility than non-working women in the more economically advanced developing countries but that relationship was much weaker within the least developed countries. 12/ Secondary education, associated with a high position in the social structure, appears to be the strongest common antecedent and predictor both of high probability of getting employment in professional or clerical occupations and of lower fertility. Education postpones entry into marital unions, improves chances of getting an attractive job, conditions the desire for a smaller family and enables women to practice family planning. 14/

212. However, in most developing countries the constraint of child-care is reduced for middle-class women by the existence of a large pool of young women workers, typically migrants to urban areas resigned to working for low wages. However, economic development tends, at least in the long run, to decrease the availability of cheap domestic help and it also increases the cost of children and the opportunity cost of time that educated women devote to childcare. Since women who have been working prior to marriage tend to marry later than women with no premarital work experience and since they may also develop greater work commitment and motivation to work, they are likely to have fewer children and to resume working after a relatively short child-bearing period. 12/ This leads to a U-shaped relationship between age and participation rates for educated women, a pattern that emerges for the entire female population of industrialized countries with market economies. 7/ Nevertheless, because the proportion of well-educated women in the population of most developing countries is small, this U-shaped relationship does not affect the supply of the entire female labour force to any sizeable extent.

213. As for women in low-income groups who are mostly working because of pressing economic necessity, 15/ the curtailment of their fertility does not come from a desire for a smaller family or from an expectation of being satisfied by a socially attractive job. The apparent weakness of this relationship in the early stages of economic development 12/ may be due to the counteracting influence of the economic contribution that young children provide to the family even in metropolitan areas of a number of developing countries, as well as to the inability of poorly educated women to control their fertility. Hence, it may be suggested that in the developing countries the single factor crucial for strengthening the inverse relationship between fertility and participation of females in the labour force might be increased access by those women to education, particularly at secondary and higher levels, and professional training. However, secondary school enrolment ratios for girls remain low in most developing countries and the situation does not seem to be improving. 16/

214. Most studies in industrialized countries have found the expected inverse relationship, 17/ and although there remain some doubts about the causal explanation of the research findings, it seems that duration of employment after leaving school and after marriage are associated with lower desired and actual family size and with greater planning of fertility. While the socialist countries

of Eastern Europe have consistently high, age-standardized rates of female participation in the labour force, higher on average than in other industrialized countries, 18/ these different patterns are not related to cross-national differentials in fertility levels. It appears, however, that, as fertility approaches replacement level and as institutional child-care facilities and other economic support for families expand, the constraining influence of children may be somewhat moderated.

215. While a number of studies have found a significant positive relationship between child employment and fertility at the household level, 19/ the causality is directed from child labour to fertility rather than vice versa. However, it can be suggested that, in so far as reduced fertility contributes to increased per capita income and to greater public resources for education, it is likely that the participation rates of young people in the labour force will be reduced. In addition, a decline in the proportion of children in the population would also contribute to a decline in the amount of child labour. Moreover, under certain conditions lower fertility is likely to increase the demand for social services for the aged by reducing the amount of potentially available help from children.

(ii) Mortality, labour supply and employment

216. Patterns of mortality and morbidity can affect both labour supply and labour quality. In absolute terms, labour supply is directly related to overall population growth: ceteris paribus the greater the population growth, the greater the potential number of persons in the labour force. Declines in mortality, such as those experienced by many developing countries during the post-war period, have spurred population growth. However, importantly and contrary to fertility-induced population growth, population growth induced by a typical pattern of mortality decline increases the number of persons at all ages; the size of the labour force increases along with the number of those dependent for economic support. It is therefore probably of most interest to investigate the effect of a decline in mortality on relative labour supply than on absolute labour supply; that is, the way in which typical decline in mortality differentially affects the size of the labour force population and the size of the dependent population.

217. A relatively simple type of mortality decline that can be envisioned is one in which age-specific death rates change by an equal amount at every age. Such a mortality change is generally termed a neutral change in mortality. It is called neutral because such a change has no effect on the population age distribution; the percentage of the population in each age group remains the same. Hence under the assumption of unchanging rates of labour force participation, by age and sex, relative labour supply remains unchanged. The assumption of unchanging rates of labour force participation may under some circumstances be unrealistic. Even a neutral change in mortality generates an increased rate of population growth. Increased population growth can give rise to social change or to structural change in the economy due to, for example, fixed amounts of land and capital or economies of scale, which affects the level and pattern of labour force participation.

218. In actual fact, historical mortality declines have not been neutral. Mortality has generally declined in absolute terms more among the young and old in

the population than among the prime age population, which comprises the majority of the labour force. This pattern of mortality decline has the expected effect on age structure and relative labour supply: the proportion of the population at the young and old ages increases relative to those in the traditional labour force ages. To quantify this result, a simple comparison can be made of two populations. Both experience the same level of fertility (a total fertility rate of 5.0) but vary according to their level of mortality. The first population exhibits a life expectancy at birth of 40 years, typical of a country before the onset of the mortality transition. The second population exhibits a life expectancy of 65 years at birth, typical of a country nearing the end of its mortality transition. The described mortality transition may be expected to take place over a quarter-century or longer. Both populations are assumed to experience age-specific labour force participation rates typical of a country at a "middle" level of modernization, 20/ and, for the sake of example, only the male population has been modeled. Results for females would differ only because of the different level of labour force participation exhibited.

219. Under this hypothetical example the proportion of the total population in the labour force changes moderately from 0.53 under high mortality conditions to just over 0.50 under lower mortality conditions. (If only the population aged 15 and over is considered, the proportion changes insignificantly from 0.87 to 0.86, suggesting that most of the decrease in relative labour supply is due to excess growth in the numbers of young dependents). These proportions imply a decline from 1.14 workers available to support each dependent member of the population to 1.01 workers as survivorship improves from an expected life expectancy of 40 years at birth to one of 65 years at birth. This implies an 11.5 per cent decline in available workers per dependent; a corresponding increase in productivity would be necessary to retain the identical per capita income.

220. Not only can the relative supply of labour change during the transition from high to low mortality but the age distribution of those in the labour force may also be expected to change in ways that alter the distribution of longevity in the labour force and associated productivity. Surprisingly, however, the mean age of the labour force in the two illustrative populations is nearly identical - 35.8 years before onset of the mortality decline and 35.7 years near its conclusion. This constancy, however, masks change. Mortality decline increases the proportion of workers in the younger and older ages more or less symmetrically. The mean age remains the same but the distribution is broader.

221. Improvement in mortality and morbidity levels may bring with it improvement in the quality of the labour force necessary to counter-balance the small decline in relative labour supply. Lower levels of infant and child mortality will result in a gain in the expected returns from investments made during early child-rearing. Since low mortality increases returns per surviving child, the incentive for parents and society to make such investments in child health care and education is increased. With increased investment, the quality of labour supplied and the quality of employment available will rise.

222. Human capital investment is not the only reason, of course, to expect a positive relationship between health and productivity. A healthier person is

likely to be physically stronger, mentally quicker and miss fewer days of work due to illness. Whether one is employed, where one is employed, what one can do on the job, and one's role in the organization are all affected by previous health. 21/

223. The above discussion considered solely the effect of a decline in mortality and improvement in health on labour supply and productivity. Some researchers have indicated that causality also flows in the opposite direction. For example, studies in many developed countries have shown that employed persons experience lower mortality than unemployed persons of the same age. This in itself, however, does not indicate that unemployment leads to greater risk of death and illness since the effects of employment, social class and income are inextricably intertwined. More convincing are studies demonstrating that fluctuations over time in employment are followed by similar fluctuations in mortality. However, some researchers have also questioned the significance of these results since the structure of the perceived relationships differ over time and place.

(iii) Internal migration, labour supply and employment

224. The age selectivity of migrants is perhaps the most universal characteristics of internal migration. 22/ According to studies covering a wide range of countries in more developed and less developed regions, migrants tend to be relatively young and are concentrated in the age group of 15 to 30 years. 23/ It is usually during this interval that most persons enter the labour force on a permanent basis (at least in the case of males), and persons in their 20s tend to have among the highest rates of labour force participation. 24/ It is also widely recognized that the search for employment is a major, if not the most important factor in the decision of persons to migrate. 25/ For these reasons, it can be expected that migration has major consequences for employment in terms of its supply and characteristics (such as labour productivity, mode of production and division of labour).

225. These consequences, however, depend on several factors, including the context of development and the specific forms of internal migration in terms of direction and duration. Seasonal and circulatory migration, for example, are likely to have different effects on employment than permanent migration, and employment may also be differently affected by rural-urban and rural-rural migration.

226. In situations where young persons and others who are unemployed leave their communities and obtain a job elsewhere, migration can be said to increase the level of employment, for it provides a mechanism of transferring the supply of labour to those areas where it is needed. Similarly, migration often increases the productivity of labour either because of underemployment in the areas of origin or because of differential productivity in sending and receiving areas. Rural-urban migration, for example, increases labour productivity by facilitating the transition from (rural) agricultural to (urban) industrial activities, which is entailed in the process of industrialization. It should be pointed out, however, that differences in regional productivity themselves are a consequence of economic, and often political, decisions to locate investments in certain areas, usually favouring cities. 26/ Industrialization and increased productivity of national economies would generally not require the level of rural-urban migration typical in many developing countries if more investments were made in rural areas.

227. The effects of migration on urban unemployment remain controversial. While it has been found in many studies that migrants do not tend to have a higher incidence of unemployment than urban natives, 27/ it is possible that they are displacing urban workers, thereby adding to unemployment in cities. 28/

228. Migration, especially rural-urban and circulatory migration, often has an impact on the mode of production by accelerating the transition to wage employment, which can come about in several ways. For example, most rural-urban migrants, even those who were self-employed farmers or unpaid workers on family farms, become wage labourers; in other cases, circulatory migrants take on jobs that local persons would not accept, and it has been found that in some instances, the introduction of wage labour in a given community was made possible only by bringing migrants into that area. 29/

229. While rural-urban migration in many developing countries today involves persons who were either self-employed or unpaid family workers, this has been not necessarily the experience of the more developed countries. In the United Kingdom, for example, the commercialization of agriculture preceded urbanization and rural-urban migration; in this case, rural-urban migration mostly represented a transfer of wage labour from rural to urban areas. 30/ It should also be noted that several forms of migration tend to preserve the pre-industrial mode of production. Frontier settlers, for example, often are motivated to migrate by their desire to work on their own land rather than being wage earners, and not all migrants to urban areas in less developed countries aspire to employment in the modern sector. It has been found that in countries where prevailing wages are low and opportunities for advancement are scarce, some migrants are willing to assume the risk of self-employment in return for the potential reward of much greater earnings than are possible in most low-level industrial jobs in those countries.

230. Rural-urban and rural-rural migration have also been found to lead to changes in the sexual division of labour in both sending and receiving areas. 31/ Especially in the areas of origin, the outmigration of males frequently places a heavy burden on women and children left behind to carry out the necessary agricultural work. 32/

(iv) International migration, labour supply and employment

231. International migration is one of the instruments that Governments may use to regulate the supply of labour. This use of international migration is clearer from the perspective of receiving countries, since the legally sanctioned recruitment of foreigners to perform specific jobs within their territories is a practice that obviates the constraints imposed by the size and composition of the national labour supply. For sending countries, however, international migration has often appeared as a means to alleviate, inter alia, local unemployment and underemployment. Indeed, the potentially negative effect that emigration may have on the size of the labour supply has generally been considered one of the positive consequences of international migration for sending countries.

232. During this century there have been many instances of countries that have legally sanctioned the temporary presence in their territories of foreigners whose



skills were needed. The best known and most recent examples of organized labour flows have been directed towards the highly industrialized, market economy countries of Europe and towards the resource-rich countries of Western Asia and Northern Africa. The contrasting situations prevalent in these two regions will be considered below.

233. In Europe, the economic recession that affected many of the labour-importing countries during the early 1970s led to the virtual stoppage in 1974 of migration of non-EEC nationals. Such stoppage, however, has not meant the massive repatriation of foreign workers. Instead, the former labour-importing countries have adopted policies designed to stabilize the foreign population present in their territories by encouraging return migration and allowing family reunification under certain conditions. 33/ The adoption of such policies has important implications for the evolution of the labour supply. First, once it is recognized that the foreign population is more than a temporary, dispensable component of the local population, its share of the labour supply loses the flexibility that was intrinsically related to its purely temporary nature. Second, the possibility of family reunification adds dynamism to the demographic aspects of labour supply, since participation in the local labour market cannot remain restricted to the original migrant workers. Consequently, receiving countries are now faced with a new component of the labour supply (constituted by the children of migrant workers) that must be integrated into the mainstream of economic activity in order to ensure a healthy symbiosis between it and the national population as a whole.

234. In Western Asia and Northern Africa, the inflow of migrant workers continues. In certain receiving countries, the foreign population already constitutes a very sizeable proportion of the total population in the country. 34/ Given the existing imbalance between resources, the size of the native labour force and its distribution with regard to skills, foreign labour is necessary to fuel and maintain an ambitious development programme that would not be possible in its absence. Yet, appreciating that the long-term presence of foreigners in their territories may bring about undesirable social and economic changes, receiving States have vigorously pursued measures to ensure the rotation of foreign labour: migrants are allowed to enter and stay in the receiving country only when their labour is needed, their family members are generally not allowed to accompany them and upon completion of their task migrant workers are expected to leave the country. 35/ In this sense, receiving countries have been successful in maintaining the flexible character of the foreign labour supply. The short-term consequences of such a strategy appear to be positive on balance, but its long-term consequences may not be equally encouraging, especially with respect to the national labour supply. Indeed, the relatively privileged position enjoyed by nationals makes it unlikely that they may be eager to take over the tasks being performed by foreigners. 36/ Hence, the enhancement of the national labour supply in terms of skills and the promotion of incentives to facilitate its replacing foreign labour are among the tasks still facing the receiving States.

235. Regarding the sending countries, their position with respect to international labour migration tends to be passive, since they are generally unable to initiate or to determine the pace of labour migration flows. In addition, labour emigration does not necessarily lead to a reduction of unemployment, partly because the skills

of those who leave are not always easy to replace. In fact, there is evidence suggesting that some sending countries have actually become labour-importing countries in order to replace the needed skills which have been lost through emigration. <sup>37/</sup> Thus, labour emigration affects not only the size of labour supply but also, and most importantly, its composition and may have undesirable consequences even when reducing national levels of supply.

236. Another aspect of international labour migration that may have detrimental effects for sending countries is the return of migrants, especially when it occurs on a large scale as part of the discontinuation of a well established flow. Migrants returning in such "unplanned" circumstances are often ill prepared to start anew in their country of origin and the national economy is unlikely to be ready for the absorption of a sudden increase of labour supply. However, not all return migration occurs under such circumstances. The orderly return of migrants associated with the enforcement of labour rotation by the receiving States may be accompanied by minimum disruptions and may even lead to overall benefits if the savings accumulated by migrants while abroad are put to productive use.

237. This brief discussion shows that the consequences of the international movement of workers are far from straightforward, varying according to context. In addition, consequences vary according to the type of movement involved. This discussion has focused on the role of legally sanctioned labour migration. The effects of illegal or undocumented migration on labour supply are even more complex, given that the foreign labour involved is not considered necessary by the receiving State. A detailed discussion of the implications of undocumented migration for labour supply is beyond the scope of the present study.

### 3. Labour demand/supply balance

238. The discussion below briefly considers the implications for employment in the developing countries with market economies of the projections of GDP under the different long-term scenarios discussed in section IV. Approximate projections of employment as a percentage of the labour force have been made, based on the assumption that productivity will increase 2 per cent per year from 1980 to 2000. It must be emphasized that these projections are subject to a high degree of uncertainty, because of the very limited availability of reliable historical data on employment, productivity and labour force participation rates in the developing countries. The underlying projections of labour force participation rates are expected to be revised, probably upwards, by ILO in late 1985.

239. For the developing market economies as a whole (the same countries as those covered in the analysis of GDP in section IV), total employment was about 93 per cent of the labour force in 1980 and has fallen sharply to only 83 per cent in 1985, given the very slow growth of GDP since 1980 (see table 35). While this implies an unemployment rate of 17 per cent, that figure should probably be interpreted as including some shifting of labour from the formal sector to the informal sector, rather than consisting entirely of open unemployment. For comparison, the limited available estimates of open unemployment in urban areas of 12 Latin American countries averaged around 9 to 10 per cent in 1982-83, as shown in table 32 above.

Table 35. Employment as a percentage of the labour force in developing market economies, 1980-2000 under the scenarios of higher and lower GDP growth during 1986-2000

Country group/scenario	1980	1985	1990	1995	2000
Developing market economies					
Lower growth			88.1	84.9	83.5
Baseline	93.3	82.9	90.6	90.2	92.0
Higher growth			95.4	102.5	113.9
Least developed economies					
Lower growth			77.6	70.8	65.8
Baseline	89.7	81.5	77.7	70.9	66.0
Higher growth			81.0	83.4	91.8

240. Under the lower-growth scenario, the employment rate in the developing market economies would recover to 88 per cent by 1990, reflecting a moderate recovery from the severe recession of the early 1980s. By 2000, however, it would fall back below 84 per cent, with the continuing rapid growth of the labour force (see table 36), implying a return to the current degree of economic hardship and related social unrest. The situation in the least developed countries would be even worse, with the employment rate falling steadily to 78 per cent in 1990 and only 66 per cent in 2000. This should be interpreted as an indication of the pressure on the formal sectors of those countries; most of the "unemployed" would have to find "self-employment" in agriculture or in the informal sector of the urban economy.

241. Under the higher-growth scenario, the employment rate in the developing market economies as a whole would recover rapidly to about 95 per cent in 1990 and would reach 100 per cent before 1995. This 100 per cent figure and the corresponding figure of 114 per cent for 2000 imply that achievement of the GDP growth projected in this scenario will require one or both of the following factors: (a) an average productivity growth somewhat greater than 2 per cent per year; and (b) higher labour force participation rates than those projected by ILO in 1977. The possibility of higher participation is indicated by considering the employment projections in relation to the projections of the working age population. With the 2 per cent growth of productivity, employment as a percentage of the working age population would reach 64 per cent in 1995 and 71 per cent in the year 2000, compared with 62 per cent in 1980 (see table 37). Such an increase is certainly a possibility, given the various influences on labour force participation discussed above. In the least developed countries, the employment rate would recover much less, reaching 92 per cent in the year 2000, which is much higher than with the lower growth scenario - only 66 per cent.

Table 36. Labour force levels and growth rates in the developing market economies, 1980-2000

Country group	Labour force (millions)							
	1965	1970	1975	1980	1985	1990	1995	2000
Developing market economies	574	634	704	780	868	967	1 095	1 224
Least developed economies	68	76	84	95	107	122	141	160

  

	Labour force growth (annual rate in percentage)						
	1965-1970	1970-1975	1975-1980	1980-1985	1985-1990	1990-1995	1995-2000
Developing market economies	2.06	2.12	2.08	2.17	2.19	2.53	2.25
Least developed economies	2.38	3.15	2.56	2.54	2.67	3.04	2.67

Source: Based on country estimates by ILO and the Population Division of the United Nations Secretariat.

Table 37. Employment as a percentage of the working age population in developing market economies, 1980-2000, under the scenarios of higher and lower GDP growth during 1986-2000

Country group/scenario	1980	1985	1990	1995	2000
Developing market economies					
Lower growth			55.4	53.3	51.8
Baseline	62.0	53.5	56.9	56.7	57.1
Higher growth			60.0	64.4	70.7
Least developed economies					
Lower growth			60.8	55.3	50.2
Baseline	72.6	64.6	60.9	55.4	50.3
Higher growth			63.4	65.1	70.1

#### B. Education - literacy and primary-school-age enrolment

242. Widespread illiteracy exists in many developing countries because educational opportunities are not yet readily available to millions of people. As recently as 1980, about 38 per cent of the adult males (aged 15 and over) and 58 per cent of the adult females were illiterate in the developing market economies (see table 38). The illiteracy rates were lower for the 15 to 19 age group in these countries - 23 per cent of males and 38 per cent of females, but still high enough to indicate that adult illiteracy is likely to remain a major problem for several more decades in many of the countries.

243. High illiteracy rates are in large measure a result of still inadequate enrolment in primary schools. In 1980 only an estimated 75 per cent of boys aged 6 to 11 and 59 per cent of girls of the same age were enrolled in schools in the developing market economies. Although these figures show considerable improvement over the respective 65 per cent and 48 per cent enrolment rates in 1970, the outlook for continued improvements in enrolment and literacy, particularly in the least developed countries, is discouraging.

244. Although the reasons for illiteracy in any particular country are complex, it is generally true that with few exceptions the poorer countries have a higher rate of illiteracy. The problem tends to be more acute in rural areas, where there are

often not enough funds to provide teachers and schools. In addition, the poorer families in order to subsist depend upon a contribution by their older children to the household income. Hence, the drop-out rate of their children is high, and these children tend to forget much of what they have learned, because it is not used at home or reinforced by any kind of literacy maintenance programme. Thus the poorest people are the most likely to be illiterate.

245. The relevance of per capita income levels to a country's ability to reach high levels of literacy is indicated by comparing the literacy levels of the different income groups among the developing countries. By 1980 the upper-income group had reached a literacy rate of 82 per cent for adult males and 72 per cent for females, while in the low-income group only 52 per cent of the adult males and 29 per cent of the adult females were literate. The situation in the least developed economies was even worse: only 36 per cent of adult males and 20 per cent of adult females were literate (see table 38).

246. Although a few low-income countries have achieved relatively high literacy rates, typically those where significant development of primary education was started several decades ago, as in Sri Lanka, for example, and a few of the upper-income and oil-exporting countries still have low literacy rates, higher per capita income levels generally have allowed greater expenditures on education and consequent increases in enrolment and literacy rates. In 1980 the upper-income oil-importing group reached estimated enrolment rates of 82 per cent for boys aged 6 to 11, and 79 per cent for girls of the same age, compared with 68 per cent for boys and 46 per cent for girls in the low-income group. In the least developed group, only 51 per cent of the boys aged 6 to 11 were enrolled in school and only 31 per cent of the girls. Another indication of the effect of per capita income on purchasing power is the rapid growth of enrolment rates in the oil-exporting group; in the years from 1970 to 1980, enrolment of children aged 6 to 11 rose from 62 to 86 per cent for boys and from 51 to 77 per cent for girls.

247. Spending per student for primary level schooling varies considerably among the different income groups of countries (see table 39). In order to increase enrolment rates, the developing countries will need to increase their spending on primary education at a rate faster than the growth of their primary-school-age population (typically aged 6 to 11, though other age ranges are the standard in some countries). At the same time, they must limit the growth of the cost or spending per pupil; otherwise, large increases in spending could occur with little or no increase in the enrolment rate.

Table 38. Recent literacy rates for adults and youth and school enrolment rates for children a/

Country group	Literacy rates (percentage)				Enrolment rates (percentage)	
	Adults (aged 15 and over)		Youth (aged 15 to 19)		Children (aged 6 to 11)	
	1970	1980	1970	1980	1970	1980
<b>Developed market economies</b>						
Males	98.0	98.8	99.4	99.5	97.3	97.6
Females	96.5	97.4	99.3	99.3	97.6	97.9
<b>Developing market economies</b>						
<b>Oil-exporting</b>						
Males	58.4	69.0	81.2	85.7	61.8	86.2
Females	37.9	50.2	66.6	73.4	50.1	77.3
<b>Oil-importing</b>						
<b>Upper-income</b>						
Males	76.1	82.5	93.0	94.3	78.4	81.7
Females	62.6	71.7	89.9	92.0	73.1	78.6
<b>Low-income</b>						
Males	43.5	52.7	66.1	67.3	62.0	68.5
Females	18.8	28.5	43.2	46.6	38.1	46.3
<b>Least developed</b>						
Males	27.9	36.1	54.0	61.9	36.4	50.7
Females	9.8	20.4	18.2	27.0	18.2	31.4
<b>Total, oil-importing</b>						
Males	52.1	60.1	73.4	74.6	66.3	71.8
Females	30.3	40.0	55.0	58.8	47.3	54.4
<b>Total, developing market economies</b>						
Males	53.3	61.8	74.9	76.8	65.4	74.7
Females	31.7	42.0	58.1	61.7	48.0	59.0

Sources: United Nations Educational, Scientific and Cultural Organization, Trends and Projections of Enrolment by Level of Education and by Age (CSR-E-46), March 1983; Estimates and Projections of Illiteracy (CSR-E-29), September 1978; Statistical Yearbook, 1984, and unpublished computer print-outs.

a/ Enrolment and literacy rates for the different groups of developing countries were arrived at by applying country rates in the documents cited above to the population of the respective age groups and adding the countries in a given group, so that the group rates are weighted by country population sizes.

Table 39. Public expenditure (current account) for primary education in 86 countries a/ in 1974 (or nearest prior year for which data were available)

Country group	Expenditure in 1975 United States dollars	
	Per pupil <u>b/</u>	Per capita <u>c/</u>
Developed countries	924.45	119.51
Developing countries		
Oil-exporting	116.52	13.33
Oil-importing		
High-income group	89.79	14.47
Medium-income group	44.68	5.56
Low-income group	14.20	1.30
Least developed group	27.32	1.48
Total, oil-importing	33.19	4.48
Total, developing (oil-exporting plus oil-importing)	41.85	5.40

Source: UNESCO, The Allocation of Resources to Education throughout the World (CSR-E-35), March 1980, annex VI, containing data on expenditure in 1976 United States dollars and number of pupils, for each country.

a/ Including 22 developed countries and 64 developing countries.

b/ The figure for each country group is an average weighted by the number of primary-level pupils in each country.

c/ The figure for each country group is an average weighted by the population of each country in the group, in the year for which the expenditure was recorded.



### 1. Enrolment projections

248. Given the observed relations between education costs and spending and per capita income levels, improvements in enrolment rates that can be expected in the developing countries during the 1980s and 1990s will depend in part on their economic growth. Table 40 shows projections of the enrolment rate for children under the lower and higher growth scenarios for the years 1990 and 2000. The projections are based on a cross-country statistical analysis of the relationships between per capita income, per capita expenditure on primary education and per student expenditure on primary education in 66 developing countries in the first half of the 1970s. <sup>38/</sup> The analysis indicates that per capita spending on primary education tends to increase a little more quickly than does per capita GDP, while per student spending increases about at a rate 70 per cent that of per capita GDP, at least up to an average per capita income level of \$3,000 (in 1975 United States dollars).

249. The evolution of spending and enrolment in any particular country may vary greatly from the typical path implied by these relationships. The levels of spending per capita and per student on primary education, most of which is government spending, are very much subject to government policy decisions. Some of the developing countries with relatively high rates of enrolment and literacy have had relatively rapid increases in these rates within a decade or so, at some time in the past when they made a major commitment to improve their education systems, particularly at the primary level.

250. Thus the rates of improvement for the different groups of countries in table 40 should be considered only as average rates for each group, indicating improvements that could reasonably be expected in a country whose per capita income grows at the average rate projected for that group under the relevant economic growth scenario. However, considerably greater improvement would be possible if the country chose to increase its total spending more quickly and/or to limit more stringently the increase in spending or cost per student, subject to spending enough per student to provide training in basic literacy.

251. Given the foregoing qualifications, table 40 shows that the enrolment rate for boys aged 6 to 11 in the developing market economies will increase from 75 per cent in 1980 to only about 77 per cent in 1990 and to 81 per cent in the year 2000 under the lower-growth scenario. Similarly, the enrolment rate for girls will increase from 59 per cent in 1980 to only about 62 per cent in 1990 and 67 per cent in the year 2000.

252. The outlook for enrolment of girls in the low-income countries and for enrolment of both girls and boys in the least developed countries is especially bleak under the lower-growth scenario. The enrolment of girls aged 6 to 11 in the low-income group would increase from 46 per cent in 1980 to only 49 per cent in 1990 and 55 per cent in the year 2000. In the least developed group it would increase hardly at all, from 31.4 per cent in 1980 to 32.5 per cent in the year 2000, while the enrolment of boys would increase from 50.7 to only 51.1 per cent.

Table 40. School enrolment rates for children aged 6 to 11 projected to 1990 and 2000 under the lower-growth and the higher-growth scenarios

Developing market economies	1980	Lower-growth		Higher-growth	
		1990	2000	1990	2000
Oil-exporting					
Males	86.2	87.8	88.8	89.8	92.7
Females	77.3	79.8	81.9	82.4	87.8
Oil-importing					
Upper-income					
Males	81.7	84.8	91.1	86.3	96.7
Females	78.6	82.2	89.7	84.1	98.1
Low-income					
Males	68.5	70.6	74.9	71.4	80.1
Females	46.3	49.1	54.9	50.1	61.1
Least developed					
Males	50.7	50.2	51.1	50.7	55.4
Females	31.4	31.1	32.5	31.7	37.8
Total, oil-importing					
Males	71.8	74.1	78.7	75.1	84.0
Females	54.4	57.3	63.1	58.5	69.9
Total, oil-exporting and oil-importing					
Males	74.7	76.9	80.9	78.1	85.9
Females	59.0	62.0	67.2	63.5	73.8

Source: Department of International Economic and Social Affairs of the United Nations Secretariat.

The comparative increases in the enrolment rates for boys and girls aged 6 to 11 are projected, in each of the scenarios, according to a well-defined relationship between these enrolment rates and the so-called "gross" primary enrolment rate, which is the total enrolment in a country's primary schools (including a substantial number of children older than age 11, and any under age 6) divided by the population aged 6 to 11.

After 1995, the adult literacy rates would begin to vary under the different scenarios as a result of the differences in the youth literacy rates after 1995. But by the year 2000, only the younger adults would have benefited from the effects on enrolment of higher growth after 1985. Therefore, the differences between the adult literacy rates under the higher and the lower-growth scenarios are quite small - less than 1 per cent. Even these relatively small differences, however, represent additional millions of literate adults, and the absolute and percentage differences would increase rapidly after the year 2000.

253. Under the higher-growth scenario, the upper-income oil-importing economies would come close to full enrolment (100 per cent) for boys and girls by the year 2000, and the low-income countries would reach about 80 per cent enrolment for boys and 61 per cent for girls. The rates in the oil-exporting countries would be 93 per cent for boys and 88 per cent for girls. However, in the least developed economies the enrolment of girls would reach only 38 per cent and the enrolment of boys would be only 55 per cent, indicating a need for special policy measures at the national level and appropriate international technical and financial assistance, if these countries are to come anywhere close to achieving the Strategy goal of universal primary enrolment by the year 2000.

## 2. Literacy projections

254. The literacy rates for youth aged 15 to 19 have been projected to 1990, based on the 1980 enrolment rates for children aged 6 to 11, according to a time-sequence relationship between these rates found by the United Nations Educational, Scientific and Cultural Organization (UNESCO). <sup>39/</sup> Because the enrolment rates for 1980 are not affected by the different economic growth scenarios, the literacy rates for youth in 1990 are not affected by them either. This relationship is not inevitable but, given the time typically required for major increases in school enrolment, the overall literacy rates for youth in 1990 would depend largely on the proportion of those youth aged 15 to 19 in 1990 who were enrolled in primary school during the early 1980s. Based on this relationship, the literacy rate for males aged 15 to 19 in 1990 will be about 97 per cent in the oil-exporting countries, 96 per cent in the upper-income oil-importing countries and 89 per cent in the low-income countries, but only 75 per cent in the least developed countries. The rates for female youth in 1990 will be more diverse - as high as 93 per cent in the upper-income oil-importing countries and in the oil-exporting countries, but only 65 per cent in the low-income countries and 41 per cent in the least developed countries (see table 41).

255. The different economic scenarios, with their divergent economic growth and consequently divergent enrolment rates after 1985, would lead to different literacy rates for youth after 1995. There would be only slight differences between the results of the lower-growth and higher-growth scenarios by the year 2000, but substantial differences by 2010. Although the differences between the two scenarios, shown in table 41, may seem relatively modest, the total population aged 15 to 19 will be far larger in the year 2000 than in 1980 or even 1990, so that small increments in the literacy rate represent additional millions of literate youth.

256. The literacy rates for adults aged 15 and over have been projected to 1990, based on the corresponding adult literacy rates in 1980 and on the projected literacy rates for youth aged 15 to 19 in 1990. <sup>40/</sup> Because the literacy rates for youth in 1990 are the same under the different scenarios for economic growth, the adult literacy rates in 1990 are also not affected by the differences between the scenarios. The adult literacy rate in 1990 will be about 88 per cent for males in the upper-income oil-importing countries, but only 41 per cent for females in the low-income countries and only 27 per cent for females in the least developed countries (see table 41).

Table 41. Literacy rates in 1980, 1990 and 2000

Developing country group	Adults (aged 15 and over)				Youth (aged 15 to 19)			
	1980	1990	2000		1980	1990	2000	
			Lower a/	Higher b/			Lower a/	Higher b/
Oil-exporting countries								
Males	69.0	81.5	88.4	88.9	85.7	97.5	96.8	97.7
Females	50.2	64.8	68.5	69.2	73.4	93.1	92.0	93.9
Oil-importing countries								
Upper-income countries								
Males	82.5	88.2	91.8	92.1	94.8	95.6	96.6	97.1
Females	71.7	79.0	84.1	84.4	92.0	93.4	94.7	95.7
Low-income countries								
Males	52.0	67.3	76.6	76.8	67.3	89.2	89.8	90.2
Females	28.5	40.7	49.7	50.1	46.6	65.8	67.8	69.0
Least developed countries								
Males	36.1	51.1	59.6	59.9	61.9	75.4	74.8	75.3
Females	20.4	26.5	30.4	30.9	28.0	41.3	40.5	41.9
Total, oil-importing countries								
Males	60.1	72.8	80.6	80.8	74.6	90.8	91.5	91.9
Females	40.0	50.8	58.7	59.1	58.8	72.8	74.5	75.7
Total, oil-exporting and oil-importing countries								
Males	61.8	74.5	82.2	82.5	76.8	92.1	92.6	93.1
Females	42.0	53.6	61.8	62.3	61.7	77.1	78.3	79.6

Source: Department of International Economic and Social Affairs of the United Nations Secretariat.

a/ The lower-growth scenario.

b/ The higher-growth scenario.

257. The foregoing projections of enrolment and literacy represent extrapolations that implicitly assume a continuation of historical trends in the allocation of resources to education. More comprehensive action by individual countries and the international community could accelerate the increase in literacy rates. Major efforts will be needed, both in the development of education policy and financing at the national level and in the provision of appropriate technical and financial assistance at the international level, if the world is to make accelerated progress towards the Strategy goal of the eradication or considerable reduction of illiteracy by the year 2000. Such efforts will be economically more feasible in most countries if their economies grow at the rates assumed with the higher-growth scenario. The absence of such efforts, particularly in many of the low-income countries, will lead to a greatly increased absolute number of illiterate citizens if their economies grow slowly.

258. In addition to expanding the capacity of their formal education systems for children and youth, many countries would benefit greatly from the expansion of appropriate part-time and non-formal adult education. This may be mainly pragmatic, such as the introduction of new skills, or mainly cultural. In this connection, the role of communication technology is promising. Instructional radio is already employed by a number of developing countries. India, for example, has effectively used direct-broadcast satellite television to relay recent information in such fields as agriculture, nutrition and health to remote villages that otherwise might not have the opportunity to keep abreast of these developments.

259. Besides the challenge posed by the threat of increasing illiteracy, the developing countries will be faced with other educational needs over the next two decades, especially the need to link education and productive work. Integration of the culturally beneficial aspects of education and the development of appropriate skills will be an important requirement for continued economic development. The teaching of appropriate aspects of science and technology should have an important place in the overall scheme of development. At the same time, many of the recently independent developing countries are at various stages of changing their educational curricula to reflect the richness of their native languages, customs and religions. The need to relate the educational curriculum to a country's socio-economic and environmental conditions is increasingly being recognized by development planners throughout the world, but a more extensive exchange of views between economic development planners and education planners is also necessary.

#### C. Nutrition 41/

260. The present food situation is characterized by adequate consumption by the majority of the world's population and serious nutritional shortages for a significant minority. Current trends would worsen the pattern of world food production and consumption and lead to unacceptable increases in numbers of nutritionally deprived adults and children. However, detailed assessments of production potential demonstrate that if national and international policies gave more weight to agriculture and if improved distribution accompanied feasible production increases, serious undernutrition could be eliminated despite the substantial rises projected in population (see A/37/211, paras. 383-411).

261. Although the causes of malnutrition are complex and not yet fully known, it is generally held that the adequacy of calorie intake must receive first consideration. A dietary intake sufficient to cover calorie requirements will generally be sufficient to meet protein requirements; however, when calorie intakes are deficient, part of the dietary protein is used to provide energy.

262. Cereals constitute the most important component of calorie supply, accounting for about 60 per cent of the total in 1976 for 90 developing countries. The share of roots and tubers, which have a low protein content, in total calorie supply was 21 per cent, although for some individual countries the share was more than half. Africa, particularly dense equatorial forest zones, low lands around the great lakes, and the coastal populations of Western Africa, being more dependent on roots and tubers as a source of energy supply than other regions of the world, is most vulnerable to protein deficiency.

263. The growth of average calorie supplies gives an idea of nutritional trends, but cannot provide an indication of the total number of undernourished people, which depends crucially on the distribution of income. Within the agricultural population, landless agricultural labourers, small and marginal farmers and nomadic tribes constitute the bulk of those who are most vulnerable to nutritional deficiency. Food intake also tends to be inequitably distributed within the family. Various studies suggest that children at the weaning stage and women, particularly pregnant and lactating women, are adversely affected. This raises questions regarding the changing attitude towards the status of women in traditional societies.

264. Fluctuations in the availability and price of food supplies affect poor families relatively more seriously. Fluctuations from year to year and seasonal variations can have damaging consequences, particularly in areas where the food distribution structure is weak owing to inadequate storage, transport and marketing. Moreover, if there are seasonal fluctuations, annual average intake figures can be misleading. For example, it often happens that small and marginal farmers are forced to sell their products for a low price at harvest time to meet the pressing demand for cash and then to buy back a smaller amount at higher prices later in the year. Furthermore, groups with limited effective purchasing power are particularly vulnerable to the possibility that market supplies are pre-empted in times of shortages by those who are economically advantaged.

#### Estimates of undernutrition

265. A simple method to estimate the total number and proportion of undernourished people would be to calculate the number subsisting at calorie intake levels below those considered critical for carrying out minimum daily activity without serious impairment. Minimum requirements vary among individuals, depending on activity, climate, sex and body weight.

266. Ideally, data are needed on the calorie intake and requirements of each individual in order to estimate the number of undernourished. In a comprehensive study in Tunisia it was found that some households in all income classes suffered from calorie deficiency. While 19 per cent of all rural households were below the

critical calorie intake level, for the lowest two income classes (containing 23 per cent of total population) the proportion exceeded 30 per cent and the incidence of undernutrition generally showed an inverse relationship with income levels. Undernutrition was associated with large family size in each income class.

267. As data on individual calorie intake and requirements are not generally available, the number of undernourished is estimated by following the methodology used in the Fourth World Food Survey. Those who have calorie intake less than 1.2 BMR (basal metabolic rate) 42/ are considered as undernourished. Based on this criterion, 436 million people were undernourished during the period 1974-1976 in the 86 countries for which the necessary data were available or 23 per cent of their total population (see table 42). Most of the undernourished people - 349 million - were in the low-income countries, where 29 per cent of the population was undernourished. In the least developed countries, 74 million people, or 31 per cent of their total population, were undernourished. Available data suggest that people tend to select protein intakes that contribute 10 to 12 per cent of total dietary energy, so that in general, if calorie intake falls below the requirement level, a person will also be susceptible to protein deficiency. Therefore it is likely that the figures of table 42 correspond fairly closely to the numbers of those who are also protein malnourished, although there are certainly instances of protein deficiency among people with average calorie intake above the critical limit of 1.2 BMR.

268. FAO has estimated that by the year 2000 the number of undernourished people will rise to 588 million, including 477 million in the low-income countries and 111 million in the middle-income countries, if the trends of the 1970s continue (see table 42). Under a scenario with high agricultural growth, in contrast, the total number undernourished would fall to 260 million by the year 2000.

Table 42. Estimated percentage and number of persons with calorie intake below critical minimum limit of 1.2 BMR (basal metabolic rate) during 1974-1976, and projections to 1990 and 2000

Country group	Percentage of population below 1.2 BMR		Number of people below 1.2 BMR (millions)	
	<u>Trend</u>	<u>High growth</u>	<u>Trend</u>	<u>High growth</u>
<b>Total, 86 developing countries with market economies</b>				
1974-1976	23	23	436	436
1990	18	12	508	346
2000	17	7	588	260
<b>Middle-income countries</b>				
1974-1976	13	13	87	87
1990	9	6	96	67
2000	8	1	111	46
<b>Low-income countries</b>				
1974-1976	29	29	349	349
1990	23	15	412	279
2000	22	9	477	214
<b>Least developed countries</b>				
1974-1976	31	31	74	74
1990	29	19	104	72
2000	18	11	133	55

Source: FAO, Agriculture: Toward 2000 (Rome, 1981), statistical annex, table 7.

#### D. Drinking water supply and sanitation

269. A lack of safe drinking water and adequate sanitation is a major cause of the death of millions of children every year in the developing countries. Diarrhoeal diseases, which arise mainly from infested drinking water and poor sanitation, account for about 4 million of the deaths of more than 13 million children who die each year in the developing countries. Nearly one half of the population of the developing countries is infected with worms, which are spread by poor sanitation, and many skin and eye diseases can be traced to insufficient water for personal hygiene. In addition to these direct effects on health, the scarcity of safe drinking water has other economic and social costs. In certain arid and semi-arid parts of the world, it is common for the members of a household to spend more than



six hours each day collecting water from sources far away. In such circumstances, it is usually women and children who suffer most. For a young child the day can begin with a long, difficult journey for water, instead of a journey to school. Significant loss of school attendance because of water-related diseases constitutes a further social cost of these conditions (see A/35/367, paras. 13-14).

270. Population coverage for safe drinking water 43/ and adequate sanitation 44/ in the developing countries with market economies has been projected for the years 1990 and 2000, in relation to their levels of per capita income and investment under the higher- and lower-growth scenarios and in relation to their projected population growth and levels of urbanization. 45/ The projections implicitly assume that investment devoted to drinking water and sanitation in relation to total investment in all sectors will follow the cross-section relationship that prevailed in 1980. To the extent that countries revise their water and sanitation investment policies along the lines called for in the General Assembly resolutions establishing the International Drinking Water Supply and Sanitation Decade and the International Development Strategy, their investments to provide safe water and adequate sanitation would be increased far above the levels implicit in the aggregate investment levels assumed in the lower-growth scenario and even above those assumed in the higher-growth scenario. To reach the Decade goals of safe drinking water and adequate sanitation for all (100 per cent) by 1990 would require an investment of about \$40 billion per year during the 1980s, even with extensive use of less expensive technologies, compared with estimates of actual investment of \$6 to \$9 billion per year in the late 1970s and proposed investments of about \$10 billion per year in the first years of the Decade (see E/C.7/1983/11, para. 74). (For an assessment of progress from 1980 to 1983 and of the actions being taken in connection with the Decade, see the report of the Secretary-General on progress in the attainment of the goals of the Decade (A/40/108-E/1985/49).)

271. Under the lower-growth scenario, the percentage of the population with safe drinking water in the low-income countries would increase from 37 per cent in 1980 to only 42 per cent in 1990 and 47 per cent in 2000, and in the least developed countries the percentage would increase only from 28 to 35 per cent (see table 43). In the upper-income oil-importing countries it would increase from 67 per cent in 1980 to only 72 per cent in 1990 and 73 per cent in the year 2000. Under the higher growth scenario, in contrast, the low-income countries would make greater progress, reaching 53 per cent in the year 2000, because of their rapid increase in total investment. In the upper-income countries, higher growth would raise the service coverage for water about 4 per cent above the levels projected for the year 2000 with lower growth. The projections for the group of oil-exporting countries may seem surprisingly low in relation to their recent and projected levels of per capita investment, but they are a result of several other factors, including low levels of coverage in 1980, high rates of population growth and low levels of urbanization.

272. The significance of urbanization may be seen by comparing the levels of service in the urban and rural areas in 1980. The average percentage served in the urban areas of the developing market economy countries together was 71 per cent, compared with 32 per cent in the rural areas. The percentage served in the urban areas was quite similar among different groups of countries, averaging between 68 and 80 per cent, except in the least developed countries, where only 47 per cent of the urban population had safe water. The percentages of population with safe water in the rural areas differ more among the country groups, approximately in relation to their differences in per capita income.

Table 43. Percentage of population with safe drinking water in developing countries with market economies, 1980-2000 a/

Country group	1980 <u>b/</u>			1990 <u>c/</u>		2000 <u>c/</u>	
	Urban	Rural	Total	Lower	Higher	Lower	Higher
Oil-exporting	68.3	30.3	44.8	51.8	52.4	57.8	61.2
Oil-importing							
Upper-income	79.8	48.9	66.9	71.9	72.7	77.6	81.4
Low-income	68.6	27.1	36.9	41.9	43.0	47.4	52.6
Least developed	46.7	24.2	27.7	31.1	32.7	35.2	43.5
Total, oil-exporting and oil-importing	70.8	32.2	44.6	50.0	51.0	55.6	60.1

Source: Department of International Economic and Social Affairs of the United Nations Secretariat.

a/ The percentages for each group are the average of the percentages for each country in the group, weighted by the country's population (in the year to which the percentage applies).

b/ Based on country figures in documents A/35/367, annex V, and A/40/108-E/1985/49, annex II.

c/ Projections based on lower-growth and higher-growth scenarios (see para. 271).

273. The outlook for improvements in sanitation is generally similar to the outlook for improvements in water supply but, as the percentages of population with adequate sanitation in 1980 were much lower than those with safe water, the percentages still unserved in 1990 and 2000 will be much higher. Under the lower-growth scenario, the percentage of the population with adequate sanitation in the low-income countries would increase from 13 per cent in 1980 to only 17 per cent in 1990 and 23 per cent in 2000; the improvement in the least developed countries would be even less, from 16 per cent in 1980 to 19 per cent in 2000 (see table 44). In the upper-income oil-importing countries, it would increase from 48 per cent in 1980 to only 52 per cent in 1990 and 56 per cent in 2000. Under the higher-growth scenario, in contrast, the low-income countries would make greater progress, reaching 19 per cent in 1990 and 30 per cent in 2000, because of the more rapid increase in total investment. The effect of higher growth would be more moderate in the oil-exporting and upper-income oil-importing countries, raising the service coverage about 1 per cent above the levels projected for 1990 with low growth, and 4 to 5 per cent above those projected for the year 2000.

Table 44. Percentage of population with adequate sanitation in developing countries with market economies, 1980-2000 a/

Country group	1980 <u>b/</u>			1990 <u>c/</u>		2000 <u>c/</u>	
	Urban	Rural	Total	Lower	Higher	Lower	Higher
Oil-exporting	52.9	17.5	34.6	44.2	44.9	53.5	57.8
Oil-importing							
Upper-income	60.2	35.3	48.4	51.9	52.9	56.4	61.4
Low-income	32.7	6.7	12.6	17.4	18.9	22.8	29.6
Least developed	33.9	12.9	15.8	16.1	38.1	19.3	30.2
Total, oil-exporting and oil-importing	41.3	14.1	23.1	28.3	29.5	34.0	40.0

Source: Department of International Economic and Social Affairs of the United Nations Secretariat.

a/ The percentages for each group are the average of the percentages for each country in the group, weighted by the country's population (in the year to which the percentage applies).

b/ Based on country figures in documents A/35/367, annex V, and A/40/108-E/1985/49, annex II.

c/ Projections based on lower-growth and higher-growth scenarios (see para. 273).

274. In sum, under the lower-growth scenario and with a continuation of the typical relation between investment in water and sanitation and per capita income and aggregate investment, only 50 per cent of the people in the developing market economies would have safe drinking water by 1990 and 56 per cent by the year 2000. Under the higher-growth scenario, 60 per cent would have safe drinking water by the year 2000. Similarly, with lower growth only 28 per cent of the population of these countries would have adequate sanitation by 1990 and only 34 per cent by 2000. With higher growth, 40 per cent would have adequate sanitation by the year 2000.

275. The developing countries and the international community thus would have to give much higher priority to water and sanitation within the total investment budgets projected even with higher growth, and extremely high priority within the

limited total investment projected under the lower-growth scenario, in order to provide safe drinking water and adequate sanitation for all by 1990 or even by the year 2000. For additional discussion of problems and progress in meeting the goals of the Decade, see documents E/C.7/1983/11 and A/40/108-E/1985/49.

#### Notes

- 1/ Distributed as document E/CN.5/1985/2, to be issued as a United Nations publication.
- 2/ See ILO, World Labour Report, vol. 1, 1984, p. 7.
- 3/ The 36 least developed countries are Afghanistan, Bangladesh, Benin, Bhutan, Botswana, Burundi, Cape Verde, the Central African Republic, Chad, Comoros, Democratic Yemen, Djibouti, Equatorial Guinea, Ethiopia, the Gambia, Guinea, Guinea-Bissau, Haiti, the Lao People's Democratic Republic, Lesotho, Malawi, Maldives, Mali, Nepal, the Niger, Rwanda, Samoa, Sao Tome and Principe, Sierra Leone, Somalia, the Sudan, Togo, Uganda, the United Republic of Tanzania, Burkina Faso and Yemen.
- 4/ The three age-dependency ratios are defined as follows: (a) the child-dependency ratio is the ratio of the population under 15 years of age to the population between the ages of 15 to 64 years per 100; (b) the aged-dependency ratio is the ratio of the population 65 years of age and over to the population between the ages of 15 to 64 years per 100; and (c) the total-dependency ratio is the ratio of the combined child population under 15 years of age and the adult population 65 years and over to the population between the ages of 15 to 64 years of age per 100.
- 5/ Guy Standing, Labour force participation and development (Geneva, International Labour Organisation, 1978).
- 6/ N. Youssef, Women's employment and fertility: demographic transition or economic needs of mothers? (International Center for Research on Women, 1979); and R. Dixon, Rural women at work: strategies for development in South Asia (Baltimore, Johns Hopkins University Press, 1973).
- 7/ Guy Standing, "Women's work activity and fertility", in Determinants of fertility in developing countries, R. Bulatao and D. Lee, eds. (New York, Academic Press, 1983), vol. I.
- 8/ E. Ware, "Women's work and fertility in Africa", in The fertility of working women: A synthesis of international research, S. Kupinsky, ed. (New York, Praeger Publishers, 1977); and C. Opong, "Family structure and women's reproductive and productive roles: some conceptual and methodological issues", in Women's roles and population trends in the third world, R. Anker, M. Buvinic and N. Youssef, eds. (London, Croom Helm, for the International Labour Organisation, 1982).

Notes (continued)

9/ J. Caldwell, "Direct economic costs and benefits of children" in Bulatao and Lee, op. cit.

10/ Studies cited in Standing, "Women's work and fertility", p. 525.

11/ Studies cited in Standing, Labour force participation and development, p. 188; E. Ware, loc. cit.; and R. Lee, "Economic consequences of population size, structure and growth"; International Union for the scientific study of population, Newsletter, 17 (January-April 1983).

12/ United Nations. Fertility levels, patterns and differentials: A comparative analysis using World Fertility Survey data. To be issued as a United Nations publication.

13/ G. Rodriguez and J. Cleland, "Socio-economic determinants of marital fertility in twenty countries: a multivariate analysis", in World Fertility Survey Conference 1980; Record of Proceedings (London, International Statistical Institute, 1980); studies cited in Standing, Labour force participation ..., p. 189 and in Anker, Buvinic and Youssef, pp. 177-179.

14/ Studies cited in Standing, Labour force participation ..., pp. 147-149; S. Cochrane, Fertility and education: What do we really know? (Baltimore and London, The Johns Hopkins University Press, for the World Bank, 1979); S. Cochrane, "Effects of education and urbanization on fertility", in Bulatao and Lee, op. cit., vol. 2.

15/ V. Hull, "Fertility, women's work and economic class", in Kupinsky, op. cit.

16/ "Review and appraisal of the World Population Plan of Action" (E/CONF.76/4 and Corr.1).

17/ United Nations, Fertility and family, (ST/ESA/SER.A/88), pp. 201-222; and studies cited in Standing, Labour force participation ..., pp. 172-175.

18/ Working women in socialist countries, R. Anker and V. Bodrova, eds. (Geneva, International Labour Organisation, (forthcoming)).

19/ Studies cited in R. Bulatao, Reducing fertility in developing countries (Washington, D.C., World Bank staff working paper, 680, 1987), pp. 22-23 and 87-88.

20/ John D. Durand, The Labor Force in Economic Development - A Comparison of International Census Data, 1946-1966 (Princeton, New Jersey, Princeton University Press, 1975).

21/ "Mortality and health policy: highlights of the issues in the context of the World Population Plan of Action", in Mortality and Health Policy (ST/ESA/SER.A/91) (United Nations publication, Sales No. E.84.XIII.4).

Notes (continued)

22/ Dorothy S. Thomas, Research Memorandum on Migration Differentials, Bulletin No. 43 (New York: Social Science Research Council, 1938), p. 1.

23/ For a summary of many studies on the age selectivity of migration, see The Determinants and Consequences of Population Trends (United Nations publication, Sales No. E.71.XIII.5), p. 181.

24/ Durand, op. cit.

25/ Alan Gilbert and Josef Gugler, Cities, Poverty and Development - Urbanization in the Third World (Oxford, Oxford University Press, 1982).

26/ Michael Lipton, Why Poor People Stay Poor - A Study of Urban Bias in World Development (Cambridge, Massachusetts, Harvard University Press, 1977).

27/ See Min Kyong-Hee, "Labour utilization of migrants in urban Korea, 1970", Bulletin of the Population and Development Studies Center, No. 12 (1983), pp. 21-40.

28/ Guy Standing, "Population mobility and the labour process", in Population Distribution, Migration and Development (United Nations publication, Sales No. E.84.XIII.3), pp. 247-261.

29/ Ibid.; and Peter Peek and Guy Standing, "State policies and labour migration", in State Policies and Migration - Studies in Latin America and the Caribbean, Peek and Standing, eds. (London, Croom Helm, 1982), pp. 1-34.

30/ Brian Roberts, Cities of Peasants - The Political Economy of Urbanization in the Third World (London, Edward Arnold, 1978), pp. 18-35.

31/ Standing, "Women's work activity ...".

32/ Alan B. Simmons, "Migration and rural development: Conceptual approaches, research findings and policy issues", pp. 156-192 in Population Distribution, Migration and Development.

33/ International Migration Policies and Programmes: A World Survey (United Nations publication, Sales No. E.82.XIII.4), pp. 28-33.

34/ See, for example, State of Bahrain, Census of Population and Housing 1981 (Bahrain, 1982); State of Kuwait, Annual Statistical Abstract 1983, (Kuwait, 1983), and J. S. Birks and C.A. Sinclair, International Migration and Development in the Arab Region (International Labour Office, Geneva, 1982).

35/ International Migration Policies ..., pp. 53-57.

36/ See, for example, Birks and Sinclair, op. cit., p. 66.

37/ Ibid., pp. 91-98.

Notes (continued)

38/ Underlying data on total expenditure on primary education and total enrolment in primary education were published by UNESCO, in The Allocation of Resources to Education throughout the World (CSR-E-35), March 1980, annex VI.

39/ UNESCO, Estimates and Projections of Illiteracy (CSR-E-29), September 1978; and Towards a Methodology for Projecting Rates of Literacy and Educational Attainment (CSR-E-28), April 1978.

40/ The projections are based on relationships described in UNESCO publications CSR-E-28 and CSR-E-29, cited above.

41/ The discussion on nutrition is adapted from a draft version of the FAO study, Agriculture: Toward 2000, issued by FAO as document No. C 79/24, chapter 9, pages 145-147. Other issues of food and agriculture were discussed in the previous socio-economic perspective report (A/37/211, section V.B.).

42/ The basal metabolic rate represents the energy needed under resting and fasting conditions. It is important to note that BMR varies between individuals depending on body weight and sex. Therefore, the critical limit in calorie terms for each country will depend upon the average body weight and sex composition of the population.

43/ There is no specific definition of "safe" drinking water in general use by the member countries of WHO. From a general public health standpoint, safe water is water that can be used for human consumption without risk to the health of the consumer. For its 1970, 1975 and 1980 surveys, WHO stated that: "The term 'safe water supply' includes treated surface waters or untreated but uncontaminated water such as that from protected boreholes, springs and sanitary wells. Other waters of doubtful quality are classified as unsafe". With regard to access to water, WHO stated that: "In an urban area, a public fountain or stand-post located not further than 200 metres away from a house may be considered as within reasonable access to that house. In rural areas reasonable access would imply that the housewife or members of the household do not have to spend a disproportionate part of the day in fetching the family's water needs" (WHO, World Health Statistics Report, vol.29, No. 10, 1976, p. 546 and subsequent correspondence). WHO has developed technical guidelines for drinking water quality which can be used as a reference by countries to establish national standards for drinking water quality (see WHO, Guidelines for Drinking Water Quality, Volume I - Recommendations, EFP/82.39).

44/ "Adequate sanitation" is understood by WHO as the provision of physical facilities and the adoption of procedures for the isolation and disposal of human excreta and wastewater that may contain human residues. For the 1970, 1975 and 1980 surveys, WHO stated that: "excreta disposal may include the collection and disposal, with or without treatment, of human excreta and wastewater by water-borne systems, or the use of pit privies and similar installations" (WHO, World Health Statistics Report, vol. 29, No. 10, 1976, p. 546 and subsequent correspondence).

45/ The relationship was based on a sample of 61 developing countries and two relatively low-income developed countries - Greece and Portugal. A very similar relationship was found for an augmented sample with 43 additional observations from developing countries and 25 from the developed countries in the 1970s.

## VI. THE EXPERIENCE OF THE UNITED NATIONS DEVELOPMENT DECADES

276. The present section summarizes briefly the development experience of the world economy during the last 25 years with a view toward assessing long-term progress in achieving the goals and objectives contained in General Assembly resolutions establishing the United Nations development decades. In doing so an attempt is made to identify some of the main constraints to development in the developing countries in the past and to give reasons for the persistent difficulties that have hindered economically advanced countries from attaining high and stable rates of economic growth. 1/

### A. Development aspirations and goals

277. The launching of United Nations development decades, in which is inherent the preparation of an international development strategy, has been accepted as an essential and pivotal means for expressing world development needs and aspirations and for setting development goals for the international community. In addition to promoting the establishment of a new international economic order and international co-operation for development, it brings into focus concrete international objectives to be attained as part of the process of world development and, more importantly, provides a programme of action for accelerating the pace of economic and social progress in developing countries. Implicit in the development decades, then, is recognition of the need to spell out explicitly both objectives and policies that Governments intend to follow in pursuit of the accelerated development of the developing countries.

278. The specific objective stated by the General Assembly in its resolution 1710 (XVI) of 19 December 1961, in which it established the 1960s as the first United Nations Development Decade, was "to attain in each under-developed country a substantial increase in the rate of growth, with each country setting its own target, taking as the objective a minimum annual rate of growth of aggregate national income of 5 per cent at the end of the Decade" (para. 1). As part of a programme for international economic co-operation in achieving what was regarded as a bold and challenging goal, the Assembly called on Member States and specialized agencies to pursue policies designed to increase exports from the developing countries, to ensure that they shared equitably in earnings from their natural resources and to provide them with an increased flow of development resources and private investment capital. In its resolution 1522 (XV) of 15 December 1960, the General Assembly had expressed the desirability of expanding and systematizing the regular transfer of resources to developing countries and of setting a target for those transfers in terms of the combined national income of the more economically advanced countries. Finally, in its resolution 1710 (XVI), the Assembly requested the Secretary-General, in consultation with the heads of appropriate international agencies, to develop proposals for the intensification of international action in the area of economic and social development.

279. Toward the end of the 1960s, however, it became increasingly clear that there was a need to improve upon the modest record of economic and social progress



achieved during the first Development Decade, and that in order to do so a comprehensive and integrated programme of national and international action was required. Therefore, in 1970, when declaring in its resolution 2626 (XXV) of 24 October 1970 that the Second United Nations Development Decade would begin on 1 January 1971, the General Assembly adopted the International Development Strategy containing an interrelated set of economic and social objectives for the world economy. As in the case of the first Development Decade, raising the rate of economic growth in developing countries was one of the key objectives of the Strategy. Following its deliberations on the development potential of developing countries during the period of the 1970s, the Assembly decided that "the average annual rate of growth in the gross product of the developing countries as a whole during the Second United Nations Development Decade should be at least 6 per cent, with the possibility of attaining a higher rate in the second half of the Decade to be specified on the basis of a comprehensive mid-term review" (resolution 2626 (XXV), para. 13).

280. Increased attention was paid in the Strategy to other international development targets derived from the desire to expand and diversify the economies of developing countries, and a set of quantitative objectives covering production, mobilization of resources for capital formation and expansion of international trade were specified as targets to be attained in the 1970s. Moreover, although not given in quantitative terms, important social goals such as a more equitable distribution of income and wealth and improvements in education, health, housing and nutrition, among other areas, were stated as objectives of the Second Development Decade. In order to achieve these objectives the Strategy encompassed comprehensive measures that envisaged greater efforts and far reaching policy changes in developing countries to create an environment conducive to rapid development as well as vigorous efforts by developed countries to improve the international environment within which developing countries could plan and carry out their economic and social developments. In this regard, special measures in favour of the least developed and other disadvantaged countries were specified to enable those countries to overcome their particular disabilities. Finally, the Strategy called for a review and appraisal of progress during the Second Development Decade, with the possibility of recommending new goals and policies as needed.

281. The disappointing development experience of the 1970s led the General Assembly, when adopting the International Development Strategy for the Third United Nations Development Decade in 1980 (resolution 35/56 of 5 December 1980, annex) to note the limitations of a strategy conceived within the framework of the existing system of international economic relations. As in the case of the other development decades, one key aspect of the process of accelerating development in developing countries was raising their rate of economic growth, particularly that of the low-income developing countries. The scope of concerted efforts required to be made at the national and international levels was reflected in the statement by the Assembly that "in order to achieve the goals and objectives of the International Development Strategy, the average annual rate of growth of gross domestic product for the developing countries as a whole during the Decade should be 7 per cent, and in the early part of the Decade, as close as possible to this rate" (resolution 35/56, annex, para. 20).

282. Although still a very important objective, economic expansion is seen in the new Strategy as a necessary but by no means sufficient condition of development progress. The development of human resources and the attainment by the year 2000 of a wide range of social goals in the areas of employment, education, health and shelter are also stated as key objectives of the Strategy. The entire set of objectives has as its purpose the eradication of extreme poverty and the satisfaction of basic needs of all the world's people by the end of the century and it calls for increased participation and involvement by all people in the development process. In this regard, the Strategy states that special efforts are required to ensure that the least developed and other disadvantaged countries, where development needs and problems are concentrated, participate fully in the process of world development.

## B. Development progress and problems

### 1. Economic growth and standards of living

283. During the quarter of a century covering the period from 1960 to the midpoint of the Third United Nations Development Decade, world GDP measured in real terms rose an average of over 3.5 per cent a year (see table 45). This is less than the tempo achieved in the 1950s, when the output of all market and planned economies rose on average more than 4 per cent a year, but it represented a considerable improvement on rates attained during the immediately preceding decades. Output in developing countries rose even faster than the world pace and over this 25-year period averaged almost 4.5 per cent a year. The rate of growth in material production in Eastern Europe and the USSR was impressive, exceeding that of the market economies. Concomitant with this increase in production were significant changes in the structure and distribution of world production and in the pattern of world trade.

284. Contrary to expectations, the overall growth performance of the developing countries as a group during the period 1960 to 1985 was significantly below their target rates of growth during most of these years (see table 45). It will be recalled that targets for rates of growth of the group of developing countries taken as a whole were 5 per cent per year by the end of the first Development Decade, an average of 6 per cent per year for the Second Development Decade and an average of 7 per cent per year for the Third Development Decade. Corresponding rates actually achieved for the three development decades are 5.8, 5.4 and, to 1985, 1.8 per cent, respectively. Economic growth in the economically more developed regions of the world has also been substantially below expectations since the mid-1970s. Hence, except for the first Development Decade, there have been serious shortfalls in the area of economic growth between professed aspirations and actual performance.

Table 45. Growth in the world economy, 1961-1985 a/

Economy group	Average annual rate of increase in gross domestic product			
	1961-1985	1961-1970	1971-1980	1981-1985
World	3.6	5.1	3.6	2.2
Developed market economies	3.4	4.9	3.2	2.2
Centrally planned economies	5.3 <u>b/</u>	7.2 <u>c/</u>	5.4	3.9
Developing market economies	4.4	5.8	5.4	1.8
Least developed economies	2.9	2.9	3.1	2.7
<u>Memorandum item:</u> Target rates of growth for developing countries as a group		5 <u>d/</u>	6	7

Source: Department of International Economic and Social Affairs of the United Nations Secretariat. Rates of growth for the group of centrally planned economies refers to net material product.

a/ Growth of GDP measured in 1975 prices and exchange rates. Data for centrally planned economies include estimates for China.

b/ 1965-1985.

c/ 1965-1970.

d/ Minimum rate of economic growth at the end of the first Development Decade.

285. Even the moderate growth performance of the developing countries as a group masks marked differences in the performance of different groups of developing countries. Over the 25 years (1965-1985), output growth in the newly industrializing economies averaged 6 per cent a year, whereas in the least developed countries growth averaged only 2.9 per cent a year in the 1960s, rose only to a modest 3.1 per cent overall in the 1970s and fell to a low of 2.7 per cent per year during the first half of the 1980s. Indeed, growth in the low-income and least developed economies is not only poor in comparison with other groups of developing countries but also, owing to the high rate of population growth in these countries, stagnant in terms of providing improvements in their standards of living.

286. Although the overall average rate of growth in the world economy during this quarter century was relatively good by previous standards, there was a disturbing tendency for it to decelerate with the passage of time. The 1960s represented a decade of relatively steady and high growth in the world economy, with world output growing on average more than 5 per cent a year. During the first Development Decade, despite the handicaps of poverty and the narrow export base of the developing market economies, the GDP of those economies as a whole grew at a significantly higher rate than in the developed market economies as a whole. As the 1960s came to an end, however, the rate of increase in world production was falling from the peak recorded earlier in the decade. The 1970s, in contrast, were characterized by generally slow growth in most world regions and unparalleled instability in the developed market economies. Following rapid growth during the first three years of the Second Development Decade, severe fluctuations in the business cycle were recorded, one of them the steepest and deepest recession since the 1930s. When growth faltered in the developed market economies, the slowdown was transmitted directly to the developing economies by means of the strong export orientation of the latter to the former. The instability in the developed market economies was also coupled with a virulent inflation and high unemployment levels that continued into the 1980s. As the 1970s gave way to the 1980s, the impact of strong upsurges in energy prices and interest rates wreaked damage on the economies of many countries, and the deterioration in growth in world output accelerated amid a general decline in standards of economic performance in all world regions. It is apparent, then, that despite initial success the endeavour to achieve increasingly high annual target rates of growth in developing countries has not been successful, and, indeed, economic growth in all world regions has tended to decelerate significantly over the course of the last 25 years. See table 46 for distribution of growth of GDP among developing countries.

Table 46. Distribution of growth of per capita gross domestic product during the development decades

Range of average annual rate of per capita GDP	Number of developing countries with growth rates in specified range			
	1961-1985	1961-1970	1971-1980	1981-1985
More than 7 1/2 per cent	0	3	3	0
Between 5 and 7 1/2 per cent	5	15	11	3
Between 2 1/2 and 5 per cent	23	35	25	11
Between 0 and 2 1/2 per cent	49	35	30	28
Less than 0 per cent	22	11	30	57

Source: Department of International Economic and Social Affairs of the United Nations Secretariat.

287. The most disturbing consequence of the disappointing record with regard to economic growth is its impact on improving the already low standard of living of the populations of the developing countries. In spite of the fact that total output in developing countries expanded faster than that in developed economies, their per capita gross domestic product rose at a slower rate, creating widening disparities in levels of living between developed and developing economies (see table 47). Between 1960 and 1985 the real per capita GDP of the developed market economies almost doubled, reaching a figure above \$6,800 when measured in 1975 dollars. In contrast, during the same period, real per capita GDP in developing countries, which started from a low absolute level of \$300, rose only 75 per cent to \$530, and was lower in 1985 than in 1980. As a result, the ratio between the average level of per capita GDP in the developed market economies and in the developing countries, which was about 11.5 to 1 in 1960, increased to almost 13 to 1 by 1985.

Table 47. Ratios of per capita GDP levels of selected regions to average for all developing market economies, 1960-1985 a/

Economy group	Index of per capita GDP developing market economy average = 100			
	1960	1970	1980	1985
Developed market economies	1 144	1 230	1 162	1 291
Developing market economies	100	100	100	100
Least developed economies	49	38	29	30

Source: Department of International Economic and Social Affairs of the United Nations Secretariat.

a/ Per capita GDP measured in 1975 prices and exchange rates.

288. Moreover, owing to slower economic growth and a faster rate of population increase in the poorest developing countries the disparity between the least developed countries and other developing countries also widened further in terms of their relative per capita income levels. Thus, while per capita incomes were rising in the developing countries as a group on average over 2 per cent a year over the two and a half decades, they rose only 1.8 per cent a year in the low income countries and, even more disturbing, less than 0.5 per cent on average in the least developed countries. Consequently, not only was the absolute level of per capita income in the least developed countries far below that prevailing in other groups of countries, but it grew slower over time. Per capita incomes in the least developed countries, which were about one-half the developing country average in 1960, are now less than one-third those in the group of developing countries as a whole. As a result, during the development decades the relative per capita income difference - not to mention the absolute gap measured in dollar terms - widened between the economically advanced countries and developing countries and within developing countries between the least developed group and all others.

/...

289. Table 48 presents indicators relevant to an assessment of the absolute and relative positions of different groups of developing countries with respect to some key aspects of their economic and social situations in 1960 and around the beginning of the 1980s. A slow pace of economic advance also tends to obstruct efforts aimed at improving essential social services, even those, such as better health, nutrition, and education, which are desirable in themselves and would also contribute to raising the efficiency and skills of the labour force and, hence, growth performance. Although past efforts to improve nutrition and health have resulted in a rise in the average life expectancy at birth in the developing countries over the course of the past 25 years, as indicated in table 48, there still remains a wide gap between the developing countries, particularly the disadvantaged countries, and the rest of the world. This low life expectancy is associated with high infant mortality, poor sanitation and inadequate health facilities characteristic of the poorest countries. Infant mortality rates in least developed countries, for example, average with few exceptions well above 140 per 1,000 live births. Corresponding figures for the developing countries taken as a group average significantly less than 100, and for the developed market economy countries, less than 15. Similarly, contaminated water supplies, inadequate waste disposal systems and a lack of clinical facilities for health care continue to characterize the conditions under which the vast majority of the people of the least developed countries live. Although the Strategies for the 1970s and 1980s addressed the need to make marked progress in these areas during the development decades, little headway was made in attacking problems contributing to the low standard of living in many developing countries. The broad picture presented is one of widening disparities between economic and social conditions in developing countries as compared with conditions prevailing in economically advanced regions.

Table 48. Standard of living indicators for developing country regions, 1960-1985

Classification and economy group	Life expectancy at birth (years)		Percentage of population with access to safe water		Infant mortality rates (age 0-1) (per 1,000 live births)	
	1960	1980	1970	1980	1960	1980
	Developing market economies	45	53	29	43	136
Africa	40	50	..	38	160	127
Latin America and the Caribbean	56	64	..	56	100	70
Western Asia	49	59	..	59	157	110
East and South-East Asia	43	51	..	38	130	92

Source: Department of International Economic and Social Affairs of the United Nations Secretariat.

## 2. Physical production and infrastructure

290. Rates of expansion since 1960 in output originating in the main sectors of production of different world regions are given in table 49. The contrasting rates of growth for the different producing sectors reflect continuing shifts in output compositions and productive resources from agriculture to industry in developing countries and from industry to services in developed economies. The composite rate of growth in manufacturing output for all developing countries, while not approaching the annual rate of 8 to 9 per cent indicated in the Strategies, was considerably above that of GDP as a whole and was a major source of structural change in a number of high- and middle-income developing countries. In contrast, the rate of growth of agriculture lagged in all groups of developing countries, barely exceeding that of population in some groups and even below that in others. Although broad patterns of structural evolution were less observable in developed economies, as their structural change was more intensive than extensive in nature, significant changes in patterns of economic activity took place within these broad sectors of production. Hence, although the targets in respect of structural change in production were not met during the development decades, the long-term pattern of economic activity within and among countries was nonetheless altered significantly during the last 25 years.

Table 49. Average annual rate of growth of GDP originating in different sectors of production during the development decades a/

Economy group	Agriculture	Industry	Manufacturing	Services	GDP
World market economies	2.2	3.8	4.1	4.3	4.0
Developed market economies	1.7	3.5	3.8	4.0	3.7
Developing market economies	2.7	5.4	6.4	6.2	5.1
Least developed economies	1.5	4.1	4.2	4.8	3.0

### Memorandum item:

Target rate of sectoral growth for the developing countries as a group

4 b/

8 and 9 c/

Source: Department of International Economic and Social Affairs of the United Nations Secretariat.

a/ Average growth for the period 1961-1981 measured in 1975 prices and exchange rates.

b/ Rate of growth specified for the Second and Third Development Decades.

c/ Rates of growth specified for the Second and Third Development Decades, respectively.

291. Agriculture, which continues to be the major economic sector in the majority of developing countries, failed to grow as anticipated in the Strategies and this had very adverse consequences for the expected expansion of production in many developing countries. Agriculture remains the preponderant source of incomes and employment in the majority of developing countries, and for this reason slow growth in agriculture during the development decades translated directly into slow growth for the economy as a whole in these countries. But, in addition, slow growth in agriculture was transmitted to other sectors and constrained their growth as well. For example, as a result of the strong forward and backward linkages between agriculture and the rest of the economy, the small and largely agro-based manufacturing capacity of the disadvantaged countries was impeded in its growth by erratic supplies of agricultural raw materials and unstable demands from the farm sector for domestically produced industrial goods. Even in medium- and high-income developing countries the performance of the agricultural sector exercised a strong influence on the pace of overall economic growth through its effect on the rest of the economy and the pattern of external trade.

292. One reason that manufacturing production was expected to advance at a much higher rate than agriculture lies in the nature of structural change in countries undergoing development. Although productivity growth and structural change in agriculture can be rapid, allowing output to expand rapidly, income and price elasticities for agricultural products are significantly below unity, with the result that, over the longer term, income generated in agriculture tends to fall as a proportion of total output. Moreover, because the average level of labour productivity in agriculture is low in developing countries when compared to that of the non-agricultural sector, the shares of production and labour force engaged in agriculture also tend to decline in response to higher wages and incomes in other sectors, and thereby leading to rural to urban migration. This migration usually proceeds slower than the shift in production, and agriculture remains a major source of employment and income even after the development process is well under way. Mirroring this change in agriculture is the rising importance of industry and services as the sectors where incomes rise and as the points where continued growth proceeds.

293. For this reason, a sharp increase in the importance of the manufacturing sector was to have been expected during these 25 years a function of their development. Instead, measured by the changing proportions of output originating in the major economic sectors (see table 50), this process of structural change was slow or non-existent in many developing countries. The share of manufacturing remained about the same in 1980 as it was in 1960, and little increase in the importance of industry in general can be noted outside of the petroleum-exporting economies. Moreover, in many disadvantaged countries where the share of agriculture did fall noticeably, it has been more a consequence of deteriorating agricultural performance than the successful development of industry and manufacturing; in still other countries the service sector accounts for much of the perceived change in economic structure, and the commodity-producing sectors achieved no positive structural change in the form of improvements to the organization, techniques and basic facilities underlying the production of commodity goods and basic services.



Table 50. Share of major producing sectors in total GPD in main world economic regions, 1960 and 1981 a/

(Percentage)

Economy group	<u>Agriculture</u>		<u>Industry</u>		<u>Manufacturing</u>	
	1960	1981	1960	1981	1960	1981
Developed market economies	6.5	3.7	41.6	37.8	30.5	25.3
Developing market economies	31.6	16.7	26.0	38.1	15.4	17.1
Least developed economies	60.9	44.6	10.0	17.4	5.4	9.2

Source: Department of International Economic and Social Affairs of the United Nations Secretariat.

a/ GDP originating in given sectors as measured in current prices and exchange rates.

294. With possibilities for steady expansion in the manufacturing sector adversely affected by the poor performance of agriculture, growth in that sector in many developing countries was generally far below targets specified for the development decades. In the case of the least developed countries it would appear that manufacturing, because it is based largely on food processing and natural fibre textiles industries, cannot expand vigorously without a vibrant and strong agricultural sector providing both needed inputs and effective demand for its outputs. Even in other groups of developing countries, where manufacturing activity looms larger in production, the expansion and modernization of agriculture are still vital for easing inflationary pressures and reducing balance-of-payments strains, for providing employment opportunities and generating savings, and for improving nutrition and enhancing incomes in rural areas where the bulk of the population resides.

295. Some idea of the inadequate state of the basic physical infrastructure supporting production in many developing countries towards the end of the 1970s can be seen in table 51. Transport problems of those countries are not limited to inadequately developed road, rail and air networks or to restricted and costly port services, although these factors have obviously hampered the provision of inexpensive and efficient transport services needed to increase output. Many of these countries are land-locked or isolated islands or, even when coastal States, have poor harbours for ports. Similarly, facilities for supplying energy and communications remain inadequate in many developing countries. In the disadvantaged countries, in particular, a lack of basic physical infrastructure and of the skills required to maintain them represents a major bottleneck to expanding production. Efforts to overcome these deficiencies are thus a pivotal need, for the process of industrialization and development cannot proceed without significant improvements in these areas:

Table 51. Indicators of physical productive infrastructure in main world economic regions, 1970 and 1980

Economy group	Transport: Commercial vehicles per 1000 population	Utilities: Installed electri- city capacity in Kws/1000 population	Communications: Telephones per 1000 population	
	1980	1980	1970	1980
Developed market economies	92.1	1 757	33.0	55.3
Developing market economies	8.3	100	0.9	2.0
Least developed economies	1.4	13	0.2	0.5

Source: Department of International Economic and Social Affairs of the United Nations Secretariat.

### 3. Mobilization of real and financial resources

296. Tables 52 and 53 below assemble historical estimates relating to the investment effort, investment efficiency and saving rates of different groups of world economies for the periods covered by the Development Decades. From these tables it can be seen that changes in resource allocation in most groups of developing countries have moved in directions supportive of faster growth during the first and Second Development Decades, with both investment and saving shares generally rising. Over the decades of the 1960s and 1970s, for example, the share of capital formation in GDP in all groups of developing countries, with the exception of the least developed economies, rose to that prevailing in the economically advanced economies. While the rise in investment effort over that period may be less pronounced in the least developed countries, it none the less represented a dramatic and apparently a sustained increase. Although no explicit targets for investment effort are mentioned in the programmes for the first and Second Development Decades, the rise in investment shares recorded during this period in the developing countries would appear to be consistent with their overall aspirations in this area.

Table 52. Investment effort and investment efficiency  
 during the development decades  
 (Percentage)

Economy group	Share of capital formation a/ in gross domestic product				Incremental capital-output ratio b/		
	1960	1970	1980	1983	1961-1973	1974-1980	1981-1985
Developed market economies	21.2	23.0	22.5	20.8	4.8	8.1	9.6
Developing market economies	18.9	20.4	24.2	23.3	2.9	5.0	12.8
Least developed economies	9.8	11.1	14.9	15.1	5.1	4.4	6.5
Petroleum exporting group	22.2	21.3	25.3	25.8	2.1	5.9	40.7
Newly industrializing group	20.1	23.9	24.0	24.6	2.6	3.8	9.5
Agricultural product group	18.4	21.2	25.4	21.4	3.9	5.5	9.9
Mineral product exporters	18.2	18.5	20.3	16.8	3.6	7.0	22.2
Other developing economies	17.1	17.9	22.8	22.7	5.2	4.1	4.7

Source: Department of International Economic and Social Affairs of the United Nations Secretariat.

a/ Measured in current prices and exchange rates.

b/ Measured in 1975 prices and exchange rates.

297. In the Strategy for the Third Development Decade, the General Assembly provided a target for investment effort during the 1980s when it stated that the acceleration of production in developing countries during the Decade "will require that gross investment reaches the level of about 28 per cent of gross domestic product by 1990" (resolution 35/56, para. 23). As this target is considerably above investment ratios prevailing in 1980, the past trend noted above toward a higher share of production devoted to capital formation would have to be continued. However, the quickening pace of capital formation in the developing countries experienced under the first and Second Development Decades came to an abrupt end in the first year of the Third. High interest rates, a major debt crisis, tightened monetary conditions, a slowdown in foreign investment and aid flows, and the adverse impact of higher oil prices and the global recession have caused a significant decline in investment outlays in both developed and developing

/...

countries. The decline was particularly great in those countries experiencing severe balance-of-payments constraints due to the heavy burden of interest payments on their accumulated external debt. In Latin America, where the majority of high debt countries were concentrated, the level of investment declined by 25 per cent from 1981 to 1983, the latest year for which data are available. Investment rates also fell in other developing country regions and in the developed economies as well, although not by the magnitude recorded in Latin America. Hence, rather than continuing a positive trend and moving closer towards the attainment of the goal of mobilizing resources for faster growth, the developing countries suffered a significant setback in their efforts to expand their economies during the early years of the 1980s.

298. Other priorities in the area of investment performance were improving the productivity of the resources mobilized for investment purposes and increasing the efficiency with which existing capital was utilized. Standards for investment effectiveness inherent in the growth and investment targets in the Strategy for the Third Development Decade, expressed in terms of an incremental capital-output ratio (ICOR), were of the order of 4 units of investment expenditure per 1 unit increment in output. Results in this area have been mixed. Although the overall level of investment efficiency of developing countries compares favourably with that of developed economies, it is marked by considerable dispersion among individual countries and, even more disturbing, tends to deteriorate markedly over time. Needless to say, the fastest growing groups of countries registered low ICORs, some groups less than 3 during the period 1960-1973; in contrast, during the same period over 5 units of additional capital were required to produce an additional unit of output in the group "other developing economies". In the 1970s, however, a rising degree of investment effort was accompanied by generally slower economic growth, implying an overall decline in the effectiveness of investment. No group of economies escaped this negative trend, which worsened considerably in the early years of the 1980s when economic growth stagnated. The generally poor investment productivity levels registered in all groups of world economies would seem to be mainly the result of the adverse environment within which investment is currently taking place and the low rate of utilization of existing productive capacity rather than an increase in the capital-intensive nature of the facilities being built.

299. The domestic saving performance target of the Second Development Decade for the developing countries as a group was set as an annual expansion of "0.5 per cent in the ratio of gross domestic saving to the gross product so that this ratio rises to around 20 per cent by 1980" (resolution 2626 (XXV), para. 17). In a similar fashion, a higher target figure, namely, that "gross domestic saving should be increased to reach about 24 per cent of gross domestic product by 1990", (resolution 35/56, para. 23), was given in the Strategy for the Third Development Decade.

Table 53. Saving and external resource ratios in developing market economies during the Development Decades a/  
(Percentage)

Economy group	Share of national saving in gross domestic product				Share of external saving in gross domestic product			
	1960	1970	1980	1983	1960	1970	1980	1983
Developed market economies	21.9	23.6	22.2	22.4	-0.8	-0.6	0.3	-0.6
Developing market economies	16.2	18.3	24.5	19.1	2.4	1.9	-0.3	5.6
Least developed economies	9.1	5.0	5.7	5.9	0.4	2.5	8.6	8.9
Petroleum exporting economies	21.2	20.0	33.8	21.5	0.4	1.3	-8.5	7.6
Newly industrializing economies	12.0	19.7	17.1	16.8	4.0	2.9	6.7	8.0
Agricultural product exporters	15.4	18.7	20.3	20.2	1.9	2.0	5.0	1.5
Mineral product exporters	16.7	13.8	14.1	13.4	2.2	2.5	5.9	4.5
Other developing economies	11.4	15.6	19.2	20.8	3.8	1.3	3.3	1.9

Source: Department of International Economic and Social Affairs of the United Nations Secretariat.

a/ Measured in current prices and exchange rates.

300. With respect to the goal of improving saving performance, as in the case of investment performance, the record of the developing countries during the development decades is mixed. Saving performance by most groups of developing countries generally improved during the first Development Decade, although not at a rate sufficient to finance their growing levels of spending for investment purposes. The share of national saving in GDP of the rapidly growing group of newly industrializing economies rose over 0.75 per cent each year between 1960 and 1970, lessening substantially their high dependence on foreign capital inflows. Significant increases in saving ratios in the 1960s were also registered in the economies classified as agricultural exporters and the residual group of "other developing economies". On the other hand, two groups of developing economies, the least developed economies and the petroleum exporters, had lower saving shares in 1970 than in 1960 (see table 53 above).

301. Saving performance among developing economies was even more diverse during the Second Development Decade. Although the overall average saving ratio for all developing countries rose on average more than 0.5 per cent a year, this increase is traceable mainly to the petroleum-exporting economies. In contrast, in the petroleum-importing economies saving rates generally declined from 1970 to 1980. As one example, the supply of national saving fell as a percentage of GDP of 21 least developed countries for which data are available and rose in only 12. One reason for the decline in saving performance in these countries can be traced to the poor performance of the agricultural sector, where a substantial part of any extra income is saved. Per capita food output declined in many disadvantaged countries in the 1970s, while international prices for primary commodities soared and foreign borrowing rose, with the result that the prime source of domestically generated saving contracted just when the need for it was greatest.

302. Little or no actual improvement in saving performance has occurred during the first half of the Third Development Decade. In the early 1980s the world-wide recession reduced the demand for oil and its price fell at a time when consumption was rising rapidly in the petroleum-exporting developing countries. As a result, their rate of saving fell dramatically, and as a group they began importing capital. Austerity programmes implemented by debtor developing countries did cause a rise in saving through the adverse effect of those programmes on incomes and spending but the extraordinary changes in expenditure patterns induced by these policies cannot be regarded as either permanent or desirable.

303. With the exception of the capital surplus energy-exporting economies, where more savings were generated than these economies could use, many developing countries were heavily dependent during the first Development Decade on inflows of foreign financial resources to finance their increased pace of capital formation. Although the share of inflows of foreign capital from abroad remained high in the group of developing countries as a whole, some success was registered in the 1960s in limiting this dependence. In the 1970s, on the other hand, large savings surpluses were generated in the capital surplus economies but these were more than offset by growing savings deficits in other groups of developing countries. Moreover, for both internal and external reasons export proceeds grew slowly and were extremely unstable, especially after 1973, and instead of providing a source of steady demand for stable economic growth, they disrupted production and led to fluctuations in the capacity of some developing countries to import. Similarly, a strong demand for imports generated persistent balance-of-payments pressures. Because the annual increases in domestic financial resources in many developing countries were insufficient in the 1970s to match their growing investment levels and because export revenue failed to keep pace with import needs, the dependence of the developing countries on inflows of external capital increased significantly during the Second Development Decade. From annex table 8 can be seen the adverse nature of sudden shifts in the direction of these flows brought about by a change in the international economic environment. Such a shift occurred in the early 1980s. As the downturn in the world economy took place in the early years of the 1980s, some developing countries found the growth of their export revenues slowing down at the very time when increased payments were required to service their accumulated external debt.

#### 4. International trade and payments

304. The importance attached to export growth is reflected in the fact that special emphasis is given in each General Assembly resolution on the development decades to policy measures designed to promote and diversify the export trade of the developing countries, particularly in manufactures and semi-manufactures. Policy measures in the programmes for the development decades stress a commitment to an open and expanding trade system, one that would promote structural adjustment within the context of a dynamic pattern of comparative advantage. The programmes recognize, however, that in order to gain full benefit from the possibilities for mutually advantageous exchange, stability and equity in the international economic arrangements are essential. Through its resolutions establishing the development decades, the Assembly has urged that the flow of concessional assistance and development capital to the developing countries be increased substantially, so as to amount to 1 per cent of the combined gross national products of the developed economies. In the Strategies for the Second and Third Development Decades the target for the annual net flow of financial resources to the developing countries to be provided in the form of official development assistance has been given as 0.7 per cent of the aggregate gross national product of the developed economies. Steady progress toward achieving the goal is suggested in the Strategies, and each developed country is to make its best efforts to attain the target figure by the middle of each Decade. In addition to providing a greater volume of financial resources to the developing countries, the economically advanced countries are also urged to remove restrictions on the use of their aid transfers. Finally, in order to make full and effective use of an enlarged flow of foreign assistance and capital, developing countries must adopt appropriate measures to expand and diversify their economies in a manner that generates self-sustaining growth.

305. An important aspect of trade expansion targets for the Second Development Decade is that the indicative figure for the average annual rate of growth of imports ("somewhat less than 7 per cent") is to be less than that of exports ("somewhat higher than 7 per cent") (resolution 2626 (XXV), para. 17). This pattern is consistent with a strong emphasis on import conservation and substitution and is based upon an expected large contribution of an expanding manufacturing sector. In the case of the Strategy for the Third Development Decade, however, imports are targeted to grow faster than exports (not less than 8 per cent annually as compared with 7.5 per cent annually for exports) (resolution 35/56, para. 22). This relatively faster growth target for imports stems from the more rapid acceleration of economic growth anticipated during the 1980s. In the Strategy for the Third Development Decade special emphasis is also given to the need for the developing countries to increase trade among themselves and to intensify their mutual co-operation in international financial transactions. The strong emphasis on improving trade performance is based on the recognition of the fact that foreign exchange is the necessary pre-condition of successful economic growth of many developing countries, especially the least developed among them.

306. In retrospect, the world trading environment in the first Development Decade was exceptionally favourable. The 1960s represented a period of rapid and widespread growth in economic activity and world trade, of relatively low inflation and relatively stable commodity prices and of reduced trade barriers and expanding

transfers of real resources to the developing countries. In this environment, the developing countries boosted the rate of growth of their exports from the 3 per cent a year during the previous decade to over 7 per cent a year during the 1960s (see table 54 below). This overall average conceals wide variations in the export performance of separate groups of developing countries, as exports of fuels and of manufactures from the petroleum-exporting and the newly industrializing economies grew rapidly while those of industrial raw materials and foodstuffs from other groups of developing economies increased at a much slower rate. While primary products of all kinds sold mainly to the developed market economies represented the preponderant source of exports receipts in all developing country regions (see table 55 below), imports into the developing countries consisted of more than 50 per cent of manufactured goods purchased from developed market economies (see table 56 below).

Table 54. Average rate of growth of exports and imports of goods and non-factor services during the development decades

(Percentage)

Economy group	1961-1970		1971-1980		1981-1983	
	Exports	Imports	Exports	Imports	Exports	Imports
World market economies	8.4	8.3	5.8	5.9	3.8	3.0
Developed market economies	8.2	8.8	6.1	4.9	1.9	1.2
USSR and Eastern European countries	9.3	8.1	6.8	6.8	4.6	0.9
Developing market economies	7.9	6.0	4.2	8.9	-0.1	1.3
Least developed economies	4.8	5.7	3.6	3.8	2.6	2.9

Memorandum item:

Target rates of growth of exports and imports for the developing countries as a group

8                      7                      7.5                      8

Source: Department of International Economic and Social Affairs of the United Nations Secretariat.



Table 55. Level and composition of world exports by major commodity, 1960 and 1980

Exporting group	Total exports in billions of US dollars	Percentage of composition of commodity exports			
		Primary commodities			
		Total	Fuels	Minerals	Manufactures
<b>World</b>					
1960	127.7	53.1	9.9	13.0	45.7
1980	1 994.7	47.4	24.0	8.5	50.9
<b>Developed market economies</b>					
1960	85.4	41.4	3.9	13.7	57.2
1980	1 260.3	32.0	6.9	10.0	66.5
<b>Developing countries</b>					
1960	27.4	90.7	27.9	10.9	8.9
1980	559.0	82.0	62.0	5.1	17.2
<b>Centrally planned economies</b>					
1960	13.0	49.6	12.5	13.4	49.5
1980	155.2	46.8	27.2	8.5	46.7

Source: Department of International Economic and Social Affairs of the United Nations Secretariat.

Table 56. Level and composition of world imports by major commodity, 1960 and 1980

Importing group	Total imports in billions of US dollars	Percentage of composition of commodity imports			
		Primary commodities			
		Total	Fuels	Minerals	Manufactures
World					
1960	127.9	53.1	9.9	13.0	45.7
1980	1 994.7	47.4	24.0	8.5	50.9
Developed market economies					
1960	82.8	57.6	10.0	14.4	40.2
1980	1 343.0	49.9	27.1	8.7	48.9
Developing countries					
1960	29.3	40.1	9.9	7.4	55.7
1980	463.8	40.3	18.4	7.0	57.2
Centrally planned economies					
1960	12.9	53.7	7.2	16.4	45.7
1980	143.8	45.0	13.2	11.3	53.1

Source: Department of International Economic and Social Affairs of the United Nations Secretariat.

307. World trade prices were generally stable in the 1960s, but there was a steady tendency toward a further deterioration in the terms at which exports of the developing market economies were exchanged for imports. This had a negative effect on their ability to earn foreign exchange, as did the greater instability of the prices of their exports as compared with those of the developed market economies. Thus, while the income terms of trade of the developed market economies rose almost 125 per cent from 1960 to 1970, the corresponding increase in the capacity of the developing countries to import was only 80 per cent. Finally, it should be noted that although the increase in the value of developing country commodity exports over the course of the decade exceeded the corresponding increase in their commodity imports, the balance-of-payments accounts of these countries recorded continuing and more than offsetting imbalances on their net service trade.

308. Thus, by 1970 no significant improvement in the relative position of the developing countries in world trade or in their balance-of-payments position could be noted. Merchandise exports from developing countries amounted to less than 18 per cent of the value of world trade (see annex table 10). Primary commodities remained the main source of export revenue and accounted for almost 85 per cent of all export earnings of developing countries. The 16 per cent of developing country exports that represented trade in manufactured goods (Standard International Trade Classification (SITC) categories 5 to 8 less 67 and 68) accounted for just over 5 per cent of world trade in manufactures in that year. The lagging increase in the export volumes of developing countries to the rest of the world and the deterioration in their terms of trade with the developed economies caused their external trade to fall as a share of total world trade from over 16 per cent in 1960 (and over 20 per cent in 1950) to just over 13 per cent in 1970. More significantly, a further erosion in the closeness of the trade link among developing countries could also be noted in 1970 as the share of trade with other developing countries fell to less than 21 per cent of their total exports, or only 4 per cent of total world trade. Although a substantial surplus was recorded by the developing countries on their merchandise trade in 1970 (attributable mainly to a low rate of import absorption by petroleum-exporting developing countries), net payments on service account for insurance and freight, property income and other services resulted in a negative balance on current account equal to 30 per cent of the value of the goods imported by developing countries.

309. In contrast to the first Development Decade, the 1970s represented a period of unparalleled instability in the world economy. Severe fluctuations in economic activity, strong upsurges in prices and interest rates, large-scale financial imbalances in the domestic economies of all groups of countries as well as in the international economy, and several exogenous events interacted to lower dramatically previously attained standards of world economic performance. In nominal terms, world trade grew at a rate of more than 20 per cent a year and, in contrast to previous decades, the growth in the value of exports by developing countries exceeded that of other major economic regions. By far, the highest rate of expansion was recorded in trade among the developing countries, which also proved to be the most dynamic destination for the exports of both groups of developed economies, market and planned, during the 1970s. The annual rate of growth of export volume from the developing countries, however, grew at a much slower rate and masked wide differences in the export trends of different groups of developing countries. Petroleum-exporting developing countries, for example, experienced a several-fold jump in the price of their main export, coupled with little or no sustained increases in the volume of petroleum sold on world markets. In contrast, major developing country exporters of manufactures recorded rapid rises in the volume of their exports during the 1970s, combined with relatively slow increases in the unit value of their exports. Those developing countries that exchanged primary products other than oil for manufactures and petroleum found themselves in the worst position, with their terms of trade falling over the course of the Second Development Decade while their export volume also lagged. Part of the shortfalls in export volume can be traced to slow growth in world demand for the primary products exported by

the developing countries. More important, however, was a decline in the market share of those countries for their major products, caused in some measure by domestic failures in agriculture. These divergent trends caused large-scale changes in the commodity composition of developing country exports and in the trade balance positions of those countries. In terms of their commodity composition, reflecting the large increase in their unit value, fuels rose substantially as a share of the value of developing country exports. Manufactured products also increased as a proportion of total developing country merchandise trade in response to the rapid expansion in the export volume of these goods.

310. In the first years of the Third Development Decade, further sweeping changes have taken place in the level, direction and composition of world trade as the global economy underwent a period of profound stress and strain. These changes were discussed in some detail in section III. During the first years of the Third Development Decade, the process of global adjustment is still under way, with large-scale imbalances remaining in the external accounts of all groups of countries.

311. Over the entire period of the development decades a major problem before many developing countries was a negative trend in the terms on which they exchanged their exports for imports. Between 1960 and the early years of the 1980s net losses in the purchasing power of exports caused by adverse changes in the terms of trade were recorded in 62 of 99 developing countries for which relevant data are available. This negative trend was widespread, as all groups of developing countries suffered significant declines in their terms of trade at some time during this period. Furthermore, as the rate of growth in the volume of developing country exports slowed over the course of the development decades their terms of trade also tended to worsen, limiting the capacity of these countries to maintain past rates of import absorption and re-enforcing the downward tendencies already at work in many countries. For the least developed economies as a whole the purchasing power of their exports declined in each development decade, indeed, at an average annual rate of 1 per cent since 1970. Because the disadvantaged countries are precisely those characterized by economic circumstances least favourable to a policy of internal development based on their own limited resources, the severe deterioration of their terms of trade has gravely affected their ability to finance imports necessary to sustain production and increase capacity.

312. The slow growth in the purchasing power of exports from the developing countries and their pressing need to pay for essential imports point to the importance of international assistance in overcoming the external constraints to their development. From the inception of the development decades the joint responsibility of the economically advanced countries in providing economic assistance was recognized, and in each resolution establishing the development decades the hope was expressed that the flow of international assistance and capital would be expanded to reach levels commensurate with a target of 0.7 per cent of the combined GNP of these countries. At the onset of the first Development Decade, the share of official development assistance in the GNP of the developed market economies was just over 0.5 per cent. In the years after 1960, the volume of aid increased from DAC countries, but at a rate slower than the rise in their aggregate GNP, with the result that the ratio of assistance to GNP was lower in 1970 than it had been at the start of the first Development Decade. Over

the course of the Second Development Decade a slight improvement was registered in aid performance by those countries as the share of official development assistance in their GNP rose from 0.34 per cent in 1970 to 0.38 per cent in 1980. During the 1970s, an increase was also recorded in the share of concessional assistance in the GNP of a number of the OPEC countries, and aid flows from these countries rose rapidly in value between 1970 and 1980. Since 1980, however, the share of aid provided by all donor groups except the CMEA countries has declined.

#### 5. Human resources and skills

313. Among the structural characteristics of a developing country, particularly a least developed country, that have contributed to the disappointing performance reviewed above is the difficult situation of the human resources in terms of population dynamics and manpower attributes (see table 57). Some negative characteristics are impossible to alter in the short or medium term. Population densities, for example, are exceptionally high in some of the least developed countries, as well as elsewhere, and are exceptionally low in others, as in Botswana, Chad and the Central African Republic. Increased attention was focused in the 1970s on lowering the rapid rate of population growth in most of the developing countries as a matter of high priority, but present rates of population growth in many developing countries range from 2.5 to almost 4 per cent a year, a pace that would double their population in the span of one generation should such rates continue without change. This rapid growth of population brings with it various problems that inhibit the ability of governments to attain their development objectives: higher population densities and overcrowding, an unfavourable age-structure with a high dependency ratio, large increments added to the work force each year creating a need for correspondingly large increases in employment, and difficulties of financing increased social services from already inadequate government revenues.

Table 57. Human resources and skills of different world economic regions, 1960 and 1980

	Dependency ratio		Adult literacy rate <u>a/</u>	Population density <u>b/</u>	
	1960	1980		1960	1980
Developed market economies	2.35	2.26	95.1	19.7	23.7
Developing market economies	2.54	2.79	46.3	20.6	33.8
Least developed economies	2.37	2.55	24.1	12.6	21.1

Source: Department of International Economic and Social Affairs of the United Nations Secretariat.

a/ Dates relate to most recent year available.

b/ Expressed in population per square kilometre.

314. Longer-term problems in the development of human resources characterize the labour force of all least developed countries. High levels of illiteracy prevail in those countries and school enrolment ratios are low, particularly at the more advanced levels, with the result that there exists an acute scarcity of trained personnel and skills in all occupational categories. Data in annex table 11 show that the secondary school enrolment rate of the least developed countries taken as a whole is only 12 per cent and that only a little over one half of all children between 6 and 11 years of age attend school. Enrolment rates for girls and literacy rates for women are extremely low. A heavy reliance on expatriates in the trade and other service sectors and in the area of industrial management is also a reflection of this situation. Weak educational systems also characterize higher education; consequently, training for high-level technical occupations such as medicine, science and the law must be obtained elsewhere and the number of people trained in those areas is low in relation to the populations of those countries.

315. One of the major problems facing developing countries in the field of human resources is the so-called "brain drain". Because of the differences in living and working conditions in developed and developing countries, many professionals emigrate from the developing countries to the developed market economies. Developing countries lose not only millions of dollars of potential GDP but also their investment in the education of these emigrants. The developing countries thus lose much of their most skilled labour force - the most important factor of economic and social development.

#### C. Some lessons of experience

316. From this survey it is clear that, contrary to the opinion of some observers before the launching of the development decades, the developing countries proved their ability to develop rapidly over an extended period of time. In addition to undergoing significant structural change and transforming the physical basis of their production, during the years reviewed many developing countries were able to raise considerably their investment and saving rates, thereby laying the foundation for their continued growth and development. However, it is also evident that despite considerable progress on the part of some developing countries, the overall growth performance of the developing countries during the development decades was significantly below their target rates of growth during most of these years. The least developed economies, in particular, have lagged in the process of world development and continue to present a picture of persistent poverty and under-development. One disturbing consequence of the disappointing record with regard to economic growth is the widening disparities in standards of living between developed market and developing market economies and, within the latter group, between the richer and poorer groups of developing countries.

317. It is also evident that one of the most important pre-conditions for rapid and stable growth in the developing countries is high and stable growth in the developed economies and the absence of unexpected shocks and radical changes in the world economy. The deterioration of growth in many groups of developing countries is directly linked to instability and large-scale changes in the primary commodity markets and the deep recessions of the developed economies in the 1970s and 1980s.

318. Among the major reasons for the slow pace of growth and structural change in the developing market economies over the past 25 years are the growing debt burden, inadequate inflow of resources and technology transfer, and constraints in access to external markets. As discussed above, the developing countries need a vigorous agricultural sector to provide both the means of producing manufactures and the incomes necessary to purchase them.

319. Over the 25 years covered by the development decades, changes in the allocation of resources in the developing countries have generally moved in directions supportive of faster economic growth. Because investment shares have risen more slowly in the disadvantaged countries, special policies will have to be formulated to support the investment effort required by those countries in order to accelerate their economic growth.

320. The record of the development decades also shows that, given the nature of the interdependence between the developed and developing economies, a supportive international economic environment is of critical importance in maintaining their growth momentum.

#### Notes

1/ This section focuses on the experience of the developing countries but includes references and data relating to the group of developed market and planned economies where relevant. Within the developing country group, special attention is given to the experience of the least developed and low-income developing countries. These latter two groups taken together are referred to as disadvantaged countries.

STATISTICAL ANNEX TO SECTION VI

1. The statistical annex to Section VI provides a set of internationally comparable data relevant for the evaluation of progress and problems of the world economy during the years of the Development Decades. However, it should be noted that while every effort has been made to assemble and prepare data in accordance with standard coverage and definitions, full comparability is not possible because of inadequacies, incompleteness and definitional differences in the basic set of data underlying the tables. In general, historical data relating to gross domestic product and its detail, population and labour force, and demographic characteristics encompass complete country coverage for the market economies, and have been classified and aggregated in accordance with the groupings shown in the Handbook of World Development Statistics issued by the Department of International Economic and Social Affairs. Forecasts and projections of national accounting and aggregates given in other sections of the socio-economic perspective may be based on quarterly data that differ from estimates reported to the United Nations Statistical Office on its annual national accounts questionnaire. In addition it should be noted that region aggregates and averages relating to commodity trade, to living conditions such as access to safe water and health services, and to attributes of physical infrastructure such as transportation, utilities and communications are based on basic data corresponding to accounting frameworks that differ from the United Nations System of National Accounts and for this reason may have some minor differences in country grouping detail and may encompass incomplete country coverage or data for years around those listed in the tables. Finally, because of the need to maintain comparability with the principle set of data underlying each section of the perspective, minor differences in country coverage and definitions may occur between different chapters. Data presented in the perspective are based on those available to the Secretariat as at 1 January 1985.

Annex tables

2. Table 1 assembles in tabular form quantitative targets and goals for world development specified in General Assembly resolutions establishing the United Nations Development Decades.
3. Table 2 provides data relating to the growth of total gross domestic product, population and gross domestic product per capita in different economic regions of the world over the entire period from 1961 to 1985.
4. Table 3 contains population levels and percentage shares in total world population for the year 1980 and growth rates of gross domestic product, total and per capita, for the three periods covered by the Development Decades.
5. Table 4 shows standard of living indicators for different world economic regions at the beginning of the first United Nations Development Decade and in the most recent year for which relevant data are available.
6. Table 5 provides information on the expansion of production and labour resources in different sectors of economic activity over the entire period from 1961 to 1981.



7. Table 6 indicates, through the use of shares of product originating in and labour force engaged in different major sectors of production, the extent of structural change in production taking place in different world regions from 1960 to 1981.
8. Table 7 presents selected indicators of the physical productive infrastructure in place in different world regions in 1960 and in the latest available year.
9. Table 8 summarizes, for a selected set of world regions, the changes in investment effort, investment efficiency and internal and external saving ratios that have occurred during the different periods covered by the Development Decades.
10. Table 9 provides information on the growth of the volume of exports and imports of goods and non-factor services during the Development Decades and the growth of the purchasing power of these exports in terms of their capacity to finance imports.
11. Table 10 gives basic data relating to the level and composition of commodity exports of major world economic and geographic regions in 1960, 1970 and 1980.
12. Table 11 provides the same information as table 10, but for commodity imports rather than for exports.
13. Table 12 shows the historical pattern of world exports and imports by origin and destination of main exporting and importing regions in 1960, 1970 and 1980.
14. Table 13 summarizes some indicators useful in assessing human resources and skills of different world economic regions in 1960 and 1980.

Annex table 1. International development targets and goals specified for the United Nations development decades

Development decade, country group and item	Indicator
<u>First United Nations Development Decade</u>	
<u>Developing countries a/</u>	
Annual rate of increase in national income	5 per cent <u>b/</u>
<u>Economically advanced countries</u>	
Flow of international assistance and capital to developing countries as a share of the combined national incomes of the economically advanced countries	1 per cent <u>c/</u>
<u>Second United Nations Development Decade</u>	
<u>Developing countries a/</u>	
Annual rate of increase from 1970 to 1980:	
Total gross domestic product	6 per cent
Per capita gross domestic product	3.5 per cent
Population	2.5 per cent
Agricultural output	4 per cent
Manufacturing output	8 per cent
Exports	Somewhat higher than 7 per cent <u>c/</u>
Imports	Somewhat lower than 7 per cent <u>c/</u>
Average annual expansion in the ratio of gross domestic saving to gross product	0.5 per cent per year
Share of gross domestic saving in gross product in 1980	20 per cent
<u>Economically advanced countries</u>	
Annual provision of net financial resource transfers to developing countries by 1972 as a share of gross national product	1 per cent
Annual provision of net financial resource transfers to developing countries by 1975 provided in the form of official development assistance as a share of gross national product	0.7 per cent

Annex table 1. (continued)

Development decade, country group and item	Indicator
<u>Third United Nations Development Decade</u>	
<u>Developing countries a/</u>	
Annual rate of increase from 1980 to 1990:	
Total gross domestic product	7 per cent
Per capita gross domestic product	4.5 per cent
Population	2.5 per cent
Agricultural output	4 per cent
Manufacturing output	9 per cent
Exports	Not less than 7.5 per cent <u>c/</u>
Imports	Not less than 8 per cent <u>c/</u>
Share of gross investment in gross product in 1990	28 per cent
Share of gross domestic saving in gross product in 1990	24 per cent
<u>Economically advanced countries</u>	
Annual provision of net financial resource transfers to developing countries by 1985 provided in the form of official development assistance as a share of gross national product	0.7 per cent

Source: General Assembly resolutions 1710 (XVI), 2626 (XXV) and 35/56.

a/ Excluding developing planned economies, because of lack of comparable data.

b/ Minimum annual rate of economic growth at the end of the Decade.

c/ Exports and imports refer to goods and non-factor services.

Annex table 2. Growth of total gross domestic product, population and GDP per capita in the world economy, 1961-1985 a/

(Percentage)

Classification and economy group <u>b/</u>	Gross domestic product	Population	GDP per capita
World	3.6	2.0	1.7
<u>World by major economic region</u>			
Developed market economies	3.4	0.9	2.6
Developed planned economies <u>c/</u>	4.7	1.0	3.8
Developing market economies	4.4	2.5	2.1
<u>Developing market economies by major export orientation</u>			
Least developed economies	2.9	2.6	0.3
Petroleum-exporting economies	4.3	2.7	2.0
Newly industrializing economies	6.0	2.4	3.7
Agricultural product exporters	4.1	2.5	1.7
Mineral product exporters	3.3	2.7	0.9
Other developing economies	4.2	2.2	1.8
<u>Developing market economies by geographic area</u>			
Africa	3.8	2.8	1.3
Latin America and the Caribbean	4.2	2.6	1.8
Western Asia	4.4	3.0	1.8
East and South-East Asia	5.4	2.3	3.0
<u>Developing market economies by per capita income category</u>			
High-income economies	4.5	2.7	2.1
Middle-income economies	4.6	2.7	2.0
Low-income economies	4.3	2.3	1.8

Annex table 2. (continued)

Classification and economy group <u>b/</u>	Gross domestic product	Population	GDP per capita
<u>Developing market economies by net energy trade</u>			
Capital surplus economies	3.9	3.3	1.5
Other net energy exporters	4.6	2.6	2.1
Net energy importing economies	4.5	2.4	2.2

Source: Department of International Economic and Social Affairs of the United Nations Secretariat.

a/ Based on gross domestic product data measured in 1975 prices and exchange rates.

b/ For definitions of country groups used in this report, see explanatory notes to the statistical annex.

c/ Net material product.

Annex table 3. Population and growth of gross product of major world regions during the United Nations Development Decades, 1961-1985

Classification and economy grouping	Population (1980)		Average annual rate of increase in gross product a/					
	Millions	Percentage share	Total			Per capita		
			1961-70	1971-80	1981-85	1961-70	1971-80	1981-85
World	3 279	100	5.2	3.8	2.3	3.2	1.9	0.4
<u>World by major economic region</u>								
Developed market economies	763	23.3	4.9	3.2	2.2	3.8	2.4	1.5
Developed planned economies	366	10.8	6.7	4.8	3.0	5.5	3.9	2.1
Developing market economies	2 160	65.9	5.8	5.4	1.8	3.2	2.9	-0.6
<u>Developing market economies by major export orientation</u>								
Least developed economies	270	8.2	2.9	3.1	2.7	0.4	0.3	-0.5
Petroleum-exporting economies	470	14.3	7.0	5.4	0.5	4.2	2.7	-2.1
Newly industrializing economies	187	5.3	7.1	8.1	2.4	4.1	5.7	0.2
Agricultural product exporters	366	11.2	5.1	4.7	1.0	2.4	2.2	-0.3
Mineral product exporters	110	3.4	5.5	3.3	1.0	3.0	0.6	-1.8
Other developing economies	772	23.5	3.8	4.2	4.7	2.2	1.9	2.6
<u>Developing market economies by geographic area</u>								
Africa	440	13.4	6.1	4.3	1.0	3.3	1.4	-2.1
Latin America and the Caribbean	348	10.6	5.9	5.7	0.5	3.0	3.1	-1.9
Western Asia	124	3.8	7.3	5.1	0.3	4.4	2.3	-2.8
East and South-East Asia	1 248	38.1	4.8	6.0	5.0	2.2	3.6	2.8
<u>Developing market economies by per capita income category</u>								
High-income economies	448	13.7	6.8	5.6	0.8	3.9	3.0	-1.8
Middle-income economies	438	13.3	5.5	5.7	2.3	2.6	2.9	-0.4
Low-income economies	1 274	38.9	3.7	4.5	4.4	1.2	2.1	2.0
<u>Developing market economies by net energy trade</u>								
Capital surplus economies	64	2.0	9.8	4.5	-2.6	6.6	1.5	-5.9
Other net energy exporters	451	13.7	5.8	5.8	1.9	3.0	3.1	-0.6
Net energy importing economies	1 645	50.2	5.1	5.5	2.6	2.5	3.0	0.2

Source: Department of International Economic and Social Affairs of the United Nations Secretariat.

a/ Average annual rates of growth of gross domestic or gross material product in 1975 prices and exchange rates.

Annex table 4. Standard of living indicators for different world economic regions, 1960, 1970, 1980 and 1985

Classification and economy group	GDP per capita in 1975 US dollars			Life expectancy at birth (years)		Percentage of urban population with access to safe water		Infant mortality rate (age 0-1) (per 1,000 live births)		Hospital beds per 100,000 population a/
	1960	1970	1980	1985	1960	1980	1970	1980	1960	
World	1 317	1 758	2 060	2 077	49.6	57.6	..	..	..	..
<u>World by major economic region</u>										
Developed market economies	3 433	5 006	6 347	6 842	69.2	73.2	..	..	27	13
Developing market economies	300	407	546	530	44.8	53.4	59.7	68.0	136	100
<u>Developing market economies by major export orientation</u>										
Least developed economies	147	153	159	158	36.4	43.5	41.4	45.2	171	144
Petroleum-exporting economies	502	751	986	887	44.4	54.5	50.1	52.9	140	100
Newly industrializing economies	544	803	1 437	1 451	55.4	63.8	74.0	85.7	94	64
Agricultural product exporters	394	499	621	613	50.7	59.7	72.6	73.7	115	82
Mineral product exporters	404	543	575	524	44.6	53.3	57.8	77.0	142	103
Other developing economies	125	141	168	191	43.0	50.8	61.8	76.5	156	124
<u>Developing market economies by geographic area</u>										
Africa	290	399	459	411	40.5	49.5	70.3	69.8	160	127
Latin America and the Caribbean	740	987	1 343	1 220	55.9	63.6	75.0	80.8	100	70
Western Asia	798	1 230	1 593	1 390	48.9	59.3	76.6	87.3	157	110
East and South-East Asia	144	177	251	289	43.0	51.3	51.8	62.3	130	92
<u>Developing market economies by per capita income category</u>										
High-income economies	802	1 176	1 585	1 446	54.2	62.8	75.6	83.7	..	..
Middle-income economies	317	409	551	538	45.9	55.6	77.0	74.8	..	..
Low-income economies	130	146	179	199	41.4	49.3	50.4	60.3	..	..
<u>Developing market economies by net energy trade</u>										
Capital surplus economies	1 014	1 939	2 292	1 726	45.8	55.6	76.3	95.1	..	..
Other net energy exporters	498	740	972	881	44.4	54.6	49.3	49.0	..	..
Net energy importing economies	240	306	413	418	44.9	52.9	61.4	72.2	..	..

Source: Department of International Economic and Social Affairs of the United Nations Secretariat.

a/ Most recent year after 1975.

Annex table 5. Growth of production and labour force in the major producing sectors of major world economic regions, 1961-1981 <sup>a/</sup>  
(Percentage)

Classification and economy group	Growth of gross domestic product				Growth of labour force			
	Total	Agriculture	Industry	Manufacturing	Services	Agriculture	Non-agriculture	Total
World market economies	4.0	2.2	3.8	4.1	4.3	0.7	2.7	1.7
<u>World by major economic region</u>								
Developed market economies	3.7	1.7	3.5	3.8	4.0	-3.4	1.8	1.1
Developing market economies	5.1	2.7	5.4	6.4	6.2	1.1	3.9	2.0
<u>Developing market economies by major export orientation</u>								
Least developed economies	3.0	1.5	4.1	4.2	4.8	1.8	4.5	2.2
Petroleum-exporting economies	5.3	2.3	4.9	7.3	7.2	0.8	4.3	2.3
Newly industrializing economies	7.2	4.5	7.8	8.0	7.4	0.9	4.4	2.8
Agricultural product exporters	4.6	3.4	5.7	4.9	4.9	0.9	3.7	2.0
Mineral product exporters	4.1	2.5	4.2	4.6	4.5	1.2	3.7	2.2
Other developing economies	3.8	2.1	4.8	5.0	5.1	0.9	3.4	1.7
<u>Developing market economies by geographic area</u>								
Africa	4.4	1.3	5.8	6.4	5.8	1.4	4.5	2.2
Latin America and the Caribbean	5.4	3.7	5.3	5.8	5.9	0.9	3.8	2.6
Western Asia	4.9	3.2	3.8	6.2	7.4	0.4	4.5	2.2
East and South-East Asia	5.4	2.8	7.4	7.8	6.5	1.0	3.7	1.8
<u>Developing market economies by per capita income category</u>								
High-income economies	5.4	3.5	4.8	6.2	6.6	0.6	3.9	2.4
Middle-income economies	5.4	2.3	7.6	7.8	6.0	1.2	4.4	2.4
Low-income economies	4.1	2.3	5.7	5.7	5.3	1.1	3.6	1.8
<u>Developing market economies by net energy trade</u>								
Capital surplus economies	4.6	3.2	3.4	6.1	9.0	1.2	4.3	2.8
Other net energy exporters	5.6	2.3	6.2	7.3	5.8	0.8	4.3	2.2
Net energy importing economies	5.0	2.8	6.0	6.1	5.8	1.1	3.7	2.0

Source: Department of International Economic and Social Affairs of the United Nations Secretariat.

<sup>a/</sup> Average annual rates of growth measured in 1975 prices and exchange rates.



Annex table 6. Structure of production and labour force in the world economy, 1960 and 1981 a/

Country	Agriculture		Total		Industry		Services		Agriculture	
	1960	1981	1960	1981	1960	1981	1960	1981	1960	1981
World market economies	10.7	6.5	39.0	37.9	28.0	23.5	50.3	55.6	53.3	42.7
<u>World by major economic region</u>										
Developed market economies	6.5	3.7	41.6	37.8	30.5	25.3	51.9	58.6	18.9	7.3
Developing market economies	31.6	16.7	26.0	38.1	15.4	17.1	42.4	45.2	71.1	57.9
<u>Developing market economies by major export orientation</u>										
Least developed economies	60.9	44.6	10.0	17.4	5.4	9.2	29.1	38.0	88.0	80.8
Petroleum-exporting economies	26.5	11.2	28.5	48.1	11.8	12.0	45.0	40.7	66.0	48.4
Newly industrializing economies	17.8	12.3	31.5	33.7	22.4	25.1	50.7	54.0	52.2	34.6
Agricultural product exporters	28.6	20.6	25.9	31.0	18.4	20.6	45.5	48.4	67.5	53.8
Mineral product exporters	19.0	12.7	34.2	35.2	16.8	19.5	46.8	52.1	67.0	54.8
Other developing economies	49.0	34.8	20.0	26.2	14.0	17.2	31.0	38.9	73.0	61.6
<u>Developing market economies by geographic area</u>										
Africa	40.5	22.8	19.0	36.8	8.2	9.2	40.5	40.4	79.1	67.1
Latin America and the Caribbean	16.4	11.1	33.0	34.7	21.2	21.8	50.6	54.2	48.3	34.0
Western Asia	26.9	10.2	34.0	55.0	13.6	9.9	39.1	34.8	66.0	45.1
East and South-East Asia	44.7	27.3	19.3	32.4	13.4	19.2	35.9	40.3	73.6	61.6
<u>Developing market economies by per capita income category</u>										
High-income economies	18.3	9.9	33.4	42.4	18.9	17.8	48.4	47.7	52.1	35.7
Middle-income economies	35.6	22.7	21.2	33.2	13.4	17.2	43.2	44.1	70.1	54.8
Low-income economies	50.1	34.5	17.4	28.2	11.4	14.4	32.5	37.2	76.4	65.6
<u>Developing market economies by net energy trade</u>										
Capital surplus economies	20.3	7.4	43.8	63.6	9.3	5.4	36.0	29.0	55.2	39.2
Other net energy exporters	28.3	13.8	25.1	39.3	12.8	16.3	46.7	46.9	67.2	49.9
Net energy importing economies	33.7	20.9	24.9	30.5	16.8	20.8	41.4	48.6	72.3	60.4

Source: Department of International Economic and Social Affairs of the United Nations Secretariat.

a/ Percentage shares of producing sectors in total gross domestic product measured in current prices.

b/ Percentage shares in total labour force.

Annex table 7. Indicators of the physical productive infrastructure of different major world economic regions, 1970 and 1980

Classification and economy group	Transport:	Utilities:		Communications:	
	commercial vehicles per 1,000 population	Installed electricity capacity in Kws/1000 population		telephones per 1,000 population	
	1980	1970	1980	1970	1980
<b>World</b>					
<u>World by major economic region</u>					
Developed market economies	92.1	1 142	1 757	33.0	55.3
Developing market economies	8.3	56	100	0.9	2.0
<u>Developing market economies by major export orientation</u>					
Least developed economies	1.4	10	13	0.2	0.5
Petroleum-exporting economies	4.1	64	118	1.2	2.6
Newly industrializing economies	..	125	293	2.8	8.2
Agricultural product exporters	..	72	121	1.6	2.8
Mineral product exporters	..	106	142	0.9	2.0
Other developing economies	..	30	48	0.2	0.4
<u>Developing market economies by geographic area</u>					
Africa	2.7	42	57	0.5	1.1
Latin America and the Caribbean	11.0	143	267	3.0	6.1
Western Asia	5.3	89	176	2.0	4.6
East and South-East Asia	1.4	32	58	0.3	0.8

Source: Department of International Economic and Social Affairs of the United Nations Secretariat.

Annex table 8. Investment and saving performance indicators for the world economy, 1960-1983

Period and economy group	Gross capital formation			Gross national saving			External resources		
	Period average share in gross domestic product	Average annual change in percentage share from first year to final year	Implicit incremental capital-output ratio for period	Period average share in gross domestic product	Average annual change in percentage share from first year to final year	Period average share in gross domestic product	Period average share in gross domestic product	Average annual change in percentage share from first year to final year	
<u>Averages and changes from 1961 to 1970 a/</u>									
World market economies	21.9	0.2	4.4	22.2	0.2	-0.3	0.0		
Developed market economies	22.4	0.2	4.7	23.2	0.2	-0.7	0.0		
Developing market economies	18.9	0.2	3.0	16.5	0.2	2.3	-0.0		
Least developed economies	11.6	0.1	4.2	9.4	-0.1	2.2	0.2		
Petroleum-exporting economies	19.5	-0.1	2.2	18.6	-0.2	0.9	0.1		
Newly industrializing economies	22.3	0.4	2.9	16.9	0.8	5.3	-0.4		
Agricultural product exporters	19.1	0.3	3.8	17.2	0.3	1.9	0.0		
Mineral product exporters	17.7	0.0	3.2	15.1	0.0	2.5	0.0		
Other developing economies	17.8	0.1	5.1	15.1	0.3	2.8	-0.2		
<u>Averages and changes from 1971 to 1980 a/</u>									
World market economies	23.1	0.0	6.6	23.2	0.0	0.0	0.0		
Developed market economies	22.9	-0.0	7.4	23.2	-0.1	-0.2	0.1		
Developing market economies	23.7	0.4	4.3	23.4	0.6	0.1	-0.2		
Least developed economies	13.6	0.4	4.5	6.1	-0.2	7.5	0.6		
Petroleum-exporting economies	25.3	0.4	4.3	31.4	1.4	-6.1	-1.0		
Newly industrializing economies	25.1	0.0	3.2	19.8	-0.4	5.3	0.4		
Agricultural exporters	23.4	0.4	5.0	20.4	0.1	3.0	0.3		
Mineral product exporters	19.9	0.2	5.9	13.6	-0.2	6.3	0.3		
Other developing economies	21.3	0.5	6.0	19.8	0.3	1.5	0.2		
<u>Averages and changes from 1981 to 1983 b/</u>									
World market economies	21.8	-0.5	11.1	22.1	-0.4	-0.3	-0.1		
Developed market economies	21.0	-0.4	9.6	22.7	-0.3	-1.6	-0.1		
Developing market economies	24.7	-0.7	13.2	19.5	-1.0	-5.1	0.3		
Least developed economies	15.0	-0.0	6.5	6.2	-0.4	8.8	0.3		
Petroleum-exporting economies	29.2	-0.7	46.1	22.7	-2.5	6.2	1.8		
Newly industrializing economies	24.3	-0.4	9.6	17.5	-0.1	6.9	-0.3		
Agricultural exporters	22.3	-1.2	10.0	19.9	0.1	2.3	-1.3		
Mineral product exporters	17.3	-1.3	16.6	10.7	0.4	7.0	-1.6		
Other developing economies	22.4	0.3	4.7	20.7	0.5	1.7	-0.2		

Source: Department of International Economic and Social Affairs of the United Nations Secretariat.

a/ Measured in current prices and exchange rates.

b/ Measured in 1975 prices and exchange rates.

Annex table 9. Growth of volume of exports and imports in the world economy, 1961-1983 a/  
(Percentage)

Classification and economy group	Rate of growth of exports		Purchasing power of exports		Rate of growth of imports	
	1961-70	1971-80	1961-70	1971-80	1961-70	1971-80
World economies	8.3	5.8	1.6	5.8	8.3	5.8
<u>World by major economic group</u>						
Developed market economies	8.2	6.1	1.9	4.2	8.8	4.9
Developed planned economies	9.3	6.8	4.6	..	8.1	6.8
Developing market economies	7.9	4.2	-0.1	9.4	6.0	8.9
<u>Developing market economies by major export orientation</u>						
Least developed economies	4.8	3.6	2.6	-0.9	5.7	3.8
Petroleum-exporting economies	9.0	1.9	-6.8	13.2	6.4	11.9
Newly industrializing economies	10.0	10.3	6.0	10.2	9.2	9.7
Agricultural product exporters	5.2	5.6	5.4	3.8	5.0	6.2
Mineral product exporters	4.4	4.4	2.3	2.8	6.0	4.1
Other developing economies	3.5	6.3	4.1	3.8	1.2	5.8
<u>Developing market economies by geographic area</u>						
Africa	10.4	3.0	-4.5	6.0	5.8	5.6
Latin America and the Caribbean	5.7	2.1	2.4	2.6	5.4	8.0
Western Asia	8.7	2.4	-6.8	13.1	8.6	12.0
East and South-East Asia	6.9	9.8	5.4	10.3	5.6	10.1
<u>Developing market economies by per capita incomes category</u>						
High-income economies	8.8	2.8	-1.2	10.9	7.0	10.2
Middle-income economies	7.0	8.0	0.9	6.6	6.7	6.9
Low-income economies	3.7	5.4	1.1	6.7	2.7	7.2
<u>Developing market economies by net energy trade</u>						
Capital surplus economies	11.5	1.0	-11.2	14.3	8.9	14.5
Other net energy exporters	6.2	3.5	-1.3	11.2	5.4	9.7
Net energy importing economies	6.3	7.4	5.1	5.5	5.9	6.8

Source: Department of International Economic and Social Affairs of the United Nations Secretariat.

a/ Average annual rate of growth of exports and imports of goods and non-factor services measured in 1975 prices and exchange rates.

Annex table 10. Level and composition of world exports by major commodity groups, 1960, 1970 and 1980

Exporting group	Total exports in millions of US dollars	Percentage composition of total commodity exports								
		Primary commodities by broad group								
		Foodstuffs a/ primary	raw materials b/ Agricultural	Ores and metals c/ Fuels d/	Manufactures e/					
World										
1960	127 870	53.1	19.4	10.8	13.0	9.9	45.7			
1970	312 011	42.6	14.7	5.8	12.8	9.3	55.4			
1980	1 994 668	47.4	11.1	3.8	8.5	24.0	50.9			
Developed market economies										
1960	82 140	41.4	15.2	8.6	13.7	3.9	57.2			
1970	224 236	32.7	12.1	4.7	12.5	3.4	65.7			
1980	1 260 634	32.0	11.4	3.7	10.0	6.9	66.5			
Developing countries										
1960	27 890	90.7	33.6	18.3	10.9	27.9	8.9			
1970	54 944	83.5	26.5	10.0	13.6	33.4	16.3			
1980	558 960	82.0	11.3	3.6	5.1	62.0	17.2			
Centrally planned economies										
1960	12 970	49.6	15.0	8.7	13.4	12.5	49.5			
1970	30 625	40.2	10.9	5.8	13.9	9.6	51.4			
1980	155 116	46.8	6.4	4.7	8.5	27.2	46.7			
Latin America										
1960	10 170	96.9	42.6	9.5	12.9	31.9	3.0			
1970	17 510	90.2	41.0	5.8	18.7	24.7	9.5			
1980	140 163	85.2	28.6	3.0	10.9	42.7	13.9			
Africa										
1960	5 310	93.3	44.9	23.9	19.9	4.6	6.2			
1970	12 021	93.3	29.1	10.9	19.6	33.7	6.6			
1980	93 524	95.2	10.9	3.5	5.3	75.5	4.0			
West Asia										
1960	4 250	94.8	5.2	3.3	0.9	85.4	5.2			
1970	10 581	95.7	5.9	3.9	1.4	84.5	4.3			
1980	210 711	97.1	1.3	0.5	0.7	94.6	2.9			
East and South-East Asia										
1960	7 660	78.8	29.8	34.3	7.5	7.2	20.8			
1970	14 355	57.4	21.2	19.0	10.1	7.1	41.9			
1980	142 079	48.3	12.5	8.8	6.3	20.7	49.7			

Source: Department of International Economic and Social Affairs of the United Nations Secretariat, based on UNCTAD, Handbook of Trade and Development Statistics, 1984.

a/ SITC 0+1+22+4.

b/ SITC 2-22-27-28.

c/ SITC 27+28+67+68.

d/ SITC 3.

e/ SITC 5 to 8 less (67+68).

Annex table 11. Level and composition of world imports by major commodity groups, 1960, 1970 and 1980

Importing group	Total imports in millions of US dollars	Percentage composition of total commodity imports								
		Primary commodities by broad group								
		Foodstuffs a/ raw materials	Agricultural raw materials b/ raw materials	Ores and metals c/ raw materials	Fuels d/ raw materials	Manufactures e/ raw materials				
World										
1960	127 870	53.1	19.4	13.0	9.9	45.7				
1970	312 011	42.6	14.7	12.8	9.3	55.4				
1980	1 994 668	47.4	11.1	8.5	24.0	50.9				
Developed market economies										
1960	82 790	57.6	20.9	14.4	10.0	40.2				
1970	220 019	44.7	15.1	13.8	9.7	53.9				
1980	1 342 999	49.9	10.2	8.7	27.1	48.9				
Developing countries										
1960	29 300	40.1	17.4	7.4	9.9	55.7				
1970	57 339	34.0	13.7	8.1	8.0	61.8				
1980	463 750	40.3	12.0	7.0	18.4	57.2				
Centrally planned economies										
1960	12 910	53.7	16.9	16.4	7.2	45.7				
1970	28 637	39.7	13.4	13.7	5.8	56.4				
1980	143 829	45.0	16.1	11.3	13.2	53.1				
Latin America										
1960	10 040	38.3	12.6	7.7	14.3	58.9				
1970	18 616	34.0	11.0	8.3	11.7	63.8				
1980	125 391	44.0	10.7	6.5	24.9	54.5				
Africa										
1960	6 470	35.0	19.0	5.7	7.9	62.3				
1970	11 836	28.7	14.3	7.3	4.7	69.3				
1980	84 437	33.9	15.9	6.3	9.5	64.3				
East and South-East Asia										
1960	9 590	45.6	20.6	8.1	7.0	49.3				
1970	18 299	40.2	16.4	9.2	7.2	56.9				
1980	149 591	47.2	10.5	8.0	23.6	51.7				
West Asia										
1960	3 040	41.0	19.9	8.0	9.4	54.9				
1970	7 058	31.4	14.1	7.8	6.5	63.6				
1980	96 647	32.3	13.0	7.2	10.5	65.9				

Source: Department of International Economic and Social Affairs of the United Nations Secretariat, based on UNCTAD, Handbook of Trade and Development Statistics, 1984.

a/ SITC 0+1+22+4.

b/ SITC 2-22-27-28.

c/ SITC 27+28+67+68.

d/ SITC 3.

e/ SITC 5 to 8 less (67+68).

Annex table 12. Historical pattern of world exports and imports by origin and destination 1960, 1970 and 1980 (Percentage share of total world trade in specified year)

Year and region group	Developed market economies	Developing market economies	of which					Centrally planned economies	Total exports
			Latin America	Africa	West Asia	South and South-East Asia			
<u>1960</u>									
Developed market economies	47.0	17.0	6.1	4.2	1.8	5.0	2.3	66.8	
Developing countries	15.5	4.8	1.5	0.7	0.5	2.0	1.0	21.4	
Latin America	6.2	1.45	1.31	0.08	0.02	0.03	0.2	7.9	
Africa	3.2	0.53	0.03	0.27	0.07	0.14	0.3	4.1	
Western Asia	2.4	0.72	0.04	0.17	0.27	0.22	0.1	3.3	
South and South-East Asia	3.4	2.05	0.12	0.15	0.12	1.64	0.4	5.9	
Centrally planned economies	2.1	1.1	0.2	0.2	0.1	0.5	8.5	11.7	
Total imports	64.7	22.9	7.9	5.0	2.4	7.5	11.7	100.0	
<u>1970</u>									
Developed market economies	55.2	13.3	4.5	2.9	1.6	4.1	2.9	71.8	
Developing countries	12.7	3.48	1.17	0.49	0.41	1.36	1.1	17.6	
Latin America	4.1	1.07	0.97	0.03	0.01	0.04	0.4	5.6	
Africa	3.1	0.41	0.07	0.21	0.03	0.08	0.3	3.8	
Western Asia	2.3	0.68	0.07	0.08	0.25	0.26	0.1	3.3	
South and South-East Asia	2.9	1.31	0.05	0.15	0.28	0.96	0.3	4.6	
Centrally planned economies	2.4	1.6	0.3	0.4	2.26	0.4	6.4	10.5	
Total imports	70.5	18.4	6.0	3.8	2.3	5.9	10.3	100.0	
<u>1980</u>									
Developed market economies	44.8	14.7	3.8	3.3	3.4	4.1	3.1	63.2	
Developing countries	19.6	6.9	2.2	0.7	1.1	2.9	1.0	28.0	
Latin America	3.5	1.44	1.13	0.13	0.11	0.07	0.4	5.5	
Africa	3.9	0.59	0.29	0.15	0.09	0.05	0.2	4.6	
Western Asia	7.6	2.61	0.58	0.17	0.55	1.28	0.2	10.5	
South and South-East Asia	4.4	2.29	0.18	0.21	0.37	1.50	0.3	7.1	
Centrally planned economies	2.8	1.6	0.3	0.3	0.3	0.5	4.3	8.7	
Total imports	67.3	23.2	6.3	4.2	4.8	7.5	8.4	100.0	

Source: Department of International Economic and Social Affairs of the United Nations Secretariat, based on UNCTAD, Handbook of Trade and Development Statistics, 1984.

Annex table 13. Human resources and skills of different world economic regions, 1960 and 1980

Classification and economy group	Dependency ratio		Adult literacy rate <u>a/</u>	Population per physician <u>a/</u>	Population density <u>b/</u>	
	1960	1980			1960	1980
<u>By major economic region</u>						
Developed market economies	2.35	2.26	95.1	527	19.7	23.7
Developing market economies	2.54	2.79	46.3	2 747	20.6	33.8
<u>By major export orientation</u>						
Least developed economies	2.37	2.55	24.1	14 634	12.6	21.1
Petroleum-exporting economies	2.94	3.19	50.4	2 380	15.7	26.7
Newly industrializing economies	3.05	2.91	79.1	1 499	12.0	20.0
Agricultural product exporters	2.35	2.62	68.3	2 631	20.2	33.6
Mineral product exporters	2.68	2.95	55.1	3 758	6.7	11.2
Other developing countries	2.39	2.70	32.6	2 690	119.3	188.3
<u>By geographic area</u>						
Africa	2.45	2.69	32.2	4 294	8.9	15.3
Latin America and the Caribbean	3.05	3.13	77.4	1 365	10.1	17.2
Western Asia	2.66	3.09	50.0	1 738	13.0	23.1
East and South-East Asia	2.45	2.71	42.1	3 364	83.5	132.8

Source: Department of International Economic and Social Affairs of the United Nations Secretariat.

a/ Data relate to most recent year available.

b/ Expressed in population per square kilometre.



VII. THE CRISIS IN AFRICA

321. The present section outlines the current situation in Africa and presents projections for the future. It briefly examines the present state of development of the countries of Africa, as well as the food crises that the continent has suffered, and the structural changes that have occurred in Africa during the past quarter of a century; measures the savings and trade gaps, the flow of foreign aid and the external debt; and examines the bleak development prospects for Africa to the end of the century. The presentation is necessarily broad and general and is intended to provide background to the overall critical problems facing most of the countries of Africa today.

A. Overview of the current situation

322. Africa is the only continent where standards of living have declined over the past decade and are continuing to decline. As shown in table 58, most African countries have suffered declining real per capita GDP since 1980, and the low-income sub-Saharan countries have suffered large declines since 1970. <sup>1/</sup> The real per capita GDP of those countries was about 16 less in 1983 than in 1970.

Table 58. Growth of per capita GDP in sub-Saharan Africa, 1970-1983  
 (Average annual percentage change)

Country group	1960-1970	1970-1980	1981	1982	1983
All sub-Saharan countries	1.3	0.7	-4.0	-3.3	-3.8
Low-income sub-Saharan countries	1.5	-0.9	-1.9	-2.5	-0.3

Source: World Bank, Toward Sustained Development in Sub-Saharan Africa, (Washington, D.C., 1984), table A.1.

323. The reasons for the decline are complex and are to be found in a number of interacting internal and external factors. Among the most important external factors that have hampered African development are the following: (a) the 1973 and 1979 increases in energy prices, which absorbed a great share of the foreign exchange earnings of the oil-importing countries; (b) the recession in the developed countries, which reduced demand for exports of the African countries and resulted in declining terms of trade of those countries; (c) the reduced flow of capital and aid from the developed countries and the restrictions that the latter imposed against the exports of developing countries which have given rise to (d) a very serious debt-servicing problem. The devastating drought currently affecting more than half of the African countries has proved a serious blow and has almost

completely disrupted development efforts, as country after country has had to deal with the critical food shortage and famine brought about by drought.

324. To these external and climatic factors must be added a number of internal factors that have also contributed to the present crisis. 2/ Some of the most important of these are: (a) rapid population growth in most African countries, which has outstripped their ability to increase production in general and food production in particular; (b) inappropriate prices (including exchange rates) prevailing in some countries, which have discouraged the domestic production of agricultural commodities and minerals; (c) ill-advised industrialization programmes in many African countries within the confines of limited domestic markets rather than in a broader co-operative regional context; and (d) lack of experience on the part of Governments and political disturbances.

#### 1. The food crisis

325. The severe drought faced by many countries during the past several years has occurred against the background of a general long-term deterioration in the food situation in Africa, reaching back to the colonial period. Population growth has outstripped food production for almost 15 years, and prospects for the future are poor without drastic action to reverse the trend. As table 59 indicates, total food production has declined by about 1 per cent per year since 1971 in almost every subregion of Africa.

326. The food situation in Africa is in sharp contrast to that in Asia and Latin America where per capita food production has increased at an annual average of about 0.6 per cent during the past 25 years. The difference is due only in part to the fact that total food production in Africa has grown at a smaller rate than in Asia and Latin America. More important, quantitatively, is the fact that Africa's current average annual rate of population growth of 3.2 per cent is the highest in the world. Africa is also the only continent reporting a rising average rate of population growth. At the present rate, the population of Africa, which stood at about 440 million in 1980, will reach nearly 840 million by the turn of the century.

327. In 1984 the United Nations identified more than half of the African countries as facing exceptional food problems. FAO has found that per capita grain production in those countries has declined by about 2 per cent per year ever since 1970 and dipped below the 140 kilograms per capita considered a minimum for a healthy diet in 1975, and it has continued to fall since then. In 1984, grain production in Africa fell below 100 kilograms per capita for the first time. FAO has estimated that in 1985 the countries most affected by critical food shortages would require food aid of 5.2 million tons, as compared to donor pledges of 3.7 million tons. 3/ About one in five people in Africa are currently fed by food imports. Without greater self-sufficiency in food, the generation by those countries of a sufficiently large export surplus on goods and services, in general, or to attract enough foreign investments to cover the food deficit by commercial food imports will be increasingly impossible in the long term.

Table 59. Growth of total and per capita food production, 1971-1983  
(Average annual percentage change)

Subregion	Growth of total food production				
	1971-1980	1980-1981	1981-1982	1982-1983	1980-1983
North-eastern	2.1	6.5	-5.2	5.2	1.2
North-western	1.4	-13.1	13.0	-4.5	0.1
Western	2.1	3.0	3.4	1.0	2.7
Central	1.7	2.0	2.2	0.5	2.1
Eastern	1.7	4.3	1.2	0.6	2.1
Southern	-0.5	12.3	1.3	3.1	4.7
Total*	1.8	1.0	3.7	0.2	2.1

  

Subregion	Growth of per capita food production				
	1971-1980	1980-1981	1981-1982	1982-1983	1980-1983
North-eastern	-0.5	3.7	-7.7	2.5	-1.4
North-western	-1.5	-15.9	9.4	-7.6	-3.1
Western	-0.9	-0.2	0.1	-2.1	-0.5
Central	-0.8	-0.7	-0.4	-2.1	-0.6
Eastern	-1.2	1.1	-1.9	-2.5	-1.0
Southern	-3.1	9.2	-1.5	0.2	1.8
Total*	-1.1	-2.0	0.6	-2.9	-0.9

Source: Economic Commission for Africa, Situation of Food and Agriculture in Africa (E/ECA/CM.10/19) pp. 3-4.

\* Total Africa excludes North-eastern Africa.

328. The causes of the food crisis in Africa are three-fold. First, Africa is experiencing a higher rate of population growth than any other continent. Food production must increase by at least 3 per cent annually simply to maintain the quantity of food available per person, and that does not take into consideration the need to improve nutritional standards. However, an increase in food production by more than 3 per cent annually over an extended period of time has only been possible in a few countries, and generally requires major increases in the use of fertilizer, capital equipment, irrigation and the introduction of appropriate new seeds and technologies.

329. Second, Africa may be undergoing climatic changes and soil erosion on a scale that is perhaps not yet fully appreciated. Forests are being cut for fuel and lumber at a devastating rate. For example, 80 per cent of the Gambia was covered by forest in 1920; this was down to 40 per cent in 1966, and 10 per cent today. Deforestation has resulted in widespread soil erosion and changes in general climatic and rain patterns. Specifically, as forests are cut down, water runoff increases, which reduces moisture in the air and the formation of clouds, leading to less rain and resulting in topsoil that is dry and easily blown away. Each drought in Africa seems to become more serious than the previous one. The borders of the Sahara are expanding, and 60,000 to 70,000 sq. km. of useful agricultural land are turning into desert each year. Viewed from this perspective, the present drought, devastating as it is, may be only an episode in a much more deadly long-term general deterioration of the African environment, which the return of the rains may only partially and temporarily alleviate.

330. Third, African Governments have generally neglected agriculture since independence. A majority of African countries devote to agriculture less than 10 per cent of their public expenditures for all sectors. They also tend to set low agricultural prices, at least partly to placate urban dwellers, which has discouraged food production.

331. Those three factors are now converging and reinforcing each other in a truly devastating fashion. It is now becoming clear that without immediate and massive action on the part of the African Governments and the international community to attack all three problems forcefully and simultaneously, the deterioration of African agriculture in general, and of food production in particular, will continue and may even accelerate.

## 2. Structural changes

332. Since independence, most African countries have been undergoing structural changes, whereby the proportion of GDP and labour force in agriculture has declined while that in industry and services has increased. As shown in table 60, this structural change has proceeded at about the same rate in sub-Saharan Africa as in the low-income developing countries as a whole.

Table 60. Distribution of gross domestic product  
 (Percentage)

	<u>Agriculture</u>		<u>Industry</u>		<u>Manufacturing</u>		<u>Services</u>	
	1960	1982	1960	1982	1960	1982	1960	1982
Sub-Saharan Africa	47	33	17	27	7	8	36	40
All low-income developing countries	49	37	26	32	13	14	25	31

Source: Economic Commission for Africa, Situation of Food and Agriculture in Africa, p. 31.

333. Table 60 shows that the share of GDP from agriculture declined from 47 per cent in 1960 to 33 per cent in 1982 in sub-Saharan Africa, as compared with a decline from 49 per cent in 1960 to 37 per cent in 1982 in all low-income developing countries. On the other hand, the share of GDP produced by industry rose from 17 per cent to 27 per cent in sub-Saharan Africa as compared with a rise from 26 per cent to 32 per cent in all low-income countries. While the percentage of GDP arising from the manufacturing sector, the most dynamic part of the industrial sector, has increased only very slightly during the period 1960-1982 both in Africa and in other low-income developing countries, that percentage is only about half as large for the countries of sub-Saharan Africa as for low-income developing countries as a whole and is even lower in Africa relative to all developing countries together. Thus, in this respect, Africa compares unfavourably even with the other low-income developing countries. In services, the share of GDP increased from 36 to 40 per cent in sub-Saharan Africa and from 25 to 31 per cent in low-income developing countries as a whole.

334. Accompanying the structural change in production, there has been an intersectoral shift in the labour force of the developing countries of Africa, as shown in Table 61 below. The percentage of the labour force in agriculture declined from 80 per cent in 1960 to 69 per cent in 1979 (the last year for which data are available). However, the percentage of the labour force employed in industry almost doubled over the same period, rising from 7.5 per cent in 1960 to 13.4 per cent in 1979. However, since the number of industrial jobs in Africa was relatively small at the beginning of the period, even a doubling of the African labour force in industry by 1979 meant that the actual number of industrial jobs created has fallen far short of the very large increase in the urban labour force due to population growth and rural-urban migration. As a result, most of the increase in the urban labour force in Africa over this period found only precarious employment in the informal service sector.

Table 61. Structure of the labour force in developing countries of Africa  
(Percentage)

Year	Agriculture	Industry	Services
1960	80.0	7.5	12.6
1979	69.0	13.4	17.6

Source: Economic Commission for Africa, Survey of Economic and Social Conditions in Africa, (Addis Ababa, March 1984) p. 119.

335. As with food production, total agricultural output grew at an annual rate of only about 2 per cent as opposed to annual population growth of over 3 per cent, thus leading to a decline in per capita output of over 1 per cent annually over the past quarter of a century. Since more than two thirds of the population lives off the land, the poor performance of this sector meant a poor performance for the African economies as a whole. This was the result of the convergence of a number of internal and external forces, including poor pricing policies and neglect of agriculture by the African nations themselves, recurrent droughts, and sluggish demand in developing markets for the agricultural exports (mostly primary commodities) of the African countries. Thus, serious constraints, both on the supply and demand side, have operated in agriculture in Africa almost uninterruptedly over the past two decades.

336. Specifically, the prices received by farmers were kept artificially low and failed to keep up with the prices of the inputs farmers had to purchase; farm support programmes for technological advice, extension services, marketing and storage facilities were grossly inadequate or even counterproductive; and while agriculture employed over two thirds of the labour force and contributed over one third of GDP, it received only 10 per cent of total investments. The damage to agriculture resulting from these policies was magnified by the serious drought that has affected most of Africa in the early 1970s and again during the past several years. Superimposed on these policies and natural disasters was the recession in industrial countries, which greatly reduced the demand for agricultural products from Africa.

337. Yet, developmental problems in Africa have not been confined to agriculture. The process of industrialization in Africa has also been beset by serious difficulties and stagnation. Industrialization has failed to provide the dynamic force required for the structural transformation of the African economies. Today, Africa is the least industrialized region of the world, having to import practically all investment goods and most types of modern consumer goods. Though Africa has vast resources of iron ore, limestone, phosphate, and bauxite, it must still import most of the steel, cement, fertilizer and aluminum that it needs.

338. The share of GDP from manufacturing in Africa is only about 8 per cent and is stagnating (see table 60 above). Manufacturing consists primarily of light industries, such as textiles, and they face a number of problems that make them quite inefficient by world standards. Plants are small, management is inexperienced, the level of skills is low, maintenance is inadequate, plants often use technologies that are too capital-intensive and inappropriate to the relative abundance of labour in Africa. The level of capacity utilization is often as low as 30 per cent owing to the lack of foreign exchange to purchase required imported inputs. Public manufacturing enterprises are often not run efficiently, and support for domestic and foreign entrepreneurs is often lacking or inadequate.

339. During the past decade, Africa has also suffered competition on world markets from other developing countries for the few simple manufactures that it exports. As a result of high costs, low quality, recession in industrial countries and trade restrictions, the ratio of manufacturing exports to the total exports of the African countries is lower today than in 1970. The failures in agriculture have been compounded by the unfulfilled hopes in industry.

### 3. Social change

340. Despite the foregoing economic difficulties, some improvements in social conditions in Africa have occurred. The crude death rate (per 1,000 people) in sub-Saharan Africa declined from 25 in 1960 to 17 in 1980, and from 43 to 23 for children 1 to 4 years old. The number of people per physician declined from about 53,000 in 1960 to about 21,000 in 1980. Significant improvements also occurred in education where the number of children enrolled in primary school as a percentage of their age group jumped from 36 in 1960 to 78 in 1980, and in secondary education from 3 to 15.

341. Nevertheless, suffering, hunger and desperation are commonplace in Africa today. Twenty per cent of the population still eats less than the minimum required for subsistence. Average per capita calorie intake was only 90 per cent of the minimum requirements, and 86 per cent in the poorer countries in 1982. Furthermore, while the number of people per physician has decreased sharply, it is still three times the average for all low-income developing countries of the world, and the number of people per nursing person is six times larger.

342. Rapid population growth and rural-urban migration have accelerated the pace of urbanization in Africa. The urban population, which was 11 per cent of the total in sub-Saharan Africa in 1960, doubled to 22 per cent in 1982. In 1960 there were only three cities in sub-Saharan Africa with a population of over 500,000, but there were 28 in 1982. Rapid urbanization was accompanied by overcrowding, unemployment, underemployment, crime, suffering, and destitution. In 1977 about 40 per cent of the active population of Africa was underemployed 4/ and the situation has almost certainly worsened in the 1980s.

B. Development gaps

343. Scarcity of investment resources and of the foreign exchange required to import needed raw materials, intermediate products and capital goods can severely limit the rate of socio-economic development. While these constraints are present in all developing countries, they are particularly serious in a region as poor as Africa. Thus, it is important to analyse the gap between savings and investment and between exports and imports and to examine the way that such gaps were closed by capital inflows in the form of foreign investments and foreign aid. This analysis provides the background for the growth projections for Africa, discussed below.

1. Savings gap

344. Table 62 shows consumption, savings and investment as a percentage of GDP for the low-income countries of Africa, compared with the low-income countries of Asia, and all developing countries together.

Table 62. Consumption, investment and savings as a percentage of GDP, 1970, 1975 and 1981

Country group	1970	1975	1981
<b>All developing countries</b>			
Consumption	78.9	76.7	76.8
Investment	22.7	26.3	27.0
Savings	21.1	23.3	23.2
<b>Low-income Asian countries</b>			
Consumption	77.1	75.7	76.2
Investment	23.7	25.7	25.8
Savings	22.9	24.3	23.8
<b>Low-income African countries</b>			
Consumption	86.6	92.5	94.1
Investment	15.5	16.4	16.6
Savings	13.4	7.5	5.9

Source: World Bank, World Development Report 1984, p.24.



345. The share of consumption in GDP was 94 per cent for the low-income African countries in 1981, compared with 76 per cent for the low-income Asian countries and 77 per cent for all developing countries as a group. As a result, savings were much lower in Africa than elsewhere. In fact, savings practically collapsed in the low-income countries of Africa after 1970, declining from nearly 16 per cent of GDP in 1970 to less than 8 per cent in 1975 and to 6 per cent in 1981. This is not surprising; when per capita incomes are as low as they are in Africa today and declining, saving even 6 per cent of GDP is indeed a great sacrifice.

346. Even though the savings rate declined sharply in the sub-Saharan African countries after 1970, the rate of investment remained about 16 to 17 per cent of GDP because of an increase in capital inflows, private and public, from abroad, but this rate of investment was much lower than the rate in other groups of developing countries. Since the productivity of investments was also generally lower in Africa, the rate of growth of GDP was smaller than elsewhere. This, combined with a much larger rate of population growth, resulted in per capita GDP falling in Africa since 1973, while rising, on the average, in other developing countries.

347. Africa thus is caught in a vicious circle or poverty trap. Low incomes lead to low savings. Low savings lead to low investments, and low investments and productivity lead in turn to low income. Under these circumstances, inadequate foreign aid only somewhat alleviated the problem but did not break the dynamics of poverty in the low-income countries of Africa.

## 2. Trade gap

348. In general, developing countries do not earn sufficient foreign exchange through exports to be able to import all the raw materials, intermediate products and capital goods required for development. The resulting trade gap can be closed through private capital inflows; however, more often than not, private capital inflows are not sufficiently large and must be supplemented by foreign aid. Table 63 below shows that the export performance of the low-income African countries since 1973 was poor, both by historical standards and relative to the export performance of other developing countries. The performance was especially poor for exports of manufactured goods.

Table 63. Export performance of developing countries, 1965-1985  
 (Average annual percentage change)

Country group	Merchandise exports		
	1965-1973	1973-1980	1980-1985 a/
All developing countries	6.3	3.1	5.5
Low-income	3.3	5.4	5.0
Low-income Asia	2.9	7.6	5.4
Low-income Africa	4.0	-1.3	3.5

  

Country group	Exports of manufactures		
	1965-1973	1973-1980	1980-1985 a/
All developing countries	14.9	10.6	8.1
Low-income	6.4	6.9	8.2
Low-income Asia	6.6	7.4	8.5
Low-income Africa	4.5	0.5	0.9

  

Country Group	Exports of primary goods		
	1965-1973	1973-1980	1980-1985 a/
All developing countries	5.0	0.9	4.0
Low-income	1.8	4.5	2.6
Low-income Asia	0.3	7.9	2.1
Low-income Africa	4.0	-1.4	3.8

Source: World Bank, World Development Report 1984, pp. 36-37.

a/ The 1983-1985 figures in the 1980-1985 averages are estimates.

349. While the merchandise exports of the low-income African countries grew at a more rapid rate than the merchandise exports of all low-income developing countries over the period 1965-1973, they declined during 1973-1980, and their growth was much smaller than for other developing countries in 1980-1985. Still worse was the relative performance of the low-income African countries in the export of manufacturing goods, which has hardly grown since 1973, as compared with the significant growth for other developing countries. Only in the export of primary commodities did the low-income African countries fare better than other low-income developing countries, but only in the earlier and more recent periods. However, the exports of primary commodities suffer from high commodity and geographic concentration, low income-elasticities and fluctuating and declining relative prices, and do not seem reliable as the main engine of growth for the low-income African countries.

350. With export earnings of African countries growing at a slow rate compared with historical rates and in relation to the growth of the export earnings of other developing countries and with the need for imports even greater, the African countries have had to severely limit the amount of goods imported. This, in turn,

/...

severely constrained their rate of development, particularly during the past decade. However, this left a huge trade gap between the need for imports and the ability to pay for them.

351. The poor export performance of the low-income African countries can be explained mostly by the low efficiency of their industries and increasing competition from other developing countries, but also by the recession in the industrial countries and the restrictions that the latter imposed on the labour-intensive exports of all developing countries. The decline of trade in the terms of the low-income African countries contributed to the low export-based ability of those countries to import. From 1970 through 1982, the terms of trade of the low-income African countries, other than the oil exporters, deteriorated by over 13 per cent.

### 3. Development assistance and external debt

352. While foreign aid allowed African countries to maintain a rate of investment between 16 and 17 per cent of their GDP after 1970, when their savings rate declined well below 10 per cent of GDP, the level of foreign aid has stagnated in real terms over the past decade. Foreign aid now accounts for 3.8 per cent of the GDP of the low-income African countries and 13.1 per cent of their investment. The rest of the investment-savings gap was closed by private capital flows. In 1982, the low-income African countries received foreign aid equal to \$19 per capita and a total capital inflow, public and private, of \$33.6 per capita.

353. Stagnation in the level of real foreign aid in the face of sluggish export earnings and rising needs for development and emergency food meant that the African countries had to borrow as much as they could, to the point that they now face a serious foreign debt problem. By 1982, the low-income African countries had a total outstanding foreign debt higher than \$48 billion. The most indebted sub-Saharan African countries are Nigeria, the Ivory Coast, the Sudan and Zaire, each with a debt of over \$5 billion in 1982. Thus, while the foreign debt of the Latin American countries is much larger in absolute terms, many African countries also have a very heavy foreign debt burden relative to their levels of GDP and exports (see table 64).

Table 64. Foreign debt service of developing country groups

	As a percentage of GDP		As a percentage of exports of goods and services	
	1970	1982	1970	1982
Low-income African countries	1.2	2.7	5.1	12.6
All low-income countries	1.1	1.1	11.3	8.8
All middle-income developing countries	1.6	3.7	9.2	16.8
All upper-income developing countries	1.5	4.4	10.7	16.9

Source: World Bank, Toward Sustained Development in Sub-Saharan Africa, p. 69.

354. Debt service as a percentage of GDP and of exports of goods and services more than doubled from 1970 to 1982 for the low-income African countries, and by 1982 it was much larger than the debt service of all low-income developing countries. While the middle- and upper-income developing countries have larger debt service burdens, these countries include some very efficient and successful exporters, including the newly industrializing countries and areas, such as Brazil, Hong Kong, the Republic of Korea and Singapore, which may be in a better position to deal with their debt burdens than the low-income African countries. A more appropriate comparison of the debt service problem of the low-income African countries is with the other low-income developing countries, most of which are in a much better debt position.

### C. Development prospects

355. The development prospects for Africa can be assessed by projecting historical trends, and comparing them with the Lagos Plan for Action for the Implementation of the Monrovia Strategy for the Economic Development of Africa (A/S-11/14, annex I) and the recently emerging consensus on the actions most urgently required of the African nations and the international community. The comparison will show why the continuation of the historical trends is clearly unacceptable and why a new development strategy for Africa may be required.

#### 1. Projections of historical trends

356. To illustrate the range of development and growth possibilities for the world's major country groups in the period 1985-1995, the World Bank has prepared two scenarios, a low-growth and a high-growth one. The low-growth scenario is based on the assumption that the developed countries do not succeed in improving their performance of the past decade, so that their GDP continues to grow at a yearly rate of only 2.5 per cent during the period 1985-1995. By contrast, the high-growth scenario assumes that the GDP of developed countries grows at a rate of 4.5 per cent per year as in the 1950s and 1960s. Under the high-growth scenario, unemployment and protectionist pressures in developed countries are assumed to subside, so that the exports of developing countries can expand more rapidly and their debt burden can be eased. Under both scenarios, development assistance is assumed to remain at historical levels. The World Bank projections under the two scenarios are shown in table 65 below.

Table 65. Growth of GDP per capita, low- and high-growth scenarios, 1985-1995

(Average annual percentage change)

Country group	Low	High
Developing countries	2.7	3.5
Low income	2.7	3.4
Asia	3.0	3.7
Africa	-0.5	-0.1
Middle-income oil importers	2.6	3.6
Major exporters of manufactures	3.3	4.4
Others	1.0	1.5
Oil exporters	2.0	2.7
Industrial countries	2.0	3.7

Source: World Bank, World Development Report 1984, p. 36.

357. As shown in table 65, the low-income African countries would continue to suffer a decline in their real per capita GDP over the period 1985-1995, under either the low- or the high-growth scenario. The real per capita GDP of the low-income countries of Africa would decline by 0.5 per cent annually under the low-growth scenario and by 0.1 per cent annually under the high-growth scenario. The reason is that the commodity exports of the low-income African countries are projected to increase only slightly under either scenario, and capital inflows into these countries are not expected to be higher than historically. It should be noted that the low-income countries of Africa would be the only country group suffering a decline in their GDP per capita under either scenario. This contrasts with the moderate annual per capita GDP growth of 2.7 and 3.5 per cent under the low and the high-growth scenarios, respectively, in the developing countries as a group, and similar rates in the low-income Asian countries.

358. The World Bank projections for Africa are supported by LINK baseline projections, which estimate the average annual growth of real GNP in 1986-1990 at 4.4 per cent for all developing countries as a group, 5.7 per cent for Asia, including China, but only 3.3 per cent for Africa. With an annual rate of population growth exceeding 3 per cent, real per capita GDP in Africa can, therefore, be expected to stagnate over the next five years. The prospects for African countries are worse if the United States dollar depreciates more than assumed in the baseline projections and trade protectionism increases.

359. According to the long-term projections up to the year 2000 prepared by the Department of International Economic and Social Affairs of the United Nations Secretariat, the annual rate of increase in real GDP in Africa is projected at about 2.8 per cent. This baseline scenario also implies declining real per capita GDP in Africa, though the decline is expected to diminish gradually by the end of the decade. This will be accompanied by an investment-savings gap rising from 3.9 per cent of GDP between 1985 and 1990 to 4.1 per cent between 1990 and 1995, and finally to 4.4 per cent in the period 1995-2000.

360. In contrast, a detailed, pessimistic scenario for Africa from 1983 to 2008 has been prepared by the Economic Commission for Africa (ECA) under the assumption that the recent socio-economic trends at the national, regional and international levels would continue. Population was treated as exogenous and the high variant of the population projections, with annual population growth of 3.2 per cent in Africa, was used. Under this scenario, the number of unemployed in the formal wage labour markets in Africa would rise from about 13 million workers in 1983 to about 45 million in 2008. Rural underemployment, which was about 64 million workers or 40 per cent of the rural labour force in Africa in 1983, would rise to over 200 million, over 70 per cent, of the labour force by 2008.

361. This scenario, based on historical trends, also projects that almost 60 million tons of cereals per year would have to be imported by Africa in 2008 at a cost of \$14 billion in 1980 prices, compared with commercial imports of 7 million tons in 1983 at a cost of \$1.5 billion. Oil imports would still represent over 50 per cent of total oil consumption in oil-importing African countries. African countries would still have to import 97 per cent of their required tractors, 96 per cent of their automobiles, 59 per cent of their iron and steel, 37 per cent of their fertilizer and 12 per cent of their cement. Exports from Africa would continue to consist mostly of coffee, cocoa, tobacco, tea, copper, bauxite, iron ore, petroleum and natural gas, most of which face decreasing demand, declining prices and production constraints. As a result, most African countries would be unable to earn enough foreign exchange through exports to pay for all of their import requirements, yet could not expect capital inflows sufficient to cover their trade deficits. Thus the continuation of the present trends would have devastating effects on Africa.

## 2. The Lagos Plan of Action

362. These gloomy prospects for Africa for the next decade or so are clearly unacceptable to the African countries. In contrast, the Lagos Plan of Action adopted in April 1980 by the Assembly of Heads of State and Government of the Organization of African Unity (OAU), advocates a bold new growth strategy for Africa. It calls for a change from reliance on the export of a few primary commodities to massive improvements in agriculture and rapid industrialization. Industrialization would be based on the processing of local raw materials and on the production of needed industrial goods for an enlarged market resulting from African economic integration. Thus, this plan calls for an African solution to the development crisis in Africa and for a "willed future" based on self reliance and co-operation among African nations. The Plan of Action stems from the realization that exports of primary commodities to developed nations and foreign capital inflows cannot be relied upon to be engines of growth for the African countries in the coming decades, just as they were not in the past.

363. The Lagos Plan of Action calls for policies to reduce population growth, even though such reduction would not have much effect on living conditions in the short run. In education, the Plan of Action calls for the construction of 80,000 schools, each capable of educating 2,000 students, and for the training of 4 million teachers. The Plan of Action also calls for increasing agricultural production with the aim of making Africa self-sufficient in food by the year 2008. This requires a massive increase in agricultural investments necessary to introduce new technologies and seeds, to provide more fertilizers and pest control, to increase the areas under cultivation and irrigation, to engage in research and to provide extension services to small farmers. It also recognizes that higher prices for agricultural commodities are necessary to stimulate production.

364. The Lagos Plan of Action calls for industrialization based on the processing of domestic raw materials and the production of most manufactured goods that are now imported (i.e., import substitution). This would be achieved by the expansion of the domestic market through African integration schemes, development and adoption of new technologies more appropriate for the local availability of inputs, adoption of factor prices that adequately reflect relative input scarcities, avoidance of excessively capital-intensive and otherwise wasteful projects, provision of more technical training and substantial improvement of transportation and communications among African countries. In the field of energy, the Plan of Action calls for the expansion of petroleum exploration with the resulting increase in production going to meet petroleum needs in Africa. In addition, Africa is to strive to increase hydroelectric power and coal and natural gas production to fully satisfy African needs. The Plan of Action calls for the adoption of more realistic exchange rates, greater access for African products to the developed countries' markets, and an increase in foreign aid to 0.7 per cent of GNP of the developed countries and for an additional 0.15 per cent earmarked for aid to the least developed countries. However, African countries are to rely mainly on the expansion of domestic production and intra-African trade to close their external trade gaps.

365. According to the projections by the ECA based on the Lagos Plan of Action, Africa should be able to reduce unemployment in its formal wage sector from the estimated 45 million workers in the year 2008 under the scenario based on present trends to 27 million or about 15 per cent of its wage labour force. The Lagos Plan of Action also calls for Africa to satisfy all of its demand for fertilizers and cement by domestic production by the year 2008, 80 per cent of its demand for pharmaceuticals and textiles, and 31 per cent of its demand for steel.

366. The growth projected for Africa by ECA, based on the Lagos Plan of Action, is much more optimistic than the high-growth scenarios of the World Bank, LINK and the Department of International Economic and Social Affairs. ECA believes that the growth strategy of the past, based on primary exports and reliance on foreign capital, has failed. Thus, ECA is strongly advocating the very bold plan summarized above as providing the only hope for avoiding the gloomy prospects of a continuation of historical trends. Whether this plan is implemented and its aims achieved depend, of course, on the will and the determination of the African nations themselves, on whether they can achieve the necessary unity of purpose and co-operation, on their ability to mobilize the vast resources required, on

increased capital flows from developing countries and greater accessibility for African products to the developed countries' markets, and on the absence of drought, other natural disasters, wars, and political disturbances.

367. Since the formulation of the Lagos Plan of Action, there has developed a significant consensus among the African countries themselves, the African regional organizations, such as ECA and the African Development Bank, the United Nations and other international organizations, such as the World Bank and the International Monetary Fund, on the proper policies and actions required to overcome the deepening crisis and put Africa back on the development path. ECA and the African Development Bank have concluded that African Governments should "urgently improve the management of the public sector, create the environment for more initiative by indigenous entrepreneurs and foreign direct investors, set prices at sufficiently remunerative levels, [and] eliminate exchange rates that have not only discouraged investment and production but have also led to widespread smuggling and black markets in foreign exchange". <sup>5/</sup> Since agriculture is the mainstay of sub-Saharan African economies, improving agricultural performance is essential to ameliorating economic conditions and stimulating development in Africa. ECA and the African Development Bank have also concluded that the performance of agriculture in Africa can be improved substantially by providing adequate farm credit facilities, sufficient supply and timely delivery of inputs, adequate marketing, infrastructural and storage facilities, and effective extension services. <sup>6/</sup> Although many African countries have already adopted policies on some of these matters, much more remains to be done and a far greater effort must be placed on implementing the policies.

368. At the international level, action is required to ensure (a) greater access for products from Africa in developed country markets, (b) higher and more stable prices for African exports and (c) a much larger flow of foreign aid on concessionary terms, not only for emergency purposes, but more importantly for the long run, to support domestic reform programmes aimed at increasing economic efficiency. The Committee for Development Planning has recently emphasized that "There is technical agreement that domestic policy reform and improved external support make up an inseparable package. Increased support for agriculture, through restructured institutions and incentives, is the crux of the required domestic policy change. Restored levels, and more appropriate and more flexible forms of official assistance constitute the essential external requirements. Domestic or external policies alone are each unlikely to avert the recurrence of future disasters. There is, therefore, a joint responsibility for securing a better future in Africa." <sup>7/</sup>

#### Notes

<sup>1/</sup> The low-income sub-Saharan countries are Benin, Burundi, the Central African Republic, Ethiopia, Ghana, Guinea, Guinea-Bissau, Kenya, Madagascar, Malawi, Mozambique, Sierra Leone, Rwanda, Togo, Uganda, the United Republic of Tanzania and Zaire.



Notes (continued)

2/ These problems are common to most developing countries, and not only to African countries. In addition, development economics does not yet provide a clear guide as to the best route to rapid growth and development under widely different internal conditions and in the face of an unexpected and uncertain external environment.

3/ Food and Agriculture Organization of the United Nations, Global Information and Early Warning System on Food and Agriculture, Special Report (Rome, December 1984), p. 1.

4/ Economic Commission for Africa, ECA and Africa's Development 1983-2008: A Preliminary Perspective Study (Addis Ababa, April 1983), p. 24, and Economic Commission for Africa, Survey of Economic and Social Conditions in the African Least Developed Countries (E/ECA/LDC/S.4/2) (Addis Ababa, March 1984).

5/ African Development Bank and Economic Commission for Africa, Economic Report on Africa 1984 (Abidjan and Addis Ababa, 1984), p. 3.

6/ Ibid., p. 47.

7/ "Proposals for Action of the Committee for Development Planning", Journal of Development Planning, No. 15, (United Nations publication, Sales No. E.85.II.A.6), p. 281.

## VIII. MILITARY EXPENDITURES, DISARMAMENT AND DEVELOPMENT

369. The first half of the Third United Nations Development Decade witnessed a new phase of accelerated growth in world military expenditures, with declining prospects for mutually advantageous economic co-operation and widespread reduction in economic growth. Military expenditures consume scarce resources and divert them from productive to non-productive uses in all countries. Significant disarmament would release vast resources, even a fraction of which could accelerate development and the establishment of a more sustainable international economic and political order. This important possibility has been stressed many times by the General Assembly and especially at its tenth special session.

370. The economic and social implications of the arms race for the global economy have been comprehensively analysed in a number of United Nations studies on disarmament and development. 1/ In order to establish an empirically quantifiable relationship between disarmament and development, attempts have been made in those studies to estimate the magnitude of real resources claimed by the world-wide military outlays, to assess the opportunity costs of the arms race for societies at different levels of development and with different economic and social systems, to examine the technical feasibility of converting armament-related efforts into developmental channels, to project the direct and indirect benefits of disarmament and, finally, to examine the possibilities for some institutional arrangements to facilitate the transfer of disarmament-related financial resources for the benefit of the developing countries. Some of the main findings and policy implications of these studies are examined in the present section.

371. Although solutions to the problems of the arms race largely depend on political consensus, economic analysis can help quantify the costs and benefits of pursuing alternative policy options for individual countries as well as for the world economy in general.

### A. Global military expenditures: overall magnitudes and recent trends

372. Trends in the resources devoted to military activities world-wide can be most easily portrayed by means of financial data relating to military and other expenditures. In 1984 the world spent about \$US 649 billion (in 1980 prices) for military purposes. 2/ This amount was over 5 per cent total of world output in 1983 and about 27 times as large as all official development assistance provided by OECD countries in 1983. 3/ It was more than the total value of gross fixed capital formation in all the developing countries combined, and about the same as the global public expenditure on education. 4/

373. In addition to an examination of the trends in the large absolute volume of resources devoted to military expenditure, which are of great concern and discussed further in paragraphs 379-398 below, two related ideas are statistically analysed:

(a) The arms race has been consuming a constant proportion of the GDP of various countries and possibly also of the world's total GDP;

(b) It is mainly in the poor countries that military spending is an especially large share of GDP. Hence, the burden of the arms race falls in particular on the shoulders of those least able to bear it.

The available data generally confirm the first of these ideas and provide some support for the second.

374. Between 1960 and 1980, world-wide military expenditures almost doubled, in constant dollars, growing at an average annual rate of about 3.2 per cent. The trend did not change much during the period 1960-1978, but there was some deceleration in the mid-1970s followed by a return to the 3.2 per cent rate from 1978 to 1984. The acceleration was especially sharp from 1980 to 1984, during which the growth rate was over 3.5 per cent. Compared with the growth rates of world GDP, these rates indicate that military expenditure, as a percentage of world GDP, declined from 1960 through 1980 but increased from 1980 to 1983. <sup>5/</sup> (Table 66 below shows a decline from 6.1 per cent in 1970 to 4.8 per cent in 1980.) From 1974 to 1983, world arms spending grew by a rate of 2.9 per cent annually, or somewhat more than world GDP, which grew by around 2.7 per cent annually.

375. Testing the relation in another way, a statistical regression of world arms spending in relation to world GDP over the 10 years 1974-1983 indicates that military spending increased by 0.88 per cent for each 1.0 per cent increase in GDP. (This relationship between percentage changes is the "elasticity" of military spending with respect to GDP.) Although this estimate of 0.88 suggests a slight decline in military spending as a proportion of GDP, it is not significantly different (at the 95 per cent confidence level), from an elasticity of 1.0, which would imply equal growth rates for military spending and GDP. The reason for the difference between the implications of the regression relationship and of the 1974-1983 growth rates is that the growth rates are calculated from only the 1974 and 1983 data, whereas the regression is based on the data for each of the 10 years. On balance, these two ways of looking at the data generally confirm the initial hypothesis that the world's military spending has been growing at about the same rate as world GDP. This suggests that a long-term deceleration of world military spending relative to GDP growth is not likely, in the absence of significant political developments tending to limit the arms race.

#### Relative burden of military spending in different income groups

376. The concern that military spending may be a higher relative burden, as percentage of GDP, in the poorer countries than in the richer ones has been examined with two different techniques. First, 77 countries were cross-classified according to their level of per capita GDP in 1982 and their military expenditure as a percentage of GDP also in 1982, as shown in table 67.

377. If income per capita and military spending in GNP are negatively correlated, one would expect the figures to be relatively high in the upper right and lower left quadrants of the table, and relatively low in the upper left and lower right. There is a slight tendency in this direction, but a formal statistical test for this relationship, the chi-square test, results in no significant relation between the variables of any commonly accepted significance level. The same test applied to the income and military spending of 77 countries for 1979 and 1981 yielded similar results.

Table 66. Distribution by region of world military expenditure (MIEX) and share of MIEX in GDP in 1970 and 1980 (constant 1978 prices and exchange rates)

Region	Military expenditure (MIEX) in \$US billion		Distribution of MIEX by region, percentage		Share of MIEX in GDP, percentage	
	1970	1980	1970	1980	1970	1980
Total, developed countries <u>a/</u>	349.7	383.6	83.9	77.6	6.2	4.6
Total, developing countries	66.9	110.4	16.0	22.3	5.8	5.6
West Asia <u>b/</u>	6.3	28.7	1.5	5.8	4.3	12.0
South Asia	3.4	5.1	0.8	1.0	2.9	3.1
East Asia <u>c/</u>	44.1	55.5	10.5	11.2	12.8	8.2
Africa <u>d/</u>	6.8	10.9	1.7	2.2	3.7	3.8
Latin America	4.8	7.0	1.1	1.4	1.4	1.2
Others <u>e/</u>	1.5	3.2	0.3	0.6	3.7	5.3
World total	416.6	494.0	100.0	100.0	6.1	4.8

Source: World Armaments and Disarmament, SIPRI Yearbook 1981; 1981 Statistical Yearbook, United Nations, 1983, and Department of International Economic and Social Affairs of the United Nations Secretariat.

a/ Includes all OECD countries, South Africa and Israel and all Warsaw Treaty countries.

b/ Middle East minus Egypt and Israel.

c/ Excludes Japan but includes China.

d/ Includes Egypt and excludes South Africa.

e/ Includes Yugoslavia and developing countries of Oceania.

Table 67. Number of countries in 16 groups cross-calculated by per capita GDP and percentage of military spending in GDP in 1982

Percentage of military spending in GNP	GDP per capita				Total
	Low	Low middle	High middle	High	
Low	2	4	5	8	19
Low middle	5	4	4	5	18
High middle	7	4	7	4	22
High	5	6	6	1	18
<b>Total</b>	<b>19</b>	<b>18</b>	<b>22</b>	<b>18</b>	<b>77</b>

378. A second way to look at the relation between military spending and per capita GDP is to estimate the percentage change in military spending per capita that would result from a 1 per cent change in GDP per capita. These estimates, for 74 countries in 1982 and for 81 countries in 1979 and 1981, indicate that a 1 per cent change in per capita GDP implies approximately a 0.9 per cent change in per capita military spending. In other words, per capita military spending tends to increase about 90 per cent as fast as per capita GDP. (The result, based on cross-section data, is almost the same as the result from time-series data.) The cross-section regression analysis suggests that the poorer countries do spend a slightly higher percentage of their GDP for military purposes than do the richer countries, but this result is not statistically significant at the 95 per cent confidence level.

B. Economic and social consequences of the arms race and disarmament

379. The arms race has major economic and social consequences. First, military expenditures use up large amounts of real resources, including skilled labour, industrial capacity and essential raw materials, thereby contributing to inflation in many sectors. Second, military research and development not only use valuable resources directly, but also deprive the civilian economy of much-needed expertise. Third, international trade in arms has become increasingly important in recent years; at the same time, the production of arms has become substantial in some of the developing countries as well as in most of the developed countries. In contrast, a significant degree of disarmament could release sufficient resources to accelerate the world economy and improve the living conditions of all the world's people, including those most in need in the poorest countries. Selected aspects of these issues are considered below.

1. Use of real resources for military purposes

380. Modern military establishments place significant "procurement" demands on a wide range of industrial enterprises. Some of these enterprises exist solely to satisfy military demands. Others supply both military and civilian customers with similar products such as transport vehicles and office equipment, although the military variants often have more stringent requirements for the quality of the products. In addition, all these suppliers of finished industrial goods to the military place related demands on the suppliers of components, who in turn require processed and basic raw materials.

381. In the major arms-producing countries, military procurement of industrial goods typically accounts for between 13 and 22 per cent of military expenditures. This procurement, however, refers only to purchases of "major" equipment; thus it tends to understate the true value of manufacturing output generated by military demands, which also includes production of components, spare parts and the wide variety of industrial products that are used by military establishments but are otherwise indistinguishable from civilian products. For example, in the case of the United States the amounts for procurement in the military budget for 1975 and 1976 were \$15 billion and \$16 billion, respectively, while shipments of defence products by the manufacturing sector in those years amounted to \$29 billion and \$34 billion, respectively (see A/36/356, annex, para. 125). The estimated ranges of global military demand for industrial goods from 1977 to 1980 (based on 1978 prices and exchange rates) were as follows:

<u>Year</u>	<u>Range, billions of 1978 US dollars</u>
1977	121-139
1978	123-141
1979	125-143
1980	128-146

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Source: A/36/356, annex, table III.1.

382. In a selected group of developed market-economy countries in 1977, military demand accounted for between 7.5 and 8.7 per cent of total manufacturing output (see A/36/356, annex, para. 131). Moreover, one of the characteristics of military demand is that it tends to be concentrated in a limited number of energy-intensive and technology-intensive industries that produce major items of military hardware, for example, aircraft, ship-building, electronics and communications. In these industries the weight of military demand was significantly higher, and in many cases military sectors were in the position of monopsonist buyers with power to influence the pattern of production and prices. For example, in the mid-1970s, military demand in the United States accounted for about 45 per cent of the total

sales of the aircraft industry and 75 per cent of all new construction in the ship-building industry. 6/ The available evidence for France, the Federal Republic of Germany and the United Kingdom reveals a similar concentration of military production in selected industries. The military share of the annual output of the aerospace industry was 46 per cent in France and 70 to 80 per cent in the Federal Republic of Germany. In the United Kingdom, the share in 1980 was about 50 per cent (see A/36/356, annex, para. 132). The military shares of these sectors in the leading arms-producing countries with centrally planned economies are probably similar to those found in the developed countries with market economies.

383. In the Trade and Development Report, 1982, of the United Nations Conference on Trade and Development (UNCTAD), it was stated: 7/

"In recent years there has also been a marked trend towards the establishment of arms industries in developing countries, representing a new type of diversion of scarce resources away from real economic development in the third world. By the end of the 1970s, about 25 developing countries produced equipment for their own armed forces, including some advanced types, and a number of these countries also began to export domestically-produced weapons to other developing countries (notably Brazil, but also Indonesia, Singapore, the Republic of Korea and some others). Among the reasons explaining this phenomenon is the desire to reduce dependence on foreign supplies and to save on imports of arms."

By 1984, 18 developing countries had designed and produced at least one type of major weapon, and four others were carrying out licensed production of components of major weapons. 8/

384. In itself, the development of the arms industry in the developing countries would slow their economic and social progress if it is possible for them to use the resources and revenues more efficiently in other sectors. Their considerable success with arms industries, including a growing volume of exports as well as production for their own use, suggests, moreover, that with a similar degree of commitment they would be able quite rapidly to develop a wider range of relatively sophisticated civilian goods industries and to compete effectively in exporting the products of these industries. 9/

385. In 1980, between 3 and 11 per cent of a selected group of 14 non-energy minerals were utilized world-wide for military purposes, including aluminum (6.3 per cent), chromium (3.9 per cent), copper (11 per cent), fluorspar (6.0 per cent), iron ore (5.1 per cent), lead (8.1 per cent), manganese (2.1 per cent), mercury (4.5 per cent), nickel (6.3 per cent), platinum group (5.7 per cent), silver (6.0 per cent), tin (5.1 per cent), tungsten (3.6 per cent) and zinc (6.0 per cent). The global military consumption of aluminum, copper, nickel and platinum has been greater than the demand for these minerals for all purposes in Africa, Asia (including China) and Latin America combined. The global use of petroleum for military purposes, including consumption by the defence industry, has been estimated at close to one half of the consumption in all of the developing countries (excluding China) (see A/36/356, annex, table III.3 and para. 140).

386. Altogether, it has been estimated that in 1980 about 50 million people, or over 4 per cent of the working population world-wide, were engaged, directly or indirectly, in the production of military goods and services. Of these, as many as 39.5 million were engaged in purely military activities (35 million were employed in the world's armed forces and para-military forces, 4 million were civilians directly employed in defence departments, and about 500,000 scientists and engineers were employed in military research and development). Another 5 million were directly engaged in the production of weapons and other purely military equipment. About 2 million more produced civilian goods and services and an additional 3 to 6 million industrial jobs were being supported by the multiplier effects of direct military expenditures. In total, therefore, roughly 50 million people were employed, directly or indirectly, in the production of goods and services for military uses (see A/36/356, annex, paras. 110-123).

387. Besides directly affecting growth by diverting resources from civilian uses, the arms race has been a major source of inflation both nationally and globally. The pace of inflation in the military sector usually outruns the inflation rate in the economy as a whole. Military expenditures generate inflationary pressures through severe bottle-necks and sharp price rises in selected areas of military manufacturing, which subsequently increases costs and prices further up the manufacturing chain and through the demonstration effect of wage increases in military-related industries on other industries. Typically, military-related industries belong to the so-called wage leaders, i.e., industries that pay relatively high wages and lead in the periodic rounds of wage-bargaining in different industries. In addition, governments often find it more feasible to finance increased military expenditures through inflationary increases in the money supply in the absence of sufficient tax revenues.

## 2. Military research and development

388. A large amount of the world's most highly skilled labour and other resources have been used for military research and development to support the so-called "technological" arms race since the Second World War. Indeed, one of the most conspicuous features of the military scene has been an extraordinarily rapid rate of technological change in weapon systems. In virtually all categories of major weapons a completely new model is introduced, on the average, every 5 to 8 years, and the variety of weapons in which this process occurs has also expanded continuously, as technological developments have encouraged greater product differentiation or permitted greater functional specialization among weapons (see A/36/356, annex, para. 147).

389. In 1980, global expenditures on military research and development were roughly \$35 billion or approximately one quarter of the estimated \$150 billion spent for all research and development (see A/36/356, annex, para. 148). Approximately 20 per cent of the world's qualified scientists and engineers, some 400,000 to 500,000 people, were engaged in military research and development activities during the 1970s (see A/36/356, annex, para. 149). The average military product has been estimated to be some 20 times as research-intensive as the average non-military product. 10/ Military research and development expenditures are even more highly



concentrated in a few countries than total research and development. Whereas six countries accounted for about 85 per cent of total research and development around 1960, just two countries - the United States and the USSR - accounted for a similar share of total military research and development around 1975 (see A/36/356, annex, para. 148).

390. The world's military research and development has other important characteristics that cannot be fully reflected in a statistical portrayal. In paragraphs 82 and 83 of the report of the Group of Experts on All Aspects of the Conventional Arms Race and on Disarmament relating to Conventional Weapons and Armed Forces (A/39/348, annex), the following is stated:

"The nature of the military R and D process with its long lead-times creates uncertainty about the future military capabilities of potential adversaries. This has led to States developing new weapons on the 'action-reaction' assumption that others are also engaged in this process, even though there will often be no tangible information on this during the early stages of the research and development work on such national projects.

"Military relationships are therefore no longer assessed merely in terms of the forces and weapons existing at any particular moment in time, since this can change significantly over a relatively short period because of qualitative improvements produced through the R and D process. This inter alia, makes it very difficult to establish sustainable criteria for defining 'balance'."

391. The technological arms race has greatly complicated the process of risk assessment and increased the efforts needed to control the whole arms race through negotiations.

### 3. International arms trade

392. The international arms trade - because of its rapid growth, visibility and association with regional balance of military power - has emerged as a major topic of national and international concern since the early 1970s. Because this trade is not officially recorded in international trade statistics, there exists no comprehensive body of estimates on which to base an analysis. However, according to the United States Arms Control and Disarmament Agency, the arms trade grew from 20.3 billion in 1972 to about \$34.3 billion in 1982 measured in constant 1981 dollars (see A/39/348, annex, para. 69). According to the Stockholm International Peace Research Institute (SIPRI), total exports of major weapons declined slightly from \$23.8 billion in 1980 to \$22.1 billion in 1983 (in 1981 dollars), and preliminary estimates for 1984 show a sharp decline to only \$18.1 billion, as a result of market saturation and the debt burden of the developing countries. 11/

393. The actual value of this trade is probably higher if account is taken of the fact that, while all arms transactions involve some form of payments, such payments usually involve one or more methods intended to minimize the direct claims on foreign exchange reserves. These arrangements can include barter, full or

discounted (concessional) prices, hard or soft loans, third-party payments and offset arrangements, such as the reciprocal sale of military hardware or agreement by the supplier to place orders in the recipient nation for civilian goods and services. If the recipient is a developing country, the same end is sometimes accomplished by making the cost payable in commodities or raw materials.

394. Arms transactions also involve, besides the transfer of military hardware, large-scale training programmes. Assistance for an extended interim period by technical personnel from the supplier country is typically part of a weapons deal. Crudely estimated, these "services" constitute approximately 15 per cent of the global value of the arms trade (see A/36/356, annex, para. 155). Adding this estimate of 15 per cent for services, the global trade in arms and military services was about \$39.4 billion in 1982.

395. On the supplier side, this trade has been dominated by six industrialized countries - France, the Federal Republic of Germany, Italy, the USSR, the United Kingdom and the United States. According to SIPRI these countries accounted for 90 per cent of the cumulative value of arms exports during the period 1978-1982. 12/ The economic significance of arms exports can be gauged from the fact that by 1978 such exports accounted for more than half of the combined trade surplus of the developed economies, helping to offset the increased cost of their oil imports. In 1982, the \$39 billion arms exports of the developing market economies was much larger than their estimated trade surplus of about \$13 billion (in 1981 dollars). Without the arms exports they would have had a substantial deficit. In 1983, the exports of major weapons systems by the developing market economies were more than half of their estimated trade surplus of \$30 billion (in 1983 dollars).

396. On the purchaser side, the developing countries have long accounted for over one half of all arms imports; for the 1970s as a whole their share was roughly 75 per cent. 13/ During the period 1980-1984, it was about 66 per cent. Arms imports by all developing countries (both oil-exporting and net oil-importing developing countries) accounted for roughly one quarter of their combined trade deficits in 1978. In 1981, imports of major weapons systems alone accounted for about 40 per cent of the trade deficit of the developing market economies.

397. Imports of military equipment in developing countries have also been stimulated by intense competition and sales pressure from developed countries. In some developed-market economy countries this reflects a desire to ensure better use of the capacities of their military industries, to recover at least a part of the growing military research and development costs and to find new export commodities to cover the deficit in trade with oil-exporting developing countries through arms exports. For example, the aero-space industry of France, the strongest western European aerospace industry, exported 70 per cent of its production in 1978 and, of these exports, military sales accounted for 72 per cent. 14/

398. A net flow of resources to the countries with trade deficits can be helpful if the resources are used for productive investments. However, arms imports use up foreign exchange resources that might otherwise finance purchases of capital goods, with the result that the importing country gets much less real productive growth

for each dollar of foreign capital inflow. Some recent econometric studies suggest that for every dollar spent on arms in developing countries domestic investment tends to be reduced by about 25 cents. Therefore, for a small developing country facing a foreign exchange and savings constraint and devoting between 6 and 8 per cent of its GDP to weapons imports, the implications for long-term development can be serious indeed.

### C. Prospects

399. Looking ahead, it is obvious that a continuation of the present patterns of military spending will involve the deflection of even larger resources into military uses that do not promote collective security, and this at a time when economic growth is expected to slow down.

400. Two basic questions arise: first, what are the magnitudes of the benefits that may be expected from a change in present armaments trends? Secondly, but of overriding importance, can anything useful be said about the ways to bring about such a change?

#### 1. Reallocation of resources released through disarmament

401. The resource requirements for a more satisfactory rate of global economic growth, as estimated in sections III and IV, necessitate a close scrutiny of future military outlays in all economies, particularly those envisaging steadily high or increasing military spending. The release of human resources from military sectors could relieve some of the developed economies of their labour shortages, and the reallocation of material resources could speed up their process of adjusting to the changing nature of comparative advantage in the world economy. A reallocation from military spending would enable developing countries to speed up their process of industrialization and raise their levels of consumption.

402. The effect on GDP growth rates in the rest of the 1980s of a world-wide freezing of defence expenditure at their estimated 1984 level was considered in section III in the disarmament scenario. In that scenario, 50 per cent of the financial resources released from such a freeze in defence expenditure in most of the developed countries, both market and centrally planned economies, are assumed to be channelled into ODA to the developing countries, while the remaining 50 per cent would be used to improve the welfare of the population of the developed countries. In the developing countries and the centrally planned economies of Asia, it is assumed that the financial resources freed from the defence burden would be used to increase domestic capital investment. Under these assumptions, there is a substantial increase in growth rates relative to the baseline growth rates estimated for the rest of the 1980s. The GDP growth rate of the developing countries would be 0.72 per cent higher than their baseline rate, and the GDP growth rate of the developed countries would be 0.13 per cent higher.

403. In an earlier analysis of the possible economic effects of the arms race and disarmament measures, the United Nations input-output model of the world economy <sup>15/</sup> was used to project global economic prospects to the year 2000 under three scenarios, namely, a baseline continued arms race, an accelerated arms race, and modest disarmament measures including the release of some resources for reallocation to the developing countries. The baseline scenario assumed that the shares of military outlay in GNP and the geographical distribution of military industry would be roughly the same throughout the period 1970-2000. The accelerated arms race scenario envisages a hypothetical doubling of the share of GDP for military outlays by the year 2000 in comparison with the baseline. The disarmament scenario assumes that the military spending of the United States and the USSR, as projected under the baseline scenario, would fall by one third by 1990 and by a further one third by the year 2000. For all other regions, the projections assume that, as a share of GNP, the share of military spending would decline to 75 per cent of the 1970 baseline figure by 1990 and to 60 per cent of that figure by the year 2000. The disarmament scenario also assumes that the relatively wealthy regions of the world would transfer a fraction of their hypothetical savings accrued from disarmament to the poorest regions.

404. The long-term projections under these three scenarios indicate that an acceleration of the arms race would adversely affect economic well-being in all groups of countries except the oil-producing countries, which would neither lose nor gain. In contrast, the disarmament scenario would result in global gains, including a 3.7 per cent increase in world GNP and more than a 5 per cent increase in world capital stocks by the year 2000, in comparison to the baseline scenario. It would also yield significant economic benefits for the poorest regions of the world.

405. Although it is true that these gains would be real enough, it must be recognized that they are relatively modest in comparison with all other influences on the rate of growth of GDP. If that rate could be raised by 0.3 per cent per year, it would in 15 years raise GDP by 4.5 per cent by the year 2000.

406. This is not to say that a disarmament scenario would not bring great relief to countries that can ill afford the military spending in which they are presently engaged. Contrary to widespread beliefs, however, it does not seem to be true that disarmament would produce economic miracles unless it were far more drastic than assumed in the scenarios.

407. The real problem of the arms race seems rather to be that at least some countries can afford it without much economic pain, while at the same time it jeopardizes world peace and survival. This compounds rather than facilitates the task of disarmament.

## 2. Strategy for disarmament

408. Given the continuing failure of the international community to achieve even a slowdown in the arms race, it may be of some interest to examine why this is so, as all countries could benefit from a slowdown and even more from a major degree of disarmament. Are countries irrational in engaging in military build-ups or is there a more fundamental explanation? A clear understanding of the basic causes of the behavioural pattern inherent in the arms race is essential for effective recommendations for progress in disarmament. The background causes of the arms race have been reviewed in considerable detail in previous United Nations studies, especially the study on the relationship between disarmament and international security (A/36/597) and the Study on All Aspects of the Conventional Arms Race and on Disarmament relating to Conventional Weapons and Armed Forces (A/39/348, annex).

409. As a global activity the arms race is irrational, as virtually every country in the world continues to increase its total arms spending, rather than agreeing to reduce it. Yet decisions about national expenditures are made by able and competent people. The basic problem of the arms race is that in attempting to enhance their own security, many countries build up their armaments in ways that other countries find threatening, thus provoking reactive build-ups by those countries, which in turn stimulate further build-ups by the countries that started the process. (In practice, it is usually impossible to determine which of two rival countries or groups "started" an arms race, since each country or group generally is reacting simultaneously to anticipated threats from the other.)

410. Two general approaches have been suggested to deal with the dangers of continuing the arms race in the present manner. One is that all countries adopt only defensive rather than offensive weapons i.e., weapons that protect a country within its borders but cannot attack outside the country. <sup>16/</sup> A second is somehow to impose penalties upon countries that exceed a given amount of military spending, thus adding a new component to their cost-benefit calculation. However, agreeing to use either of these approaches or to adopt some form of balanced reduction of existing offensive weapons will require greater mutual trust and visibility regarding the actions of the countries involved. It is in the area of "confidence-building" that much more intensive work for disarmament must be done, such as promotion of mutual trade, cultural exchange, prior notification of military exercises etc. (See the comprehensive study of the Group of Governmental Experts on Confidence-building Measures (A/36/474, annex) and A/39/348, paras. 170-176.)

411. One of the potential advantages of the proposal that countries concentrate their spending only on defensive arms is that one country alone could take the initiative to shift in this direction - without reducing its own security and at the same time tending to reduce the fears and consequent military build-ups of any potential adversaries. It is not clear just what types of weapons or multi-weapon systems would be perceived as defensive in the present nuclear context. A system that one country intended as purely defensive might well provoke a potential opponent to increase its offensive system, especially if the opponent was unable to develop an equally effective defence system in a short time. Moreover, if a country increases spending on defensive weapons systems but also continues the

build-up of weapons having first strike capability, it will almost certainly start a new round of the arms race and further undermine world stability. In addition to negotiating for reduced total nuclear arsenals and greater stability (freedom from fear of a first strike), the nuclear powers and all other countries can contribute to the world's security by forgoing the acquisition of conventional weapons, while concentrating on non-threatening defensive measures and by seeking to play a useful role for other countries while left in peace. 17/

#### Notes

- 1/ See, in particular, "Study on the relationship between disarmament and development: report of the Secretary-General", 5 October 1981 (A/36/356 and Corr.1), subsequently issued with the title The Relationship between Disarmament and Development (United Nations publication, Sales No. E.82.IX.1); "Study on the economic and social consequences of the arms race and of military expenditure" (A/37/386, annex); and "Study on All Aspects of the Conventional Arms Race and on Disarmament relating to Conventional Weapons and Armed Forces (A/39/348, annex).
- 2/ World Armaments and Disarmament, SIPRI Yearbook 1985 (London and Philadelphia, Taylor and Francis), table 7A.1, p. 270.
- 3/ Total official development assistance in 1983 was about \$27.5 billion. Source: OECD, Development Co-operation, 1984 Review, Paris, 1984, tables VI-1 and VI-1, p. 82.
- 4/ World public expenditure on public education in 1982 was about \$627.7 billion. See UNESCO Yearbook, 1984, table 2.12, p. II-38.
- 5/ The growth rate of world GDP was 1.7 per cent in 1981, 0.7 per cent in 1982 and 2.7 per cent in 1983. Source: World Economic Survey, 1985 (United Nations publication, Sales No. E.85.II.C.1), table II-1.
- 6/ Jacques S. Gansler, The Defense Industry (Cambridge, M.I.T. Press, 1980), pp. 176 and 185.
- 7/ UNCTAD, Trade and Development report, 1982 (United Nations publication, Sales No. E.82.II.D.12), para. 545.
- 8/ SIPRI Yearbook 1985, table 10.1, pp. 332-333.
- 9/ M. Wionczek, "The emergence of military industries in the South", in UNIDO, Industry and Development, No. 12, pp. 115-120.
- 10/ SIPRI Yearbook 1981, p. 7.
- 11/ SIPRI Yearbook 1985, pp. 345-346.
- 12/ SIPRI Yearbook 1983, table 11.1, p. 269, cited in A/39/348, fig. 4.

Notes (continued)

13/ SIPRI Yearbook 1985, table 11.1, p. 346.

14/ H. Tuomi and R. Vayrynen, Transnational corporations, armaments and development (Finland: Tampere Peace Research Institute 1980; Aldershot, Hants: Gower, 1982), p. 35; cited in UNCTAD, Trade and Development Report, 1982, op. cit., para. 543.

15/ See Wassily Leontief and Faye Duchin, "Worldwide economic implications of a limitation on military spending" (report prepared for the Group of Governmental Experts on the Relationship between Disarmament and Development).

16/ For discussion of this suggestion, see Dietrich Fisher, Preventing War in the Nuclear Age (1984), which is summarized in United Nations Disarmament, autumn 1984, pp. 81-87.

17/ D. Fishcher, loc. cit., p. 86.

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