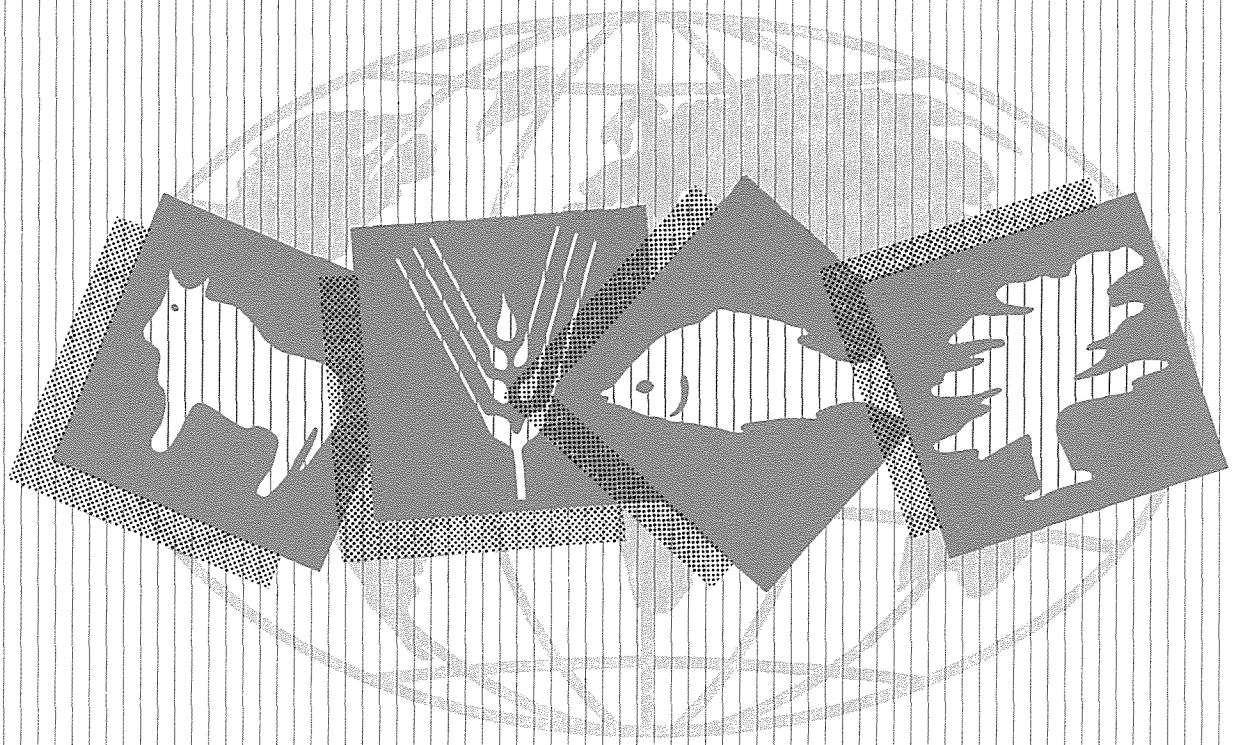
1986

THE STATE OF FOOD AND AGRICULTURE

World and regional reviews
Financing agricultural development



FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS

Special Chapters

In addition to the usual review of the recent world food and agriculture situation, each issue of this report from 1957 has included one or more special studies of problems of longer-term interest. Special chapters in earlier issues have covered the following subjects:

1957
Factors influencing the trend of food consumption
Postwar changes in some institutional factors affecting agriculture

1958
Food and agricultural developments in Africa south of the Sahara
The growth of forest industries and their impact on the world's forests

1959
Agricultural incomes and levels of living in countries at different stages of economic development
Some general problems of agricultural development in less-developed countries in the light of postwar experience

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1978
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1979
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1980
Marine fisheries in the new era of national jurisdiction

1981
Rural poverty in developing countries and means of poverty alleviation

1982
Livestock production: a world perspective

1983
Women in developing agriculture

1984
Urbanization, agriculture and food systems

1985
Energy use in agricultural production
Environmental trends in food and agriculture
Agricultural marketing and development

THE STATE OF FOOD AND AGRICULTURE 1986

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FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS
Rome, 1987

The statistical material in this publication has been prepared from the information available to FAO up to March 1987.

The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of the Food and Agriculture Organization of the United Nations concerning the legal status of any country, territory, city or area, or of its authorities, or concerning the delimitation of its frontiers or boundaries. In some tables, the designations "developed" and "developing" economies are intended for statistical convenience and do not necessarily express a judgement about the stage reached by a particular country or area in the development process.

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Foreword

In hindsight, 1986 could be regarded as a generally favourable year for agricultural production, but also as a year tarnished by uncertainties in the overall economic environment and increasing problems in the area of food and agricultural trade.

It was a year of solid agricultural achievement in many developing countries, where a single good or bad crop year can make the difference between starvation or survival for millions of human beings. This was notably the case in Africa, where the recovery from the recent drought was widely sustained and contributed to the alleviation of the food supply situation in many countries. Even more significant in a global perspective, given the large populations involved, several Asian countries further improved their record of recent performances in food supply.

Welcome as these achievements were, they should not conceal the fragility of the current world economic and agricultural situation. Despite overall slow but steady long-term progress in global nutritional status, hunger and malnutrition still affect hundreds of millions of people. The long-term guarantee of adequate access to food is contingent upon sustained economic growth and a more equitable distribution of its benefits.

The continuing lethargy of the world economy and its pervasive negative effects on global demand, and policies toward trade and international cooperation, remained a matter of profound concern in 1986. For reasons largely beyond their control, many developing countries saw their chances recede from returning to strong economic growth. The fall in their export earnings was further aggravated by a resurgence of protectionism in the industrial countries. Yet, in order to honour their debt obligations, many of these developing countries were pressed to generate trade surpluses at any cost. The trade situation offered them little option but to reduce imports, investment, and even subsistence consumption levels, thus protracting a situation of economic and social regression. The circumstances of several Latin American and Caribbean countries, which were forced into recessive adjustments, should be recalled. The gravity of the economic and financial problems in many Latin American and Caribbean countries prompted the request that FAO undertake a major study on the obstacles to agricultural and rural development and feasible actions to enhance development, reduce poverty and improve nutritional status. The study will offer a Plan of Action to help solve the major food and agricultural problems of the region. It will be presented at the next FAO Regional Conference for Latin America and the Caribbean in October 1988.

For many countries, current economic difficulties are both a cause and an effect of agricultural difficulties. The year 1986 witnessed the continuation of an often decried phenomenon—the paradoxical coexistence of food shortages in some developing countries and surpluses in other countries, especially the developed countries. Despite the need to reduce budgetary imbalances and restore equilibrium in world markets, most industrial countries largely failed in their attempts to reconcile measures to control surpluses and preserve farm incomes.

Despite a slowdown in the growth of agricultural output in 1986, world stocks—particularly cereals—soared, agricultural prices plummeted to their lowest levels in half a century, and competition in world agricultural markets led to mounting conflicts among trading areas and a growing disregard for the fundamental principle of comparative advantage.

Developing country economies saw the purchasing power of their agricultural exports suffer sharp losses in 1985 and 1986, largely cancelling the gains of the two previous years. In some of these countries, good harvests generated unmarketable surpluses, created serious storage and financial problems and, ultimately, proved almost as harmful to farmer incomes as bad harvests.

The problem of abnormal food shortages persisting in several other countries could not be ignored. Nor could we underrate the dangers posed to Africa by the recurrence of grasshopper and locust infestations. Although the response of the international community in 1986 to FAO's warnings and appeals for assistance can be regarded as successful, large areas in sub-Saharan Africa remain under threat, requiring continuing vigilance and preparedness.

This brief review of some of the highlights of the state of food and agriculture in 1986 gives rise to a number of reflections. In particular, I must point to the need to improve the agricultural terms of trade of developing countries, assure them stable prices for their exports, free access to international markets, and the means to diversify and increase the processing of their products. We, at FAO, share the frustration of those countries that have devoted much effort and resources to improving their agricultural production and productivity, only to discover that the fruits of

such labour were unmarketable, costly to store and, ultimately, unwanted.

FAO has taken decisive action to help channel cereal surpluses toward deficit areas thus avoiding driving down prices. To this effect, I urged donors—actual and potential—to provide maximum help in financing such triangular transactions and barter agreements.

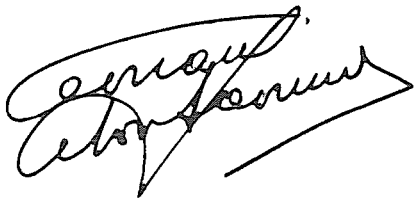
The recent improvement in the food supply situation in Africa should not allow us to relax our vigilance on the immediate food problems of the region. There is now a general consensus that sustained economic and social progress in Africa can only be through an integrated approach to its agricultural and food problems. In the FAO study, *African Agriculture: The Next 25 Years*, I made a number of concrete proposals for policy action, and FAO remains ready to assist African countries in the immense amount of work required to translate these proposals into programmes, and programmes into effective, practical action.

In the area of trade negotiations, I am looking forward to the forthcoming negotiations by GATT contracting parties to take a positive step toward instituting a sounder basis for agricultural trade. I have earlier referred to another basic ingredient—financial resources for agricultural development—which is the subject of the special chapter in this year's *The State of Food and Agriculture.*

It is important that countries mobilize resources both domestic and external for investment. External commitments to agriculture have stagnated since the early 1980s, and those granted on favourable terms have tended even to decline. Short-term prospects are also poor, as official development assistance is expected to increase by barely 2% a year, in real terms, for the rest of the decade.

I must once again underline the need for more external aid to the agricultural sector. Given the scarcity of aid, ways also have to be found for its more efficient allocation, bearing in mind the actual needs of farmers. I have emphasized, more particularly in the context of Africa, the case for considerably expanding input aid to developing countries. Inputs such as agricultural equipment, tools, means of transport, spare parts, and fertilizers could easily and abundantly be made available by industrial countries.

In making proposals for policy action, I am deeply aware of the magnitude of the problems and challenges facing us. There are recent examples from developing countries, including some from the most populous ones, which have undertaken sound policy reforms and measures to deal with the problems of widespread hunger and malnutrition. The first step toward the adoption of sound policy action is an adequate knowledge and understanding of the facts and issues surrounding the current state of food and agriculture. It is my hope that this document will contribute to this objective.



Edouard Saouma
DIRECTOR-GENERAL

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REGIONAL REVIEW

PART THREE
FINANCING AGRICULTURAL DEVELOPMENT

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ACPE	Asian centrally planned economies
AFPLAN	Regional Food Plan for Africa (FAO)
APK	Agro-Industrial Complex, USSR
APPER	Africa's Priority Programme for Economic Recovery
CFDT	Committee on Forest Development in the Tropics (FAO)
CGIAR	Consultative Group on International Agricultural Research (FAO/UNDP/World Bank)
CMEA	Council for Mutual Economic Assistance
CRP	Conservation Reserve Programme
DES	Dietary energy supplies
ECU	European Currency Unit
EEC	European Economic Community
FDI	Foreign direct investment
GATT	General Agreement on Tariffs and Trade
GCF	Gross capital formation
GEA	Government expenditure on agriculture
GDP	Gross domestic product
GDR	German Democratic Republic
GIEWS	Global Information and Early Warning System for Food and Agriculture (FAO)
IBRD	International Bank for Reconstruction and Development
ICOR	Incremental capital output ratios
IDA	International Development Association
IEFR	International Emergency Food Reserve (WFP)
IFAD	International Fund for Agricultural Development
IFC	International Finance Corporation
IMF	International Monetary Fund
ITTO	International Tropical Timber Organization
LDCs	Least-developed countries
LIFDC	Low-income food-deficit countries
MIGA	Multilateral Investment Guarantee Agency (World Bank)
MTN	Multilateral Trade Negotiations
NAMBOARD	National Agricultural Marketing Board, Zambia
OAU	Organization of African Unity
OCA	Official Commitments to Agriculture
ODA	Official Development Assistance (DAC)
OECD	Organisation for Economic Cooperation and Development
OPEC	Organization of Petroleum Exporting Countries
RFMs	Rural financial markets
SDR	Special drawing rights
TFAP	Tropical Forestry Action Plan
TF/TCP	Trust Funds/Technical Cooperation Programme (FAO)
TNCs	Transnational corporations
UNCTAD	United Nations Conference on Trade and Development
UNDP	United Nations Development Programme
USAID	United States Agency for International Development
USDA	United States Department of Agriculture
WCARRD	World Conference on Agrarian Reform and Rural Development

Explanatory note

The following *symbols* are used in the statistical tables:

— = none or negligible.
... = not available.

"1985/86" signifies a crop, marketing or fiscal year running from one calendar year to the next; "1984-86" signifies the average for three calendar years.

Figures in statistical tables may not add up because of rounding. Annual changes and rates of change have been calculated from unrounded figures. Unless otherwise indicated, the metric system is used throughout. The dollar sign ($) refers to US dollars.

Production Index Numbers

The FAO index numbers have *1979-81* as the base period. The production data refer to primary commodities (e.g., sugarcane and sugarbeet instead of sugar) and national average producer prices are used as weights. The indices for food products exclude tobacco, coffee, tea, inedible oilseeds, animal and vegetable fibres and rubber. They are based on production data presented on a calendar-year basis.[1]

Trade Index Numbers

The indices of trade in agricultural products also are based on 1979-81. They include all the commodities and countries shown in the *FAO Trade Yearbook 1985*. Indices of total food products include those edible products generally classified as "food."

All indices represent changes in current values of exports (f.o.b.) and imports (c.i.f.), all expressed in US dollars. If some countries report imports valued at f.o.b. (free on board), these are adjusted to approximate c.i.f. (cost, insurance, freight) values. This method of estimation shows a discrepancy whenever the trend of insurance and freight diverges from that of the commodity unit values.

Volume and unit value indices represent the changes in the price-weighted sum of quantities and of the quantity-weighted unit values of products traded between countries. The weights are respectively the price and quantity averages of 1979-81, which is the base reference period used for all the index number series currently computed by FAO. The Laspeyres formula is used in the construction of the index numbers.[2]

Definitions of "Narrow" and "Broad"

The OECD definitions of agriculture are generally used in reporting on external assistance to agriculture. The *narrow* definition of agriculture, now referred to as "directly to the sector" includes the following items:

Appraisal of natural resources
Development and management of natural resources
Research
Supply of production inputs
Fertilizers
Agricultural services
Training and extension
Crop production
Livestock development
Fisheries
Agriculture (subsector unallocated)

The *broad* definition includes, in addition to the above items, activities that are defined as "indirectly to the sector." These activities are:

Forestry
Manufacturing of inputs
Agro-industries
Rural infrastructure
Rural development
Regional development
River development

[1] For full details, see *FAO Production Yearbook 1985*, Rome, 1986.

[2] For full details, see *FAO Trade Yearbook 1985*, Rome, 1985.

Regional Coverage

"Developing countries" include: (i) Developing market economies (Africa, Latin America, Near East [3], Far East and Other) and (ii) Asian centrally planned economies or ACPE (China, Democratic Kampuchea, Democratic People's Republic of Korea, Mongolia and Viet Nam).

"Developed countries" include [4]: (i) Developed market economies (North America, Western Europe, including Yugoslavia, Oceania, Israel, Japan and South Africa) and (ii) Centrally planned economies of Eastern Europe and the USSR (Bulgaria, Czechoslovakia, German Democratic Republic, Hungary, Poland, Romania and USSR).[5]

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[3] The *Near East* includes: Egypt, Libyan Arab Jamahiriya, the Sudan, Afghanistan, Bahrain, Cyprus, Islamic Republic of Iran, Iraq, Jordan, Kuwait, Lebanon, Oman, Qatar, Kingdom of Saudi Arabia, Syrian Arab Republic, Turkey, United Arab Emirates, Yemen Arab Republic and Democratic Yemen.

[4] Note that "industrial countries", as defined by the International Monetary Fund (IMF) (see Table 1.1), include: Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany (Fed. Rep. of), Iceland, Ireland, Italy, Japan, Luxembourg, the Netherlands, New Zealand, Norway, Spain, Sweden, Switzerland, United Kingdom and United States. (They do not include Yugoslavia, Greece, Israel, South Africa, the centrally planned economies and some smaller other countries).

[5] Albania is omitted in this report for lack of sufficient data.

Introduction

While showing a wide variety of regional and country experiences, the world food and agricultural situation in 1986 was broadly framed by two opposing features. On the one hand, there was a marked improvement in some important aspects of food security: more developing countries achieved gains in per caput food output than in the preceding five years, several heavily populated countries consolidated their food supply situations, and food supply conditions also eased in some critical areas, notably in Africa. On the other hand, for some industrial countries, expanded availability of food and agricultural products was a mixed blessing in the context of an oversupply of many agricultural commodities, mounting stocks, depressed prices, deteriorating farm incomes, despite rising costs of agricultural programmes, and increasing protectionism in agricultural trade.

In this present period of transition between economic recession and full recovery, the relief brought about by the improvement in agricultural output has constituted, for many poor countries, a badly needed stimulus for an economic revival. The first chapter of this report shows that domestic efforts of these countries to overcome the crisis have not met with a favourable overall economic environment. Many of the problems currently facing agriculture are closely related to the inconsistencies and weaknesses of the present economic climate: (i) failure by the industrial countries to significantly resume and transmit the momentum of economic growth, despite lower inflation and interest rates and generally more realistic patterns of exchange rates; (ii) disappointing trade performances, with export volumes failing to respond to low international commodity prices; and (iii) a worsening debt situation for many developing countries, despite reduced capital inflows, lower interest rates and adjustment efforts, which have been costly in terms of human welfare.

As regards agriculture, the current situation of ample food supplies, while theoretically welcome in the context of global food security, also presents perverse aspects. Despite a slowdown in the growth of food production in 1986, sluggish global demand continued to lag behind output. As a consequence, the problem of global oversupply of many agricultural products did not subside, unmarketable stocks, especially of cereals, dairy products and beef, continued to accumulate in several industrial countries—and some developing ones—and international prices plummeted. Agricultural markets became distorted by fierce competition, export subsidies and by other market incentives, which vitiated comparative advantage relationships and undermined the efficiency of markets.

However, some progress was made in 1986 in controlling the oversupply of agricultural products in industrial countries. While a majority of these countries increased their food output in per caput terms (some substantially) during 1980-85, only a minority of them continued to do so in 1986. Conversely, a greater number of developing countries were credited with encouraging results in food production in 1986. Moreover, some of the most significant gains occurred where they were needed most: in heavily populated countries and in Africa where severe food shortages had persisted in prior years.

While such opposing trends in food output were, on balance, favourable, regional and country experiences differed widely. The generally high rate of growth in food and agricultural output exacerbated the difficulties in some agricultural commodity markets, as some countries became more self-sufficient in food and others became potential exporters and faced problems of surplus disposal.

Africa achieved a cumulative growth of over 8% in food production in 1985 and 1986. This remarkable recovery should not conceal, however, the persistence of abnormal food shortages in five African countries. Also, the sudden emergence of localized surpluses and the difficulty in marketing them, underlined the precariously poised equilibrium of Africa's food chain. This report shows the unfortunate, incongruous situation of such countries economically dependent on agriculture, which succeeded in improving their output performances, yet were deprived of market opportunities that would have permitted them to benefit from their successes.

The threat of major food losses in Africa, from grasshopper and locust infestations, which arose in late 1985 and into 1986, receded, although the persisting danger of new upsurges in some areas still required continuing control efforts. Nevertheless, one year after FAO's first warning of a grasshopper and locust upsurge,

the massive efforts mobilized have already yielded encouraging results.

In *Latin America*, the moderate recovery achieved in 1984 and 1985 failed to consolidate in 1986. Despite slower inflationary pressures, economic activity slowed down and the situation in the external sector deteriorated markedly. The difficulties in surmounting the grave economic crisis were compounded by a series of setbacks in the agricultural sector: food and agricultural output stagnated and export earnings were affected by a dramatic deterioration in the terms of trade. A sharp worsening in the debt-servicing situation brought again the problem of indebtedness to the forefront of the region's economic concerns.

A generally more favourable turn of events occurred in the *Far East*. For many Asian countries, 1986 was a good agricultural year and several of the most populous of them continued to achieve sustained growth. Paradoxically, the success in boosting agriculture created, in some countries, increased difficulties in marketing and in adjusting supply to demand.

Many of the main problems and issues surrounding agriculture in the *Near East* in 1986 were linked to the fall in export earnings from oil, and the consequent reduction of economic activity and employment opportunities. Food and agriculture in both oil-exporting and non-oil countries were affected by cutbacks in investment, production and consumer subsidies, and by massive movements of migratory workers.

It is in the area of trade that the agricultural situation appeared the least encouraging. The situation of oversupply of many agricultural products, together with depressed import demand from industrial, oil-exporting and debt-burdened countries, contributed to a stagnation in the volume of agricultural exports and a fall in their value. The collapse in the prices of agricultural products and a strong deterioration in agricultural terms of trade resulted in a heavy setback for the export earnings of many developing countries. While agricultural trade balances tended to improve in developing countries, for many of them this was only the consequence of a depressed capacity to pay and, hence, an inability to take advantage of low international prices to import food.

Although complete data on fishery and forestry performances in 1986 are not yet available, both sectors recorded substantial gains in output in 1985. Fish output expanded for the eighth consecutive year, mainly owing to larger catches in South American waters. Being largely confined to fishmeal manufacture, such catches were, however, less significant for direct food consumption than their large volumes might suggest. The stagnation in fish output in Africa, despite the rich marine resources off West Africa especially, continued to be a cause for concern. The volume of world fish trade expanded in 1985, twice as fast as output. Indeed, in 1985, fisheries appeared as the only bright spot in a generally depressed food and agricultural trade environment.

Forestry production also continued to expand in 1985 for the third consecutive year and exceeded previous peaks in all product areas. While trade in forest products had expanded considerably over the past 15 years, it stagnated in 1985, however, and actually fell in developing countries. Recent institutional developments of considerable potential importance for forestry were: the establishment in mid-1986 of the International Tropical Timber Agreement, the support for FAO's Forestry Action Plan by the Ninth World Forestry Congress, and the International Conference on Forests and Trees, along with its approval by the FAO Committee on Forestry.

This report also reviews trends in selected areas related to food and agriculture in the early 1980s. This period of serious economic stress was reflected in declining nutritional levels in nearly a half of the 100 or so countries reviewed, while a third showed only modest gains in per caput calorie intake. Most regrettably, countries whose populations already had the lowest average nutritional levels suffered the most pronounced losses in per caput calorie intake. The greatest losses were found in Africa and Latin America, while countries in the Near East achieved some gains in calorie consumption only through increased food imports. On the other hand, improvement in food availability in some Asian countries, which account for a major share of the total population of developing countries, can be regarded as a major accomplishment.

The crisis of the early 1980s had varying effects on agricultural productivity and input usage in the different regions. This report shows that both land and labour productivity declined

significantly in Africa and Latin America, but improved in Asia and the Near East. Fertilizer consumption, tractor usage and irrigation availability were, in many cases, severely constrained by the economic recession. It was also observed that the early 1980s heightened the divergence in the source of agricultural incomes of the different countries: those relatively more export-dependent became increasingly so, while for others, the domestic market assumed increasing importance.

The second chapter of this report focuses on the agricultural performances of the different regions, including the developed countries, against the background of the economic crisis of the 1980s.

Apart from greatly improved weather conditions in 1985 and 1986, a shift in policy stance was noted in Africa, conferring greater priority to the agricultural sector to lead to the resumption of economic growth. In Latin America, agriculture was a leading sector in implementing adjustment policies necessitated by the economic crisis, particularly in the drive to promote exports and reduce imports.

Agricultural incomes are still low in Asia and, while some countries in the region, including China and India, experienced impressive agricultural performances in recent years, they face problems of adjusting output to market demand. The potential size of China, both as an agricultural market and as a major exporter of agricultural products, has implications not only for the trading countries of Asia, but for the world as a whole.

Agriculture played a widely varying role in the economies of the Near East region. In both oil-exporting and oil-importing countries, however, the sector had to adjust to the consequences of declining oil revenues. Large agricultural subsidies for producers and consumers were cut as part of austerity measures in some countries, and declining remittances affected others, which also witnessed a return of migratory labourers.

Questions of agricultural adjustment were very much to the fore in the developed market economies, although the concerns were mainly about the need to restore farm incomes and the size of farm supports, programmes and budgets. The small, exporting countries of this group found it difficult to maintain their market shares in the face of fierce competition, and their agricultural sectors suffered as a consequence.

The agricultural sectors of Eastern Europe and the USSR had some success in adapting to the harsh economic climate of the 1980s. In some countries, the higher costs of energy and inputs, the declining willingness of states to apply large subsidies, and reduced levels of imported inputs and supplies, had to be absorbed. By and large, this was achieved and output growth accelerated.

This year's special chapter in *The State of Food and Agriculture* reviews agricultural financing in developing countries, identifying its main sources and uses, and examining a number of issues it raises. Recent experiences shared by many developing countries—adjustment of their economies due to balance of payment difficulties, the worsening external debt situation and excessive fiscal deficits—have led to a reappraisal of the role of agriculture during this period of adjustment. The sector's contribution to external and domestic adjustments are examined from the perspective of agriculture as a recipient and a generator of financial resources. This discussion also provides the background for a review of public and private sources of funds for agricultural development, among other development objectives and their uses.

In many developing countries, agricultural financing is seriously constrained by budgetary difficulties, the levelling off in the growth in flows of external assistance, a reluctance to incur further debts from additional external borrowings—if these are available—and the unwillingness to raise domestic budgetary commitments. As a consequence, only two feasible broad lines of policy action remain open to increase resource flows for agricultural development.

The first approach is to promote foreign direct investment (FDI) in the sector. Yet this is particularly difficult for poorer countries whose structure of agriculture is unlikely to attract much foreign investment. Furthermore, such flows to agriculture have been relatively small in the past, except for a limited number of countries, and although FDI, strictly speaking, is not regarded as debt being equity investment, it has costs and commitments for the recipient country that must be considered.

The second approach is the adoption of policies to strengthen rural financial markets, to enable them to stimulate and mobilize domestic savings and intermediate more effectively between savers and borrowers. Although low-income rural people may not be able to save much, there is evidence to show that their propensity to save is surprisingly high. Given adequate financial incentives, rural savings could attain large volumes mainly by the numbers of rural people in most developing countries. Previous policies, based on parastatal financial institutions and subsidized credit programmes, have inhibited the development of rural financial markets. Nevertheless, policy reforms may not be uniformly easy to introduce, if interest rates are allowed to become seriously distorted. The path of adjustment may be a difficult one.

This brief review of sources and uses of agricultural finance, during a period of profound macro-economic adjustment, shows the need for further work and research. Concepts often are inconsistent and reliable data are lacking. The need for further improving availability and analysis of data on public expenditure, as well as on rural private savings and investment, cannot be overemphasized. The dearth of information is particularly acute for components of public expenditure on agriculture, not only through the government budget, but through agricultural parastatals and quasi-government agencies. The potential for rural savings, the amounts saved, and in what form, need to be thoroughly assessed. The amount and nature of private investment in agriculture need to be more accurately quantified. Explicit taxation of the agricultural sector needs further study and analysis.

PART ONE
WORLD REVIEW

ECONOMIC, FINANCIAL AND TRADE ENVIRONMENT

Overview

Economic and trade performances in 1985 and the first half of 1986 present a mixed picture of accomplishments and uncertainties. Several factors, which would generally support economic growth and trade expansion, tended to consolidate: inflation receded in most countries, largely as a result of sharply falling prices of oil and other commodities; nominal interest rates fell to their lowest levels since the early 1980s; and the US dollar depreciated steeply, though in a relatively orderly way. Despite such stimulus to economic activity, estimates for 1985 and the first half of 1986 indicated a slowdown in growth in industrial countries more pronounced than had been expected, particularly in the United States. At the same time, world trade stagnated, protectionist pressures intensified and many developing countries, already severely burdened by their external debt and related austerity measures, faced a continuing fall in the prices of their commodity exports.

Capital-importing countries significantly constrained imports and improved their trade balances from a deficit of $67 200 million in 1981 to a surplus of $10 000 million in 1985, although a deficit of $6 600 million was again expected in 1986. Despite this improvement and a restructuring of their debt, external debt remained a major obstacle to a resumption of growth in many developing countries. The debt-service ratio of capital-importing countries worsened in 1985 to 24%, a little higher than the previous peak of 1982, and was expected to worsen further to 25.5% in 1986 (Table 1.1).

Prospects for the medium term were for a resumption of momentum in economic activity and a generally more balanced pattern of growth. These expectations are uncertain however, as economic prospects are contingent upon such unpredictable factors as movements in exchange and interest rates, future trends in prices of oil and other commodities, and the ability by developing countries to benefit from the momentum of growth in industrial countries. It is also uncertain whether private and official creditors will adequately increase their lending to heavily indebted countries, so as to enable them to reabsorb their debt and resume growth, and whether governments of major importing countries will succeed in containing protectionist pressures.

The beneficial effects for agriculture of a continued economic recovery should not be underestimated. As shown by the experience of recent years, the overall economic environment can exert an influence on food and agricultural production, trade and consumption comparable to that of policies and factors specifically related to agriculture.

Progress in international economic cooperation has been uneven. Some broad areas of disagreement remain among industrial countries on such issues as exchange and interest rates, and the ways to tackle the current account imbalances in different countries. In the area of international trade, a major event was the decision to launch the eighth round of multilateral trade negotiations (the Uruguay Round) (see Box 1.3 on p. 35).

Output Growth and Patterns

According to International Monetary Fund (IMF) estimates, world output of goods and services rose 3.1% in 1985, considerably below the expansion of 4.4% recorded in 1984. The slowdown was particularly pronounced in *industrial countries* (3% in 1985, down from 4.8% the previous year). This resulted largely from a tapering off in the economic expansion of the United States, although growth was also smaller in Japan and Europe.

In the first half of 1986, the pace of economic activity in industrial countries slowed down substantially reflecting, among other country-specific factors, reduced stockbuilding and lower net exports by the United States, and the negative impact of currency re-evaluations in Japan and the Federal Republic of Germany. Although there were signs of a strengthening in domestic demand and economic activity later in the year, the overall growth in real GDP in 1986 in industrial countries was not expected to have reached the previous year's level.

Prospects for 1987 were for a modest strengthening of economic activity in industrial countries fostered by successful efforts of budgetary consolidation, declining inflation and interest rates and improved terms of trade. These factors should more than offset government spending restraint and weak export opportunities in developing-country markets.

Developing countries as a whole experienced a decline in output growth from slightly over 4% in 1984 to 3.2% in 1985. Latin America was the only developing region where economic growth in real terms accelerated significantly in the latter year. Although some of the largest developing countries, namely India

TABLE 1.1. **Annual changes in selected economic and financial indicators, 1980-86**

(Percentages)

Item	1980	1981	1982	1983	1984	1985	1986[a]
OUTPUT							
Industrial countries	1.2	1.4	−0.4	2.6	4.8	3.0	2.7
Developing countries	3.5	2.2	1.6	1.4	4.1	3.2	2.7
Africa	3.7	1.8	0.8	−1.7	1.7	2.0	1.4
Asia	5.4	5.5	5.0	7.6	7.9	6.0	4.6
Near East	−2.2	−1.8	−0.1	0.1	0.9	−1.2	–
Latin America	5.3	0.9	−1.0	−3.1	3.2	3.7	2.7
CONSUMER PRICES							
Industrial countries	11.8	9.9	7.3	4.9	4.7	4.0	2.2
Developing countries	27.1	26.1	24.4	33.0	37.9	39.6	28.4
Africa	16.4	22.0	11.4	19.3	20.0	13.1	12.6
Asia	13.1	10.6	6.3	6.6	7.2	7.4	5.8
Near East	16.8	15.2	12.7	12.3	14.7	11.7	11.2
Latin America	54.2	59.0	66.4	102.7	123.4	145.7	86.5
EXPORT VOLUMES							
Industrial countries	4.0	3.6	−2.1	2.7	9.6	4.3	3.0
Developing countries	−4.1	−5.9	−8.2	3.1	6.7	0.7	5.8
Africa	−0.6	−15.8	−7.5	3.1	4.8	3.7	5.0
Asia	9.0	8.2	0.8	10.8	13.8	3.8	6.9
Near East	−15.2	−17.6	−19.7	−9.2	−5.4	−5.4	12.8
Latin America	1.2	6.1	−2.5	8.5	8.6	−1.7	−0.1
IMPORT VOLUMES							
Industrial countries	−1.7	−2.2	0.6	4.6	12.5	4.8	7.5
Developing countries	8.5	6.7	−4.1	−2.7	1.7	−1.1	−3.7
Africa	8.7	10.9	−8.3	−10.3	0.2	−7.0	−9.8
Asia	10.2	3.4	−0.3	8.1	5.5	5.6	1.7
Near East	9.4	16.0	5.9	−2.9	−7.0	−14.0	−18.7
Latin America	9.8	2.5	−17.7	−22.3	3.0	−0.6	–
TERMS OF TRADE							
Industrial countries	−7.2	−2.0	1.9	1.5	0.5	0.9	8.0
Developing countries	16.8	3.0	−0.9	−3.8	1.4	−2.2	−16.3
Africa	15.5	2.4	−3.2	−2.7	2.8	−1.2	−24.2
Asia	−1.7	−4.4	−0.7	−0.5	1.3	−1.8	−3.9
Near East	41.3	13.3	2.2	−8.8	0.1	−3.6	−44.0
Latin America	7.1	−4.3	−5.4	−3.0	3.5	−2.6	−12.4
DEBT-SERVICE RATIO[b]							
Capital-importing countries	17.3	20.7	24.7	22.3	23.9	24.0	25.5
Africa	13.8	15.4	20.6	23.0	25.8	28.4	33.5
Asia	8.2	9.6	11.3	10.9	11.9	12.7	13.1
Non-oil Near East	17.3	21.1	26.4	26.5	28.9	31.7	34.6
Latin America	33.7	41.2	50.6	41.9	41.1	40.3	46.0

[a] Preliminary.
[b] Payments (interests, amortization or both) as percentage of exports of goods and services.
Source: IMF, *World Economic Outlook*, October 1986.

TABLE 1.2. **World export price indices, by quarter, 1984-86**

(1980 = 100)

Item	1984		1985				1986	
	III	IV	I	II	III	IV	I	II
Food [a]	72	68	65	65	66	71	78	77
Agric. non-food	89	86	80	80	76	75	76	75
Minerals	95	95	94	94	94	93	83	47
Crude petroleum	93	93	91	91	91	91	80	42
Manufactured goods [b]	83	83	81	84	88	93	99	104

[a] Includes coffee.
[b] Export unit value index of developed market economies.
Source: UN, *Monthly Bulletin of Statistics*, November 1986.

and Brazil, significantly expanded their economic activity in 1985, most medium-size and small economies experienced disappointing growth. Nearly 60% of all developing countries—and a great majority of Latin American and African ones—failed to achieve any growth in real GDP in per caput terms in 1985. Oil-exporting countries suffered the most in this respect, and their aggregate output has stagnated since the early 1980s. Furthermore, the boost to economic growth expected from lower oil prices has not yet manifested itself in oil-importing countries.[1]

Economic growth in developing countries was estimated to have slowed down in 1986 to 2.7% due to the lagged impact of the declining terms of trade in 1985. They had, as a group, virtually no growth in per caput real GDP from 1981 to 1986, and no real improvement was in prospect for 1987, mainly because of lower prices for oil and non-oil primary commodities.

The balance of these factors varied among regions. Africa's output was expected to increase only 1.4%, well behind population growth. Between 1980 and 1986, real per caput GDP in Africa fell more than 11%. At 4.6%, economic growth in the Far East in 1986 was estimated to be the lowest in the 1980s. Economic activity also decelerated in Latin America, after two years of moderate recovery.

The prospects for the economies of oil-exporting countries, hard hit by oil price movements, were for a further decline in output in 1986 and very little growth in 1987. This would have an additional negative impact on the growth of their food imports, the volume of which had grown 16% a year in the 1970s, but less than 4% a year during 1980-84.

[1] During 1982-84, the share of oil imports of total imports averaged 15-20% for the developing countries for which data were available. Oil prices nearly doubled during 1979-81, and the ratio of oil imports to total imports rose 30%. In mid-1986, the oil price halved, implying that the ratio of oil to total imports could fall 30%, other things remaining the same.

Trade Growth and Patterns

The increase in the volume of industrial-country exports fell from nearly 10% in 1984 to about 4% in 1985. For developing countries, the slowdown was more dramatic: from 7% to virtually zero growth. The sluggishness in the volume of shipments reflected market conditions, particularly those of primary commodities that were in exceptionally ample supply. Prices of agricultural commodities were more adversely affected than prices of manufactured goods, which contributed to a deterioration in the terms of trade of developing countries of over 2% (Table 1.2).

Preliminary estimates for the first half of 1986 indicated that the increase in the volume of world trade decelerated to a 3% annual rate. The industrial economies responded less positively than expected to: lower interest rates, the sharp fall in the price of oil, changes in exchange rates, and in particular, to the decline in the US dollar.

The weakness of world trade reflected a number of largely interrelated factors: the slowdown of world economic activity; the strains in the international financial system; efforts to substitute imported forms of energy; foreign exchange shortages; adjustment measures in many debt-burdened countries; and the introduction or reinforcement of protectionist measures on trade outweighing liberalization efforts. Therefore, demand was weak, but supplies of most commodities were extremely abundant, particularly those of food and agricultural raw materials.

A number of disturbing situations were also found at the regional level. Latin America suffered a decline in the volume of its exports (1.7%) and a deterioration in its terms of trade (3%) in 1985, after two years of encouraging performances, and prospects were not bright in 1986, particularly with regard to terms of trade. Africa experienced the most pronounced fall in export unit values of all developed and developing regions (5.4%) and a sharper fall of almost 18% was expected in 1986. By late 1985, half of sub-Saharan African countries had barely enough reserves to finance one month of imports, and another third of them could

only finance two months of imports. Asia also was affected by sluggish growth in trade, with export volumes increasing only 3.8% in 1985, well below the average of the 1980s. Its terms of trade also deteriorated and were expected to worsen further in 1986, but export volumes should improve.

The combination of low export earnings and high debt-service costs imposed severe contraints on imports. Imports declined considerably in volume in all developing regions except Asia, and adversely affected sectors producing tradable goods, particularly those dependent on imported inputs.

Estimates for 1986 provided little encouragement for most developing countries. According to the IMF, the continuing fall in commodity prices was expected to cause a 16% deterioration in their terms of trade, more than offsetting a 6% expansion in export volumes. The resulting fall in export earnings will inevitably depress the import- and debt-payment capacity of many developing countries and retard their resumption of economic growth. On the other hand, oil-importing countries will benefit from lower oil prices, particularly as regards their trade balances, but also on the side of their production costs. Indeed, the group of net oil-importing developing countries was expected to reduce its deficit of current accounts, from an aggregated $21 400 million in 1985 to $12 900 million in 1986.

Domestic Prices and Interest Rates

A number of developments combined in 1985 and 1986 to ease inflation in and narrow inflation rate differentials among industrial countries. These developments were: the lower cost of imported oil, food and raw materials; a generally cautious attitude of governments and central banks in implementing their monetary and fiscal policies; a restrained "cost push" from wages reflecting the persistence of high unemployment; and exchange rate factors, including the depreciation of the US dollar since the second quarter of 1985, which contributed to hold down costs and prices outside the United States.

The result was a further decline in average inflation rates of developed countries, from 4.2% in 1984 to 3.8% in 1985. IMF forecasts yearly increases of barely over 3% in consumer prices in industrial countries for the whole of 1986 and 1987, figures last seen in the 1960s. But inflationary fears remain as may be witnessed by the rise in the price of gold and sudden declines in stock markets that occurred in the third quarter of 1986.

For developing countries, price inflation was a major problem during the past decade. Abatement in inflationary pressures, however, appears to have taken place in a majority of them since 1985. Furthermore, radical adjustment measures taken in recent months by several of the countries most severely affected by inflation already have resulted in dramatic falls in month-to-month increases in domestic prices.

For developing countries as a whole, consumer prices in 1986 were expected to increase by about 28%, a low figure in the context of the 1980s. This was due mainly to a sharp reduction in the inflation rate in Latin America, from 146% in 1985 to 86% in 1986.

One consequence of the overall decline in inflation rates in developed countries has been a decline in nominal interest rates, although they remain high by historic standards. By November 1986, the average short-term interest rate in seven major industrial countries was about 6%, down from 8.5% in 1985, and an average long-term rate of 7% compared with 9.8% in 1985.

The balance among the various regions and groupings of countries of the various factors contributing to economic growth lead to different conclusions depending on the perspective taken. Low commodity prices, particularly for oil, will promote global economic growth and, combined with lower inflationary expectations, should cause nominal interest rates to fall. Yet these same low prices will reduce export earnings in some indebted countries and worsen their debt situation, despite lower interest rates.

There are two main areas of disagreement among various observers of economic trends, which can be summarized as follows. The first relates to the ability of industrial countries to act as an engine of growth and pull along the economies of developing countries at an adequate pace. It is argued that concerns for budgetary restraint in the industrial countries will not allow for sufficiently high rates of economic growth, despite recent welcome moves on their part to coordinate economic policies so as to remove distortions in exchange and interest rates. Furthermore, despite moves toward negotiations aimed at achieving greater trade liberalization, protectionist pressures seem likely to remain a powerful force hampering the resumption of former growth rates in world trade. In addition, structural changes have taken place in the demand of industrial countries for

primary commodities, which further hamper export prospects of developing countries.

Even assuming a favourable turn of events in international economic and trade relationships, the ability of developing countries to positively react to external stimuli to growth would also depend on their own efforts to establish stable monetary and fiscal policies, reduce price distortions and introduce more flexibility into labour markets.

The second area of disagreement concerns the adequacy of resource flows to restore socially acceptable rates of economic growth in developing countries. Between 1981 and 1984, the capital-importing countries improved their trade balances mostly by reducing their imports. Their net capital flows (net external borrowing plus non-debt creating flows plus asset transactions) fell from $128 000 million to $49 000 million during 1981-85. Their net investment income turned more negative at the same time (−$42 000 million to −$60 000 million). Hence, net resource transfers fell sharply from $86 000 million in 1981 to −$11 000 in 1985. Therefore, although these countries had a trade surplus and were still major importers of capital, they suffered a net outflow of resources in 1985. The argument is for an increase in resource flows to capital-importing countries to enable them to resume growth.

A number of recent initiatives and suggestions centre on this argument. In September 1985, an initiative was announced

BOX 1.1

The Chernobyl nuclear accident

This accident, which took place on 26 April 1986 and released significant quantities of radioactive isotopes into the atmosphere, underlined the susceptibility of agriculture to disasters of this kind.

Although the reactor damaged by the accident is located in the Ukraine, which accounts for about 20% of the USSR's output of cereals, the area of worst contamination was limited to a radius of approximately 30 km around the reactor. The impact on cereal production may, therefore, be relatively limited. Nevertheless, winds spread the radioactivity widely throughout Eastern and Western Europe and into parts of Asia. The resulting contamination of fruit, vegetable and livestock products caused serious disruptions to domestic and international trade. A ban was imposed by the EEC until the end of May 1986 on imports of these products from areas within a radius of 1 000 km of Chernobyl.

The *long-term* environmental impact of this accident cannot yet be assessed. However, it has shown a clear need for international action that will lead to acceptable limits for radionuclide contamination of foods, since such limits did not exist at the time of the accident.

Activities leading to recommended international limits would involve the Codex Alimentarius and the joint FAO/International Atomic Energy Agency (IAEA) Division.[1] As a first step, FAO convened an expert consultation, held 1-5 December 1986, that recommended international limits for radionuclide contamination in all foods. These limits will be widely publicized and will be submitted also to the Codex Alimentarius Commission for consideration. Uniform adoption and application of these limits by regulatory authorities will prevent trade disruptions such as occurred after the Chernobyl accident.

[1] Of Isotope and Radiation Applications of Atomic Energy for Food and Agricultural Development (AGE).

(the Baker Plan) to form a partnership among debtor countries, multilateral agencies and commercial banks to lend $29 000 million to the 15 most heavily indebted countries over three years, subject to some policy changes in the indebted countries. Other recent suggestions, which encompass both the need for new lending and some form of debt release for debtor countries, hinge on the active participation of commercial banks. A suggestion of particular interest made in July was for the creation of special financing facilities from recycled Japanese and northern European current-account surpluses in favour of the debtor countries.

The case for Africa, specifically for agriculture and for sectors directly supporting agriculture, was presented to the UN General Assembly Special Session on Africa's Economic and Social Crisis, in May 1986 (see Regional Review chapter on Africa).

The difficulties that some of these recent initiatives encountered to overcome the debt problems were clearly linked to the deterioration in the debt-export earnings ratio and the severity of adjustment programmes involved. The July 1986 agreement between Mexico and the IMF provided, however, an example of how flexibility could be introduced into adjustment measures that take account of specific needs and circumstances of a debtor country.

WORLD FOOD AND AGRICULTURAL SITUATION AND PROSPECTS

Food and Agricultural Production [2]

World agricultural production increased 1.3% in 1986 as a net result of 2% growth in food and 7.3% decline in non-food production (Table 1.3). The latter was the most significant decline since 1970.

These results showed a fall back in overall agricultural performances if compared with 1985 or indeed the average for 1980-86. They concealed, however, substantial variations among regions and country groups.

Food output growth in *developing countries* in 1986 was at a similar rate as that of 1980-86 (3.7% and 3.5% a year respectively). Growth in Africa (3.1%) was substantially lower than in 1985, when a 7% increase was achieved; it was, however, above the average growth rate for 1980-86. Food output in the Far East marginally increased and the growth was below the average for the 1980s. Also, in Latin America the rise was limited in 1986 to 0.4%, thus much less than the 2.2% a year for 1980-86, which was just below the population growth rate of around 2.3% a year. The increase in food output in the Near East was 5.8%, following the 5.1% increase in 1985. The pace of food output growth in the Asian centrally planned economies (ACPE)—mainly China—which slowed in 1985, accelerated again in 1986, to 6.6%.

In the *developed countries*, 1986 food output barely changed as a net result of a 1.6% fall in the countries with market economies and a 4.3% increase in East European countries and the USSR. Output of the 12-member countries of the European Economic Community (EEC) did not change as a group.

In developing countries, growth in output of non-food products, which are major sources of income and foreign exchange, fell in 1986 by 7.6%. Output of the main non-food commodities such as cotton, tobacco, coffee and tea declined (Table 1.4).

As regards changes in food production at the individual country level, 1986 was on the whole a favourable year. Out of 97 developing countries, 40, mostly in Asia and Africa, increased their food output in per caput terms.

[2] This general review is complemented by a more detailed discussion in the Regional Review.

TABLE 1.3. Food and non-food production, 1984-86

Item	Index (1979-81 = 100)			Change		Annual rates of change 1980-86
	1984	1985	1986	1984-85	1985-86	
				(%)		(%)
FOOD PRODUCTION						
Developing market economies	111	115	118	3.6	2.4	2.7
Africa	104	112	115	6.9	3.1	2.1
Far East	116	119	122	2.4	2.7	3.5
Latin America	109	113	114	3.4	0.4	2.2
Near East	106	111	118	5.1	5.8	2.1
Asian centrally planned economies	125	126	135	0.8	6.6	5.4
Total developing countries	115	119	123	2.7	3.7	3.5
Developed market economies	106	107	105	1.1	−1.6	1.1
North America	103	108	104	5.6	−3.5	1.0
Oceania	105	107	105	1.0	−1.5	2.0
Western Europe	110	107	107	−3.4	0.2	1.1
Eastern Europe and the USSR	110	110	115	−0.1	4.3	2.6
Total developed countries	107	108	108	0.8	0.1	1.5
WORLD	111	113	115	1.8	2.0	2.5
NON-FOOD PRODUCTION						
Developing market economies	105	115	105	9.6	−9.1	1.9
Africa	110	123	125	12.1	2.0	3.9
Far East	109	120	110	10.1	−8.0	2.7
Latin America	99	110	92	10.8	−16.9	0.3
Near East	107	108	106	0.9	−1.8	1.4
Asian centrally planned economies	178	153	148	−14.1	−3.6	7.6
Total developing countries	121	124	114	1.8	−7.6	3.3
Developed market economies	100	105	92	4.6	−11.5	−0.1
North America	95	96	75	0.6	−22.0	−2.6
Oceania	106	119	118	12.8	−0.9	2.8
Western Europe	116	124	121	6.7	−2.0	4.0
Eastern Europe and USSR	98	103	104	5.0	0.9	0.2
Total developed countries	99	104	97	4.8	−6.8	−
WORLD	114	117	108	2.7	−7.3	2.2

Source: FAO, Statistics Division.

TABLE 1.4. Agricultural production, by commodity, 1985-86

Item	Developed countries			Developing countries			World		
	1985	1986[a]	Change 1985 to 1986 (%)	1985	1986[a]	Change 1985 to 1986 (%)	1985	1986[a]	Change 1985 to 1986 (%)
	(Million tons)			(Million tons)			(Million tons)		
Total cereals [b]	918.6	907.1	−1.3	925.0	953.0	3.0	1 843.6	1 860.0	0.9
Wheat	301.8	308.2	2.1	203.6	216.3	6.2	505.4	524.5	3.8
Rice	26.3	25.9	−1.5	446.4	454.2	1.8	472.7	480.2	1.6
Coarse grains	590.5	572.9	−3.0	275.0	282.4	2.7	865.5	855.4	−1.2
Root crops	215.8	212.4	−1.6	369.3	373.5	1.1	585.1	585.9	0.1
Pulses	17.1	18.5	8.2	34.3	35.9	4.5	51.4	54.4	5.8
Oil-bearing crops [c]									
Oil content	24.1	23.4	−3.0	40.6	42.6	4.8	64.7	66.0	1.9
Oilcake content	67.5	65.2	−3.3	67.7	65.7	−2.8	135.1	131.0	−3.1
Sugar, centrifugal (raw)	41.9	41.0	−2.1	79.6	81.5	2.3	121.5	122.5	0.8
Cocoa beans	–	–	–	2.0	2.0	–	2.0	2.0	–
Coffee	–	–	–	6.0	5.2	−13.8	6.0	5.2	−13.8
Tea	0.3	0.3	−4.0	2.1	2.0	−1.7	2.3	2.3	−1.1
Cotton lint	6.2	5.4	−12.5	11.0	10.2	−7.3	17.2	15.7	−9.2
Tobacco	2.1	2.0	−6.8	4.4	4.3	−2.6	6.6	6.3	−4.0
Total meat	95.3	97.0	1.8	54.8	57.9	5.7	150.1	154.9	3.2
Total milk	386.2	391.2	1.3	125.1	128.1	2.4	511.3	519.3	1.6
Hen eggs	18.8	19.1	1.4	11.8	12.3	4.7	30.6	31.4	2.7

[a] Preliminary.
[b] Including rice as paddy.
[c] Total harvested production.
Source: FAO, Statistics Division.

TABLE 1.5. **Percentage rate of change in per caput food production, 1985-86**

Percentage rate of change	Developing countries	Developed countries
More than 10.00	Uganda, Kingdom of Saudi Arabia, Iraq, Morocco	
5.01 to 10.00	Chile, Syrian Arab Republic, Yemen Arab Republic, Mauritania, Mali, Guinea-Bissau, Mauritius, Malaysia, Lebanon, China	Yugoslavia, Canada, Bulgaria
3.01 to 5.00	The Sudan, Swaziland, Burundi, Ghana, Chad	USSR, Poland, Federal Republic of Germany
1.01 to 3.00	Turkey, Burkina Faso, Pakistan, Burma, Jordan, India, Indonesia, Haiti	German Democratic Republic, Spain
2.01 to 1.00	Colombia, Egypt, Republic of Korea, Argentina, Rwanda, Ethiopia, Gabon, Jamaica, Cameroon, Philippines, Trinidad and Tobago, Uruguay, Bhutan	The Netherlands, Denmark
−0.01 to 1.00	Kuwait, Oman, United Arab Emirates, Kenya, Mozambique, Nepal, Brunei, Islamic Republic of Iran, Singapore, Guatemala, United Republic of Tanzania, Somalia, Congo, Cyprus, Zaire	United Kingdom, Romania, Japan, Switzerland, Norway
−1.00 to −3.00	Sierra Leone, Bangladesh, Panama, Namibia, Madagascar, Venezuela, Botswana, Papua New Guinea, Costa Rica, Zambia, Zimbabwe, Mexico, Malawi, Honduras, Nigeria, Brazil, Central African Republic, Angola, Dominican Republic, Benin, Nicaragua	Italy, Finland, Australia, Belgium, Luxembourg, France, Iceland, Ireland
−3.01 to −5.00	Peru, Guinea, Ecuador, Niger, Democratic Yemen, Cuba, Sri Lanka	Greece, Austria, Czechoslovakia, Hungary
−5.01 to −10.00	El Salvador, Thailand, Togo, Côte d'Ivoire, Algeria, Paraguay, Afghanistan, Bolivia, Guyana, Lesotho, Liberia	United States, South Africa, New Zealand, Sweden
Below −10.00	Tunisia, the Gambia, Senegal, Libyan Arab Jamahiriya	Israel

Source: FAO, Policy Analysis Division.

This group, which includes such heavily populated countries as China, India, Pakistan, Indonesia and Egypt, accounts for a major share of the total population of developing countries (Table 1.5). By comparison, only 33 countries achieved gains in per caput food production on an average annual basis during 1980-85.

An opposite trend was found in industrial countries: during 1980-85, per caput food output expanded in all but four of them, namely South Africa, Iceland, Greece and Yugoslavia. Several of the major food producing and exporting countries experienced substantial increases, in the average range of 1.5% to 4.8% a year, during this period. These included Denmark, Australia, Japan, Federal Republic of Germany, the United Kingdom, and most East European countries. In 1986, however, their food production growth slowed. In only one-third of all developed countries did output growth still exceed population increase.

Such opposing broad trends in developed and developing countries were, paradoxically, equally welcome. In developing countries, higher food production growth in 1986 contributed to alleviate food shortages and overall economic conditions in many critical areas, particularly in Africa. On the other hand, the slowdown in food output growth was a positive development for many industrial countries, in the context of the complex

TABLE 1.6. **Fertilizer consumption, by major nutrients, 1982-85**

Item	Consumption			Change		Annual rate of change
	1982/83	1983/84	1984/85	1982/83 to 1983/84	1983/84 to 1984/85	1980/81 to 1984/85
		(Million tons)		*(%)*		*(%)*
DEVELOPED COUNTRIES						
Nitrogen	34.57	38.09	38.69	10.2	1.6	2.4
Phosphate	20.79	22.42	22.34	7.8	−0.4	0.7
Potash	19.20	21.48	21.25	11.9	−1.1	1.8
TOTAL	74.56	81.98	82.29	10.0	0.4	1.8
DEVELOPING COUNTRIES						
Nitrogen	26.48	29.04	31.81	9.7	9.5	6.5
Phosphate	9.79	10.47	11.93	6.9	13.9	5.9
Potash	3.69	3.94	4.64	6.8	17.8	3.3
TOTAL	39.96	43.45	48.38	8.7	11.3	6.0
of which:						
Africa	1.33	1.47	1.47	10.5	–	0.5
Far East	11.24	12.41	14.30	10.4	15.1	8.7
Latin America	6.45	5.73	7.39	−11.2	28.8	−1.4
Near East	3.82	4.37	4.24	14.4	−3.0	8.4
Asian centrally planned economies	17.10	19.45	20.98	13.8	7.8	7.1
WORLD						
Nitrogen	61.05	67.13	70.51	10.0	5.0	4.2
Phosphate	30.58	32.88	34.27	7.5	4.2	2.3
Potash	22.88	25.41	25.89	11.1	1.9	2.0
TOTAL	114.51	125.43	130.67	9.5	4.2	3.2

Source: FAO, Land and Water Development Division.

problem of their growing food surpluses. As reviewed in the Regional Review chapter of this document, however, the problem of food surpluses also emerged, or became more acute, in some developing countries facing the vicious circle of limited domestic absorption capacity in market conditions, insufficient storage and marketing facilities, and difficult access to international markets.

The Outlook for Cereals

The world cereal situation in 1986/87 was not expected to change substantially from recent years: supply surpluses had led to new record levels of stocks, and imports and prices remained depressed.

World cereal harvests increased slightly in 1986, mainly because of reduced harvests of rice and coarse grains in developed countries (down 1.5% and 3% respectively) and a rise in all cereals in developing countries, where production of wheat expanded by more than 6%.

The forecast of stocks at the end of the 1986/87 season, was estimated at a record level of around 450 million tons, which would represent 27% of world consumption. Compared with the previous season, the increase would be over 40 million tons for coarse grains and 7 million tons for wheat. Stocks of rice, however, were expected to decline by about 4 million tons.

FAO's forecast of cereal imports in 1986/87, was close to the low level, 182 million tons, obtained in the previous marketing season. Reduced imports of grain by the USSR were expected as a result of the favourable outcome of the 1986 harvest. Cereal imports by developing countries, many of which benefited from particularly favourable domestic supply conditions, would rise only 2%.

The United States lowered price support levels for cereals for the 1986 crop and this, together with larger stocks and supplies, led to further declines in world market prices: more than $30 per ton less for both US Hard Winter wheat and for maize by December 1986

compared with the previous year. Among cereals, only prices of better quality rice remained relatively stable.

Prices and Consumption of Fertilizers

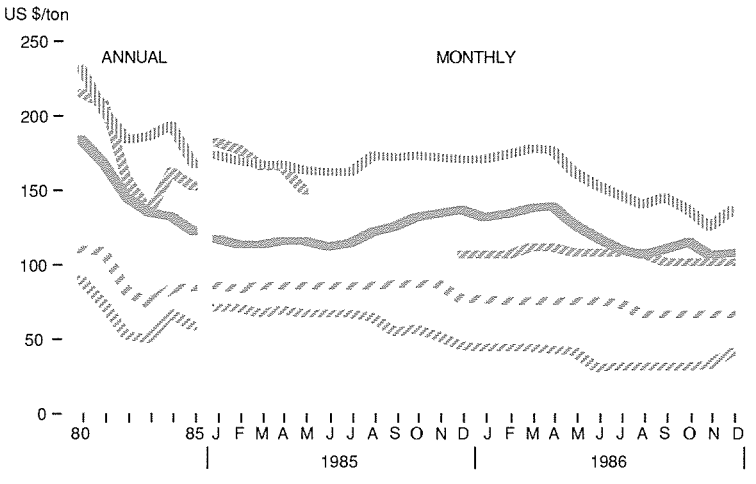
As a consequence of generally weak demand and abundant world market supplies, export prices of major fertilizer products declined, in many cases dramatically (Fig. 1.1). Thus, toward the end of 1986, the price of ammonium sulphate was more than 40% lower than a year before, although by the end of the year, it had recovered. The price of potassium chloride fell more than 20% during the same period, and those of other fertilizer materials, between 20% and 27%, depending on sources of supply. Such price changes tended to reflect movements in international prices of cereals.

World consumption of the three primary nutrients combined rose 4.2% in 1984/85 and thus remained above the trend for the 1980s (Table 1.6). The growth was mostly due to increased fertilizer use in developing countries, which accelerated their aggregate consumption in the last two years. Nevertheless, fertilizer consumption declined in the Near East and remained unchanged in Africa, possibly reflecting the lagged effect of the drought in the latter. Growth of consumption accelerated strongly in Latin America, following the sharp decline of the previous year, but fertilizer use fell back in this region in the 1980s, a sign of the austerity programmes undertaken. Growth of fertilizer use also quickened significantly in the Far East region.

The recovery in demand that had taken place in developed countries in 1983/84 was followed by a marginal increase in 1984/85, which brought consumption to more than 82 million tons, equivalent to almost 122 kg per hectare of arable and permanent crop land.

Data for fertilizer consumption in 1985/86 are still fragmentary, but first estimates indicate moderate declines in developed countries. While the prevailing low prices may have offered better market opportunities to importing developing countries, they have also discouraged production. Thus, producers in several countries limited production by reducing utilization rates or idling plants to control stock levels.

Figure 1.1 **EXPORT PRICES OF FERTILIZERS, 1980-86**



Source: FAO. Land and Water Development Division

FISHERIES

Fish Production

Total world fish production in 1985, the latest year for which complete data were available, was estimated to have increased 3.2% to almost 86 million tons (Table 1.7). While not as marked as the dramatic growth of almost 5.8 million tons in 1984, this was the eighth consecutive annual expansion in world output of fish, which is now 30% greater than in 1975.

In addition, 3.7 million tons of aquatic plants and seaweeds were harvested from marine and inland waters. Three-quarters of these vegetable products were produced by aquacultural activities. Aquaculture also contributed some 5.5 million tons of fin-fish, crustaceans and molluscs to the total world fish production. Although practised in an increasing number of countries, the impact of aquaculture on food supplies is particularly important in Asia, especially in China, Japan, the Republic of Korea and the Philippines.

As in 1984, a major factor underlying the increase in production in 1985 was the further substantial rise in catches by South American countries bordering the Pacific Ocean. The combined growth in production by Ecuador (39%), Peru (15%) and Chile (7%) accounted for the greater part of the net increase in world output. This further rise in catches in the south-eastern Pacific consisted mainly of small pelagic species such as South American pilchard off Chile (a growth of 12%) and anchoveta off Peru (from 23 000 tons in 1984 to more than 800 000 tons in 1985). Historically, the catches of these small shoaling species have fluctuated considerably under the influence of the "El Niño" phenomenon and, in many cases, their use has been confined largely to fishmeal manufacture. Thus, their impact on the supplies of fish available for direct human consumption is less significant than the annual variations in total catch might suggest.

The other major influence on the rise in the total world catch was a further substantial increase in production by China, by 850 000 tons to 6.8 million tons. In aggregate, fish production by other developing countries in the Far East showed a marginal increase. The performances of individual countries, however, differed markedly. For example, output rose in Burma (6%), the Republic of Korea (7%), Pakistan (3%), India and the Philippines (each 1%). Catches by other major producers fell, notably Thailand (6%) and Malaysia (5%).

Catches by African countries again showed an overall decline. The fall can be partly attributed to a significant revision in the system of collecting production statistics by Nigeria, a major producer. However, the long-term stagnation in fish output by African countries clearly continues. On the one hand, the capacity to exploit more fully marine resources—especially the substantial stocks off West Africa—remains to be acquired; and on the other, drought continued to affect important inland fisheries in 1985.

The world's two major producers of fish—Japan and the USSR—both failed to expand output in 1985. The catch of Japan decreased some 4%, while production by the USSR fell some 70 000 tons short of its record catch in 1984. Canada achieved an 11% recovery from its disappointing results in 1984. The catch by the United States suffered a slight decline after having shown a consistent growth in production of nearly two-thirds over the last decade.

In Western Europe, the relative stability since 1979 in total production—at between 11-11.5 million tons annually—was maintained. Norway suffered a substantial decline (16%) for the second successive year; output from industrial fisheries falling particularly sharply as a result of a drop of 300 000 tons in the catch of capelin. In the Federal Republic of Germany, catches collapsed by nearly one-third, with decreases in all species, except crustaceans. On the other hand, Iceland continued its substantial recovery from the trough of 1982, good fisheries for capelin and, to a lesser extent, for cod contributing to an overall increase in landings of 9%. Output by another major producer, Spain, showed virtually no change from the approximately 1.3 million tons caught annually in recent years.

East European countries succeeded in maintaining their levels of production, with the exception of the German Democratic Republic whose catches fell 11%.

International Trade in Fish and Fishery Products

In 1985, the total volume of fishery products entering international trade increased about 6% (Table 1.8). As a result of a decline in fishmeal prices, the total value rose only 5.3%. However, the long-term growth in the value of international trade in fishery products remains remarkable; it is now close to $17 000 million annually, compared with $1 300 million in 1961, a rate of expansion exceeding that of most agricultural products.

Trade in food-fish products expanded in volume and value in 1985, a major influence

TABLE 1.7. **Catch of fish, crustaceans and molluscs, including all aquatic organisms except whales and seaweeds, by region, 1983-85**

Country/Region	Catch			Change	Annual rates of change
	1983	1984	1985	1984-85	1980-85
		(Million tons)		*(%)*	*(%)*
DEVELOPING COUNTRIES					
Developing market economies	29.5	31.9	34.5	8.0	4.0
Africa	3.6	3.3	3.1	−4.1	−0.9
Far East	15.2	15.3	15.6	2.1	3.0
Latin America	9.3	12.0	14.3	19.0	6.7
Near East	1.1	1.2	1.2	1.0	3.9
Asian centrally planned economies	7.6	8.4	9.3	10.1	8.1
Total developing countries	37.1	40.3	43.8	8.5	4.8
DEVELOPED COUNTRIES					
Developed market economies	29.0	30.7	30.0	−2.2	2.0
North America	5.5	6.1	6.2	1.6	4.7
Oceania	0.5	0.5	0.4	−4.1	7.3
Western Europe	11.2	11.5	11.2	−2.5	0.2
Other [a]	11.9	12.6	12.2	−3.7	2.4
Eastern Europe and USSR	11.2	11.9	11.8	−0.9	2.6
Total developed countries	40.2	42.6	41.8	−1.8	2.1
WORLD	77.2	83.0	85.6	3.2	3.4

[a] Japan, South Africa and Israel.
Source: FAO, Fisheries Department.

TABLE 1.8. **FAO index numbers of volume, value and unit value of exports of fish and fishery products, 1983-85**

Item	Index numbers *(1979-81 = 100)*			Change		Annual rates of change
	1983	1984	1985	1983 to 1984 *(%)*	1984 to 1985 *(%)*	1980 to 1985 *(%)*
VOLUME						
World	109.8	115.5	122.3	5.2	5.9	4.1
Total, developing countries	114.8	123.2	133.4	7.3	8.3	6.0
Total, developed countries	107.0	110.5	115.6	3.3	4.6	2.9
VALUE						
World	104.2	105.0	110.6	0.8	5.3	1.4
Total, developing countries	110.8	114.5	118.3	3.3	3.3	3.2
Total, developed countries	99.8	98.5	105.5	−1.3	7.1	0.1
UNIT VALUE						
World	94.8	91.0	90.0	−4.0	−1.1	−2.7
Total, developing countries	95.1	93.5	90.8	−1.7	−2.9	−2.4
Total, developed countries	93.3	89.2	89.7	−4.4	0.6	−2.9

Source: FAO, Fisheries Department.

being the continuing strong demand in some major markets for demersal fish, especially cod and haddock, which led to a considerable rise in prices. Canada remained the largest world exporter of fish and increased its export sales 7%. The value of fishery exports also increased in most other major exporting countries such as Iceland (21%) the United States (15%), Norway (2%) and Denmark (6%). Japan was the exception: its exports decreased 7% mainly because of reduced sales of frozen and canned skipjack tuna. The steady growth of fish and fishery product exports by developing countries has continued. In total, it now accounts for some 44% of the value of world trade compared with 24% twenty years ago.

One-half of fishery products entering international trade in 1985 were destined for Japanese and US markets. The continued predominance of Japanese demand for high-value fishery products resulted in a 13% increase, in both volume and value terms, in its imports. In the United States, a substantial rise in fishmeal imports was the major factor behind its 6% increase in the total volume of imports of fishery products. Imports of food-fish products also rose significantly, both in volume and value. The EEC countries, which together account for over one-quarter of world imports of fish products, in value terms, also continued to expand their heavy reliance on other countries' products. In particular, the cost of imports by France and Italy, the major markets within the Community in 1985, rose about 11%.

Contrasting experiences were found in the trade of fish and fishery commodities, characterized above all by its heterogeneity and many product forms. The sellers' market in fish and frozen demersal fish has already been noted. As regards frozen tuna, world trade continued to be depressed with prices generally below 1984 levels. On the other hand, 1985 was notable for the expansion of imports of low-cost canned tuna. Thailand was the major beneficiary, supplying more than 60% of growing imports by the United States of this commodity. In most other markets for canned fish products, with the exception of shrimp, world trade remained depressed; canned mackerel was especially affected by the continued closure of the Nigerian market and lower imports by Near East countries.

International trade in frozen shrimp maintained the level achieved in 1984, with a total market value representing almost one-fifth of total trade in fishery products, the highest of any seafood category. Around 500 000 tons of shrimp were imported in 1985 by the three major consuming markets: Japan, the United States and Europe. Demand for cephalopod products (squid, octopus and cuttlefish) remained strong, with favourable and improved markets in Japan and Europe; world imports of these products increased 14% in value and 8% in volume.

While the production of cured fish has shown little change, the importance of this product in international trade has declined considerably over the past 25 years; its share of world fish trade has now dropped to 6% in value, compared with 14% in 1960. However, in 1985, supplies of dried and salted fish were generally well below demand, and prices rose in the major European markets, that is, Portugal, Spain and Italy.

World fishmeal production in 1985 surpassed even the excellent results of 1984. Demand was stimulated by competitive prices for fishmeal compared with other oil meals, and the volume of trade expanded considerably in 1985, imports increasing by nearly 30%, to reach over 2.9 million tons. Receipts from exports, however, decreased 9% compared with the previous year.

Prospects for 1986

It seems unlikely that the world catch of fish in 1986 will significantly exceed that of 1985. Lower landings were reported in Latin American countries; the catch by Japan and the USSR of Alaskan pollack, which in recent years has been the major species exploited in volume terms, fell. Other major fisheries, particularly in the North Atlantic, continued to be controlled by quotas.

International trade in fish and fishery products in 1986 was greatly influenced by changes in the value of the US dollar. Countries with strong currencies such as Japan, increased their imports; in other countries, notably the United States, total imports declined. In general, prices for fishery products rose in terms of the US dollar, with the exception of tuna and fish oil.

At the level of specific products, trends varied in 1986. The tight supply situation with regard to cod and haddock continued, with hake increasingly making ground as a substitute. The boom in canned tuna from low labour-cost countries was also maintained in 1986. Prices for shrimp continued to strengthen, both in the United States and Japan, but demand remained at a high level. The European market for dried fish similarly maintained its

buoyancy, with prices continuing their rising trend. Notwithstanding pressures on prices because of high production levels and abundant stocks of alternative sources of oil meals, fishmeal prices strengthened under the influence of the changes in the value of the US dollar.

Major Issues

In the long run, the major challenge remains that of expanding supplies of fish for direct human consumption so as to satisfy the consistent increase in demand. This demand is being boosted by the growing populations and rising needs for basic foods on the part of developing nations, and by the renewed interest of more affluent societies in fish as a healthy as well as an attractive food.

There is a need therefore not only to increase overall supplies of food fish, but also to make better use of the resources once they are harvested and bring a valuable food to market at acceptable prices. Such economies may be achieved through the reduction of the heavy losses often incurred as a result of spoilage or from the discarding of incidentally caught lower-valued species, and by the development of new product forms.

To obtain such an increase in supplies, continued efforts will be required to help developing countries enhance their own capacities to manage, harvest, process and market the often substantial resources which have come within their national jurisdictions as a result of the new legal regime of the seas. They need greater access to skills, technologies and financial resources. In this respect, collaborative efforts between countries with long experience in fisheries and those with untapped potentials will continue to be an important factor. Bilateral arrangements, through joint ventures in harvesting, processing and marketing, are likely to play a key role in this transfer of skills, reinforced by multilateral support for collaboration in fisheries development at the regional level.

FORESTRY

The forestry sector in 1985 continued its growth for the third consecutive year, reaching production levels exceeding previous peak years in all product areas (Table 1.9). The expansion of the economies of the developed countries continued, and demand for forest products maintained very high levels in North America. Although growth of the forestry sector in developing countries was marginal, it continued its slow upward trend.

Forestry Production and Trade in 1985

Removals of roundwood in 1985 grew more slowly than the average during 1980-85, but fuelwood consumption in developing countries continued to increase 2% a year, contributing 20% to their total energy supply needs and some 80% to their total roundwood production. The incentive to expand the use of fuelwood and charcoal as an energy source has diminished for developed countries with the fall in commercial energy prices, and their consumption of these products has levelled off since 1981. This is in contrast with the years immediately following the second oil shock in 1979 when the annual rate of growth of fuelwood consumption in developed countries reached 13%.

Output of mechanically processed wood products in 1985 was particularly vigorous in North America, where new dwelling construction reached 1.9 million units, close to the very high level of 1984. Lower interest rates on mortgages favoured the sustained level of activity in the North American housing sector. As a result, consumption of sawnwood and wood-based panels increased some 15% in the United States. Its imports of these products also grew considerably, mainly because of the strengthening of the US dollar until early 1985.

For Europe and Japan the situation was fairly static, as the housing industry continued to be a weak sector of many economies. Low investment in the construction sector reflected continued restraints on public sector expenditure and the structural problems of the housing industry in some developed countries. The situation was one of supply tending to exceed demand, with a consequent downward pressure on prices. Indeed, Finland and Austria had to close down some sawmills because of excess capacity. Early estimates for 1986 indicate construction activity increasing further

TABLE 1.9. **Output of main forest products, developing and developed countries, 1983-85**

Item	Output			Change 1984 to 1985	Annual rates of change 1980 to 1985
	1983	1984	1985		
		(Million m^3)		*(%)*	*(%)*
ROUNDWOOD	3 053	3 127	5 165	1.2	1.7
Total, developing countries	1 687	1 728	1 760	1.9	2.1
Total, developed countries	1 366	1 399	1 405	0.4	1.2
Fuelwood and charcoal	1 575	1 632	1 663	1.9	2.1
Total, developing countries	1 351	1 378	1 408	2.2	2.2
Total, developed countries	253	254	255	0.4	1.3
Industrial roundwood	1 449	1 495	1 502	0.5	1.3
Total, developing countries	336	350	351	0.3	1.7
Total, developed countries	1 113	1 145	1 151	0.5	1.1
PROCESSED WOOD PRODUCTS					
Sawnwood and sleepers	448	461	465	0.9	1.3
Total, developing countries	97	103	105	1.9	3.6
Total, developed countries	351	359	360	0.3	0.7
Wood-based panels	102	106	109	2.8	1.8
Total, developing countries	17	18	19	5.6	6.3
Total, developed countries	84	88	89	1.1	0.8
		(Million tons)		*(%)*	*(%)*
Pulp for paper	132	140	141	0.7	2.3
Total, developing countries	15	16	18	12.5	7.1
Total, developed countries	117	123	123	–	1.6
Paper and paperboard	177	190	193	1.6	3.0
Total, developing countries	22	25	27	8.0	7.9
Total, developed countries	155	165	166	0.6	2.3

Source: FAO, Forestry Department.

in North America, as well as some improvement in Europe.

Production of tropical timber in 1985 increased 2%. While production of tropical logs for export declined slightly, and only marginal increases were registered for tropical sawnwood exports, there were significant rises in tropical plywood production and exports. In 1985, Japan increased its imports of tropical wood products, replacing imports formerly made as logs. Thus, its imports of tropical sawnwood and plywood grew 50% and 150% respectively. As mentioned above, high levels of imports of tropical plywood were also reached in North America, favoured by the vigorous growth of the housing sector. Further export growth of the tropical plywood industry is foreseen because Japan reduces its tariff on imported plywood in 1987.

The pulp and paper sector continued to expand, reaching a new all time peak. The increase in 1985, however, was marginal compared with the strong growth which occurred in both 1983 and 1984, and which in turn, followed the slump of 1980-82. While production in the developed countries stagnated, increases in production and consumption were marked in some developing countries, but particularly in China and Brazil. China's production of paper increased by over 1 million tons and is expected to grow considerably in the future. Growth in consumption in South America resulted from increased production, but also from a reduction of exports.

The total value of forest product trade in 1985, which was $50 000 million, equivalent to about 2.7% of all merchandise trade, decreased marginally in current terms. Developing countries suffered a decrease of some 4%, while the value of developed-country trade remained unchanged. This picture of generally

TABLE 1.10. **Volume of exports of main forest products, developing and developed countries, 1983-85**

Item	Exports			Change		Annual rate of change
	1983	1984	1985	1983 to 1984	1984 to 1985	1980 to 1985
		(Million m^3)		*(%)*		*(%)*
Industrial roundwood	99	102	105	2.4	5.9	−1.0
All developing countries	32	28	29	−11.0	2.9	−6.1
All developed countries	67	73	76	8.7	3.7	1.5
Sawnwood and sleepers	84	86	86	2.8	−0.3	3.0
All developing countries	10	10	10	−3.1	−4.4	−1.0
All developed countries	74	76	76	3.7	0.3	3.6
Wood-based panels	17	18	19	3.3	5.3	3.1
All developing countries	7	7	7	1.3	8.4	8.7
All developed countries	11	11	12	4.5	3.5	0.3
		(Million tons)		*(%)*		*(%)*
Pulp	20	20	21	2.6	1.5	1.6
All developing countries	2	2	2	−1.1	−1.3	2.1
All developed countries	18	18	19	3.0	1.7	1.6
Paper and paperboard	37	40	40	8.3	1.2	3.3
All developing countries	1	1	1	38.8	−5.3	10.7
All developed countries	36	38	39	7.4	1.5	3.1

Source: FAO, Forestry Department.

stagnating growth was also shown in volume of exports of main forest products, with some exceptions (Table 1.10). Though developing-country exports of roundwood and sawnwood tended to decline, exports of wood-based panels showed considerable growth. Their pulp and paper exports, though only a small proportion of the world total, grew faster than those of the developed countries.

Price Developments of Forest Products during 1970-85

After a long period of relative stability, lasting from the mid-1950s to the end of the 1960s, prices of forest products entered into a new phase in the 1970s, marked by two steep price increases that occurred in 1973-74 and 1979-80.

Most forest products experienced a short-lived price explosion in 1973-74, which was particularly remarkable in the case of real prices of unprocessed raw materials such as coniferous and tropical logs. Prices of both products, in real terms, increased in 1973-74 by some 40-45% above the level in 1970.

In the four years following, real prices of forest products declined from this peak, but maintained levels slightly higher than those experienced before 1973. Notable exceptions were the prices of wood-based panels and of wood-pulp, which both decreased to levels below those of 1970. Improved technology, coupled with an excessive capacity of the industry, contributed to greater supplies and reduced costs and prices of panels, particularly in the case of particleboard. The real price of wood-pulp fell in 1978-79 below its level of 1970. Major increases in production in previous years were not coupled with a sustained demand, and large unsold stocks, held mainly by Scandinavian producers, kept prices at very low levels.

The second steep increase in real prices occurred in 1979-80 and had some different features to the increase in 1973-74. First, real prices did not increase as sharply as they did during the previous peak year, with the notable exception of the price of Asian tropical logs, which increased by over 50%. Second, the increases were mainly in the prices of products of tropical origin, but prices of Asian products rose much faster than those of African products. Also the downward adjustment following this period resulted in a much

smoother trend, with real prices maintaining higher levels than those reached in the trough following the 1973-74 peak. Since 1981, real prices of tropical products, while showing annual variations, have trended downward gradually.

Real prices of wood-based panels have been continuing the downward trend, while real prices of pulp and paper have been steadily recovering, after the decline experienced in the late 1970s. The high level of growth of world consumption of paper products coupled with a better balance between supply and demand, explain these rises.

The real prices of other widely traded products of developed countries, such as coniferous logs and sawnwood, declined from the peak period of 1973-74. In 1985, the real price of coniferous logs was some 3% above the corresponding price of 1970, while the real price of coniferous sawnwood was 4% below the 1970 level.

During this period, developing countries benefited mostly from price increases of tropical forest products, which contributed significantly in improving the terms of trade of developing country exports.

The Tropical Forestry Action Plan

The Tropical Forestry Action Plan (TFAP) is a new initiative within the international community, designed to halt deforestation and secure sustainable development of tropical forest resources by bringing increased human and financial resources to bear on the problem within a harmonized, long-range programme of action.

Tropical forests cover approximately 40% of the total land area of the tropical regions of the world. They have the potential to make a substantial contribution to development by meeting some of the most basic needs of rural populations: contributing to food security, supporting industrial growth and maintaining environmental quality. They are the biologically richest and most diverse habitats in the world.

Tragic situations of drought, poverty and hunger in many tropical regions have repeatedly caught the attention of the world in recent years. Over 2 000 million people live in the tropics and the great majority of them are rural people. It is now generally recognized that the main cause of deforestation in the tropics is the poverty of the people who live in and around tropical forests and depend on its resources for their basic needs: food, shelter, energy and income. The problem of tropical deforestation is therefore a developmental issue to be resolved by making the conservation and rational use of tropical forests more beneficial and attractive to rural people than the liquidation and destruction of these resources.

To this end, profound changes in present forestry policies, programmes and attitudes are required. Moreover, it will be necessary to increase substantially the level of national and international efforts and resources devoted to tropical forestry. Therefore, a strategy for action was urgently required that would enjoy the widest public and political support and that would mobilize human and financial resources for action.

The FAO Committee on Forest Development in the Tropics (CFDT) recognized the need for providing the international donor community with such a clearly defined development strategy and recommended that FAO prepare proposals for an Action Plan at the global level. The Plan was presented to and adopted by the Committee at its Seventh Session in Rome in June 1985.

The Plan subsequently received support from the Ninth World Forestry Congress in Mexico City in July 1985, from an international consultation of forestry advisers held in The Hague in November 1985 and from the International Conference on Forests and Trees held in Paris in Feburary 1986.

The FAO Committee on Forestry (COFO), at its Eighth Session in April 1986, approved the Action Plan and recommended its acceptance by interested countries and agencies as a framework for harmonized international action. It further recommended that FAO play the central coordinating role in the implementation of the Action Plan.

The Action Plan covers five closely interrelated priority areas:

1. The Action Programme on *Forestry and Land Use* focuses on the cooperation between forestry and agriculture and the direct contribution of forestry to food security. Four main lines of action are indicated: (i) agro-silopastoral development; (ii) integrated watershed management; (iii) arid zone and desertification control; and (iv) land-use planning.
2. The Action Programme on *Forest-Based Industrial Development* aims at promoting appropriate forest industries to fully use the wide range of wood and non-wood products of tropical forests. Five strategic lines of action are identified: (i) intensification of resource management; (ii) efficient harvesting; (iii) development of appropriate forest industries; (iv)

recuperation of waste; and (v) development of marketing capabilities. It aims to associate the forest with industry and local people for economic development.

3. The Action Programme on *Fuelwood and Energy* aims at restoring fuelwood supplies in countries most affected by deficits. Three major lines of action are identified: (i) increasing the supply of wood by improved management of existing resources and by massive increases of fast-growing multi-purpose trees in land-use systems outside the forest; (ii) more efficient use of wood energy through improved conversion technologies; and (iii) replacing domestic wood energy with other forms of energy where possible and using wood energy for rural industries where a surplus of wood exists.

4. The Action Programme on *Conservation of Tropical Forest Ecosystems* addresses the need to prevent the degradation of tropical forest plant and animal species and to promote the integrated management of wildlife and other non-wood products. The goal is to protect ecosystems and genetic resources in such a way that suitable development opportunities are at the same time offered to local people.

5. The Action Programme on *Institutions* focuses on strengthening the institutional framework within which sustainable tropical forest development takes place. Strategies include: (i) strengthening the financial and operational effectiveness of public forestry agencies; (ii) building education and training programmes to meet professional, technical and vocational manpower requirements; (iii) establishing strong research and extension capabilities; and (iv) strengthening the institutional capabilities of local people for self-sustained action.

SOME TRENDS IN THE EARLY 1980s IN FOOD AND AGRICULTURE

The 1980s has been a period of serious financial and economic stress for many developing countries. What has been the impact on food supplies, agricultural incomes and productivity at the country level?

Food Availability

This first section examines changes in food availability in developing countries during 1980-84, as measured by recent FAO data on per caput dietary energy supplies (DES).

A group of 102 developing countries, for which data were available, was divided into five subgroups, according to changes in their per caput DES during 1980-84. Changes in DES were then examined in relation to some general characteristics of the individual groups and selected factors (Table 1.11).

For many developing countries, 1980-84 was a disappointing period with regard to nutritional status. Per caput calorie intake declined in 46 out of the 102 countries, and only one-third of them achieved gains of 0.5% a year or more. Considerable gains, however, were achieved by some Asian countries accounting for a major share of the total population of developing countries.

A widening nutritional gap was observed between the groups of countries with higher and lower levels of per caput calorie consumption. Countries with already relatively high levels of DES were those where the most significant progress was achieved during 1980-84. Conversely, the sharpest reductions in per caput calorie intake were suffered by countries with the lowest levels of DES.

There was a strong concentration of African and, to a lesser extent, Latin American countries among those showing particularly poor performances during 1980-84. Countries in the Near East achieved some gains only through increased food imports. On the other hand, most countries in the Far East achieved significant increases in per caput calorie consumption.

Changes in DES were different according to the origin of the food products. For Latin American countries, poor performances were mostly observed for products of animal origin, therefore affecting also the quality of the diets, especially for families where roots and tubers

TABLE 1.11. **Changes in per caput dietary energy supplies (DES) and related factors, 102 developing countries, 1980-84**

Item	Percentage of change in DES				
	GROUP 1	GROUP 2	GROUP 3	GROUP 4	GROUP 5
	−6.9% to −1.0%	−0.9% to −0.2%	−0.1% to 0.3%	0.4% to 1.0	1.1% to 4.5%
Population *(million)*	287	403	227	342	2 175
Regional distribution *(no. of countries)*					
Africa	18	7	7	6	9
Far East	–	2	5	5	7
Latin America	1	10	4	5	2
Near East	–	1	4	5	4
1984 level of DES and composition *(kcal/caput/day)*					
TOTAL DES	1 970	2 389	2 469	2 574	2 635
Vegetal origin	1 805	2 039	2 125	2 225	2 345
Animal origin	165	350	344	350	290
Annual changes, 1980-84 *(%)*					
TOTAL DES	−3.1	−0.8	–	0.6	2.9
Vegetal origin	−3.2	−0.5	–	0.6	2.9
Animal origin	−1.8	−2.5	0.2	−0.2	3.7
Annual changes in related factors, 1980-84 *(%)*					
Production	−5.0	–	−0.1	−0.5	4.1
Food exports	−2.6	4.5	2.0	11.3	1.4
Food imports	−1.8	−1.5	0.9	4.1	10.2
GDP per caput	−4.3	−1.4	−0.6	0.8	5.0
Food self-sufficiency ratio [a]					
1978-80	91	105	116	86	96
1982-84	89	109	122	84	95
GDP per caput, 1982 *(US$)*	728	1 315	1 086	1 205	382

[a] The ratio of calories derived from domestic production to total calorie supplies.
Sources: FAO, Statistics Division and Policy Analysis Division.

are the staple foods. The worsening of the quality of the diet (as underlined by the fall of products of animal origin), combined with a decrease of the quantity of food consumed, was also affecting most of the African countries. On the other hand, an improvement of DES in the Far East countries is chiefly observed for products of animal origin.

An issue of particular relevance is the extent to which the nutritional status of countries was affected by income factors. On the supply side, a close relationship is to be expected in the group of chiefly agricultural-based economies examined, among GDP growth and agricultural and DES performances. On the side of demand, changes in income affected the ability of consumers to buy food and the capacity of countries to finance food imports.

Table 1.11 confirms the correspondence between changes in aggregate income and calorie supply. In the three groups of countries with declining or stagnating DES during 1980-84, per caput GDP also fell or stagnated, while in the other two groups where DES rose, GDP also rose. The first group of countries presented a consistently negative picture of low yet falling incomes, coupled with sharp declines in calorie consumption from already inadequate levels. This group, however, was predominantly composed of African countries, where other unfavourable factors, particularly the incidence of drought, were more directly responsible for declines in DES.

Production performance was the obvious main factor behind changes in DES for many countries. This was clearly so in the two

TABLE 1.12. **Annual rates of change in land and labour productivity, by region, 1971-80 and 1980-84**

(Percentages)

Region	Labour		Land	
	1971-80	1980-84	1971-80	1980-84
Africa	0.6	−0.2	1.1	0.7
Far East	2.2	3.3	2.6	4.1
China	2.9	7.8	3.6	7.1
Latin America	2.7	1.3	1.9	0.7
Near East	2.3	2.4	3.7	4.5

Source: FAO, Policy Analysis Division.

extreme cases of groups 1 and 5, where food production and DES fell in the former and expanded in the latter. In the other three groups, changes in food production did not correspond with those in DES, the impact of production having been more than offset by counteracting movements, particularly in foreign trade. In groups 2 and 3, where a number of countries, including Argentina, Uruguay, Côte d'Ivoire and Malaysia, export one-third to two-thirds of all calories produced, a sizeable increase in food exports was a major contributing factor to reduced DES.

Food imports also played a key role in both positive and negative changes in total food supply. Group 1 countries with declining DES, were squeezed between their high dependence on food imports—as shown by their low and declining self-sufficiency ratio—and an inability to finance the food imports needed. In this group of countries, imported calories declined in per caput terms nearly 2% a year during 1980-84. With even larger falls in calories domestically produced, the imported food-supply ratio nevertheless continued to increase in all countries of this group. In groups 4 and 5, countries where DES rose significantly, it did so mainly because of larger imports. This was particularly the case in group 4, which included several industrializing and oil-exporting countries with relatively high per caput incomes, low self-sufficiency ratios and declining per caput calorie supplies from domestic production.

The features and performances of group 5 were much influenced by the presence of China, India and, to a lesser extent, Indonesia. The improvement in nutritional standards achieved by those countries during 1980-84 was a major accomplishment. It involved an average increase of nearly 3% in daily calorie intake for over half of the entire population of developing countries. Moreover, this improvement was achieved with a minimum recourse to food imports, these countries having achieved self-sufficiency ratios close to 100%. Furthermore, a considerable qualitative improvement took place in these countries' diets, as shown by the marked increase in the animal component of their DES.

The situation in group 5 is still positive if China and India are excluded. Per caput calorie production rose 1.5% a year and total calorie supplies, 1.7%. Other countries in this group, however, presented an entirely different picture with regard to the origin of their gains in DES. The group includes a number of large food importers—Egypt, the Syrian Arab Republic, the Islamic Republic of Iran, Saudi Arabia and Algeria—where a traditional reliance on food imports was dramatically increased in the case of several countries during 1980-84.

Land and Labour Productivity

Did this period of economic crisis have any measurable effect on agricultural productivity?[3] Indeed, growth in labour and land productivity declined significantly in Africa and Latin America during the early 1980s compared with 1971-80, and became even negative for labour in Africa, mainly because of widespread drought (Table 1.12). Labour productivity growth declined sharply in many African countries in the early 1980s, including Tanzania, Côte d'Ivoire, the Niger and Zimbabwe.

In Latin America, growth in labour and land productivity declined significantly in Mexico and Brazil but remained positive, while the formerly high growth rates in productivity of both labour and land became negative in some Central American countries affected by civil strife and hostilities.

On the other hand, the Far East and the Near East had relatively high and accelerating growth rates in labour and land productivity, particularly in the former region. In China, agricultural productivity growth increased to above 7% a year in labour and land in the early 1980s, while in India, it increased to 4% a year for labour and nearly 5% a year for land. Productivity levels dropped sharply for both categories in the Philippines and barely remained positive, while in Sri Lanka it became negative for both labour and land. These were the exceptions, however.

[3] As measured by the value of output per caput (1979-81 prices) of the agricultural labour force or one hectare of arable and permanently cropped land.

TABLE 1.13. **Annual rates of change in selected agricultural inputs, by region, 1971-80 and 1980-83**

(Percentages)

Item	Fertilizer per arable land		Tractors per arable land		Irrigation per arable land	
	1971-80	1980-83	1971-80	1980-83	1971-80	1980-83
Africa	4.5	−0.3	2.0	1.3	7.9	5.1
Far East	8.6	4.7	12.9	10.2	1.2	1.0
Latin America	8.1	−9.3	4.5	5.8	1.6	0.6
Near East	10.9	12.7	14.5	6.2	−	0.5
ALL REGIONS	10.7	3.0	8.1	5.4	1.1	0.2

Source: FAO, Policy Analysis Division.

Changes in Input Use During the 1970s and Early 1980s

Changes in agricultural productivity were associated also with changes in input use. The recession in the early 1980s and the continued economic stagnation, along with low commodity prices, debt problems and high interest rates, contributed to declining growth rates of fertilizer consumption in developing countries. The annual growth rate slowed from nearly 11% during the 1970s to 3% during 1980-83, and consumption declined in Africa and Latin America (Table 1.13). Growth rates of tractor use and irrigation availability also slowed, with the exception of Latin America (tractor use) and the Near East (irrigation availability). Low growth in tractor use in Africa in the 1970s was accompanied by an even lower growth rate in the 1980s.

The relatively more economically developed countries, such as Algeria, Morocco, Nigeria, the Republic of Korea, Malaysia, Brazil and Venezuela, seem to have been more constrained by budgetary difficulties and current account imbalances. They registered sharp declines in fertilizer consumption in the early 1980s. The increase in tractor use in the 1980s in Latin America was largely due to relatively high growth rates of use in Mexico and Brazil (9% and 7.5% respectively) both of which possess important domestic tractor manufacturing and assembly capacity.

Agricultural Exports and Incomes

One of the remarkable features of the early 1980s was the slowing down in growth of agricultural trade. The value of agricultural exports of developing countries increased 14% a year during 1971-80, but slightly declined during 1980-84. Were there any effects on agricultural incomes as measured by agricultural GDP?

Developing countries were selected on the basis of the availability of data for 1980-84. Only 39 countries had data for both agricultural GDP and exports. Twenty countries with relatively high export/GDP ratios were then chosen to represent the group relatively dependent on exports for agricultural income (GDP). The range was from 86% for Costa Rica to 16% for the Sudan, and the group average was 36%. The second group comprised 19 countries with their ratio of agricultural exports/GDP ranging from around 13% for Peru to 1% for Venezuela, and the group average was only 5%. The agricultural sector was equally important for both groups, as the share of agriculture of total GDP was 18% for each. However, the first group's total agricultural GDP was one-third that of the second group; that is, the agricultural exporters were much smaller economies.

The average annual increase in the dollar value of agricultural exports of the first group—the agricultural exporters—drastically fell from 16.5% during 1971-80 to −1.5% during 1980-84. The annual growth rate of their agricultural GDP was 20% during 1971-80 and −4.4% during 1980-84, in US dollars. However, the average annual growth rate was 3.5% during 1971-80 compared with 1.9% during 1980-84, in terms of real local currency.[4]

The average annual increase in the dollar value of agricultural exports of the second group of 19 countries, for which agricultural exports accounted for 5% of agricultural GDP, also collapsed from 11.8% during 1971-80 to −4.4% during 1980-84. They had an annual growth rate of agricultural GDP of 12% for the 1970s and 2.7% during 1980-84, in US dollars. These growth rates were 2.4% for the 1970s and 2.6% for the early 1980s, in terms of real local currency, however.

One conclusion is that the group of countries relatively more dependent on exports had a significant slowing down in growth of real agricultural incomes, but not an actual decline, while the agricultural sectors of those countries relatively less dependent on exports actually fared slightly better between the 1970s and the early 1980s. This is the outcome not only of varying fortunes of export markets, but also domestic policies.

With the decline in commodity prices during 1980-84, the first group, which was more

[4] Agricultural GDP in local currency deflated by the total GDP deflator to reflect the agricultural sector's real domestic purchasing power. The group averages were weighted by the component countries' shares of group agricultural GDP in 1980 US dollars.

TABLE 1.14. **Value of world exports of agricultural (crops and livestock), fishery and forest products, at current prices, 1983-85**

Item	Value			Change		Annual rate of change
	1983	1984	1985	1983 to 1984	1984 to 1985	1980 to 1985
		(US$ '000 million)		*(%)*		*(%)*
Agricultural products	208.6	219.8	206.6	5.4	−6.0	−2.2
Total developing countries	66.4	73.7	69.1	10.9	−6.2	−0.2
Total developed countries	142.2	146.2	137.5	2.8	−5.9	−3.2
Fishery products	15.8	15.9	16.4	1.1	2.7	1.2
Total developing countries	6.8	7.1	7.1	4.6	−	3.2
Total developed countries	9.0	8.8	9.3	−1.6	5.4	−0.2
Forest products	47.7	50.5	49.8	5.9	−1.4	−1.7
Total developing countries	7.4	7.3	7.2	−1.3	−1.6	−3.6
Total developed countries	40.2	43.1	42.5	7.2	−1.4	−1.4
TOTAL	272.1	286.2	272.7	5.2	−4.7	−2.0
Total developing countries	80.7	88.1	83.4	9.2	−5.3	−0.2
Total developed countries	191.4	198.1	189.3	3.5	−4.4	−2.7
		(%)				
Share of developing countries	30	31	31			

Source: FAO, Statistics Division.

dependent on exports, increased the volume of its agricultural exports by 3.7% annually. The agricultural exports of the second group of countries declined 1% annually, in volume terms, during this period. Another conclusion is that the group more dependent on exports increased their ratio of agricultural exports to agricultural GDP on average by 3% annually, while the ratio for the group less dependent on exports declined nearly 7% a year. Therefore, the early 1980s heightened the divergence between countries in terms of the source of their agricultural growth. The agricultural exporters are becoming still more export dependent, but for the remainder, the export market has assumed decreasing importance.

AGRICULTURAL TRADE

Overview

Within an overall sluggish world trade environment, agricultural trade in 1985 and the first half of 1986 was generally more depressed than other sectors. While the volume of world merchandise trade in 1985 rose about 3%, that of agricultural trade stagnated at the level of 1984. Furthermore, a continued fall in the dollar unit value of agricultural commodities (−8% in 1985 compared with −1.7% for all merchandise trade), brought about an overall deterioration in the agricultural terms of trade and contributed to a sharp fall in the value of agricultural exports.

At $272 700 million in 1985, world exports of agricultural, fishery and forest products declined nearly 5% from the previous year, thus returning close to the levels of 1983 (Table 1.14). The most pronounced fall was in crop and livestock exports, although trade in forest products also declined. Fishery trade, which expanded over 5% in 1985 in developed countries, was the only agricultural subsector showing a positive, though modest, growth rate during 1980-85.

Among crops and livestock products, trade in food and raw materials changed little in volume from the levels of 1984, but fell 7-8% in unit value and hence, value (Table 1.15). The value

TABLE 1.15. **FAO index numbers of volume, value and unit value of world exports of crop and livestock products, by major commodity groups, 1983-85**

Item	Index (1979-81 = 100)			Change		Annual rate of change
	1983	1984	1985[a]	1983 to 1984 (%)	1984 to 1985	1980 to 1985 (%)
VOLUME						
TOTAL	106	109	109	2.8	–	1.5
Food	106	109	108	3.1	−0.5	1.3
Cereals	104	111	103	6.4	−7.3	0.4
Feed	125	116	123	−6.7	6.0	3.7
Raw materials	99	101	100	2.0	−1.0	−0.1
Beverages[b]	107	112	117	4.8	4.2	3.5
VALUE						
TOTAL	92	97	89	4.7	−7.8	−3.0
Food	92	96	88	4.4	−8.5	−3.5
Cereals	93	98	81	5.6	−16.8	−5.0
Feed	116	101	82	−13.1	−18.0	−3.5
Raw materials	91	96	87	6.5	−9.4	−2.8
Beverages[b]	90	107	106	18.7	−0.5	1.7
UNIT VALUE						
TOTAL	89	90	83	1.8	−7.5	−4.1
Food	88	89	82	1.1	−7.7	−4.5
Cereals	91	91	82	–	−9.7	−4.6
Feed	93	88	70	−5.6	−21.0	−6.4
Raw materials	93	97	89	4.0	−7.5	−2.4
Beverages[b]	84	95	92	12.6	−3.5	−1.5

[a] Preliminary.
[b] Coffee and tea. Cocoa is included under food.
Source: FAO, Statistics Division.

of feed exports also declined sharply despite expanded volumes traded.

Slow demand growth and associated oversupply of a wide range of agricultural products in world markets were the main factors behind the sluggish growth in agricultural trade. Agricultural supplies remained at record levels in many major exporting and importing countries, and stocks continued to accumulate. Import demand was restricted by the difficult economic and financial situation, continued adjustment efforts by many indebted developing countries, and by reduced demand of oil-exporting countries. Improved domestic supply conditions reduced import requirements in a number of large developing countries, including China, India and Brazil, which reduced their food imports to recent lows. Among developed countries, an 8-9% fall in food imports by the USSR and Japan more than offset increases in Western Europe.

The export trade performance of developing countries was particularly disappointing in 1985. Their export earnings from agriculture (crops and livestock) fell over 6%, and their agricultural imports nearly 11% (Table 1.16). By comparison, their total merchandise exports declined 5.5% and their total imports, by 6.5%. The share of these countries in world agricultural trade declined to one-third of total exports and about one-fourth of total imports.

The differences in growth between agricultural exports and imports of developing countries resulted in apparently favourable changes in their agricultural trade balances. From a temporary reversal in their traditional position as net agricultural exporters in the early 1980s, developing countries increasingly have consolidated their agricultural trade surplus in more recent years. Indeed, their export-import ratio rose from a low of 94% in 1981 to over 113% in 1985.

The overall improvements in agricultural trade balances in 1985 reflected, however, both positive and negative factors at regional and country levels. A major positive development was the improvement in the net trade position of a number of Asian countries, including China

TABLE 1.16. **Value of world agricultural trade (crops and livestock), at current prices, by region, 1983-85**

Country/Region	Value			Change		Annual rate of change	
	1983	1984	1985	1983 to 1984	1984 to 1985	1980 to 1985	
		(US$ '000 million)		(%)		Current prices	Volume[a] (%)
DEVELOPING MARKET ECONOMIES							
Export	61.6	68.2	62.9	10.8	−7.8	−0.7	2.9
Import	58.4	62.4	56.0	6.8	−10.2	−1.4	2.4
Africa							
Export	7.8	8.9	8.8	14.1	−0.3	−2.6	−0.4
Import	9.3	9.4	9.2	0.5	−2.1	−3.2	2.5
Far East							
Export	17.9	21.1	18.4	17.8	−12.8	−0.2	3.5
Import	16.7	18.3	16.3	9.9	−11.0	0.5	3.1
Latin America							
Export	30.1	32.1	30.7	6.7	−4.4	−0.1	3.9
Import	11.2	11.3	10.1	1.6	−10.6	−7.0	−2.8
Near East							
Export	5.4	5.5	4.5	3.5	−18.3	−2.2	−0.2
Import	20.5	22.7	19.8	10.6	−12.8	1.5	5.5
ASIAN CENTRALLY PLANNED ECONOMIES							
Export	4.9	5.4	6.2	11.7	14.2	6.6	11.1
Import	6.9	6.0	4.9	−12.8	−18.1	−11.2	−6.2
TOTAL DEVELOPING COUNTRIES							
Export	66.4	73.7	69.1	10.9	−6.2	−0.2	3.4
Import	65.3	68.4	60.9	4.8	−10.9	−2.5	1.6
DEVELOPED MARKET ECONOMIES							
Export	133.8	138.1	129.6	3.2	−6.1	−3.1	1.3
Import	137.2	144.6	144.5	5.4	−0.1	−1.4	2.5
EASTERN EUROPE AND USSR							
Export	8.4	8.1	7.9	−4.0	−2.3	−5.3	−0.2
Import	26.5	27.0	25.0	1.6	−7.1	−3.5	0.1
TOTAL DEVELOPED COUNTRIES							
Export	142.2	146.2	137.5	2.8	−5.9	−3.2	1.4
Import	163.7	171.6	169.5	4.8	−1.2	−1.8	2.2
WORLD							
Export	208.6	219.8	206.6	5.4	−6.0	−2.2	1.9
Import	229.1	240.0	230.4	4.8	−4.0	−2.0	2.0
Share of developing countries in world agricultural trade (%)							
Export	32	34	33				
Import	28	28	26				

[a] Obtained by deflating current value of trade with the indices (1979-81 = 100) of export and import unit values of agricultural products.
Source: FAO, Statistics Division.

TABLE 1.17. **Net barter and income terms of trade of agricultural exports for manufactured goods and crude petroleum, 1981-85**

(1979-81 = 100)

Item	1981	1982	1983	1984	1985
NET BARTER TERMS OF TRADE					
Developed market economies	103	98	100	101	94
Developing market economies	97	89	97	106	97
Africa	88	84	90	105	100
Far East	99	85	96	109	92
Latin America	98	92	98	106	97
Near East	103	97	101	106	108
INCOME TERMS OF TRADE					
Developed market economies	108	102	104	108	99
Developing market economies	102	94	106	118	110
Africa	92	87	87	103	103
Far East	105	93	104	128	108
Latin America	102	95	111	118	114
Near East	113	114	116	123	100

Source: FAO, Policy Analysis Division.

and India. Not only did China depart for the first time from its secular position as a food-deficit country, but the improvement in its domestic supply situation enabled its agricultural exports to exceed imports by over one-fifth. A similar situation emerged in India, where agricultural exports were equivalent to 164% of agricultural imports. Given the massive size of the populations involved, such developments transcend their regional context and present worldwide implications for trade and food security.

By contrast, the improvement in agricultural trade balances in Latin America and Africa chiefly reflected depressed imports, outweighing the effect of declining export earnings from agriculture.

A review of the export performance of the different developing regions and main trading countries in 1985 reveals diverse features. Of 140 developing countries reviewed, 90 experienced a fall in agricultural export earnings below their levels of 1984.

The most significant fall occurred in the *Near East*. While wide year-to-year fluctuations in export performance are common in the region, the 1985 low was unusually pronounced for several non-oil exporting countries. Thus, export earnings in the Syrian Arab Republic and the Sudan were barely three-quarters those of the average during 1983-85, while Egypt and Turkey experienced losses of about 10%. Reduced income from cotton, the export unit value of which fell 17% for the region, was a major factor behind the overall decline in export earnings.

Considerable reductions in agricultural export earnings were also recorded in several of the main exporting countries in the *Far East*. The Philippines suffered from severely depressed market conditions for coconut oil, copra cake and sugar, which contributed to a 30% fall in agricultural exports below 1984 levels. Malaysia's export earnings (−18%) were also constrained by depressed demand for natural rubber, and from plummeting palm-oil prices. In Thailand, a sharp fall in the volume and unit value of rice exports was at the basis of a 16% decline in its agricultural export earnings. Though comparatively less affected, India's agricultural export earnings also declined, for the second consecutive year, largely reflecting the collapse in tea prices.

In *Africa*, the 6% fall in the value of agricultural exports was the result of lower earnings from sugar, tea and cereals, in particular, despite larger volumes of shipments of those commodities. Such losses were not compensated for by gains from coffee (up 12% in volume and 10% in value) and, to a lesser extent, from cocoa and cotton. Four countries—Cameroon, Côte d'Ivoire, Uganda and Zimbabwe, where generally good cash crops permitted expanded exports—captured a large share of the region's export gains. In a two-thirds majority of countries, however, agricultural exports fell, in many cases, dramatically. Among the larger exporters, Kenya and Ghana were severely hit by the fall in prices of tea and cocoa respectively.

As in other developing regions, the decline in export earnings of *Latin America* was predominantly price-based. In Argentina, lower prices for most agricultural commodities, except tobacco and dairy products, more than offset expanded export volumes. In Brazil, export earnings from soybeans, coffee and sugar, declined sharply and the only substantial gains from agricultural exports were from cocoa and cocoa products. The value of sugar exports by Cuba stagnated, while Colombia's agricultural exports (gains in sugar and coffee offsetting declines in meat and bananas) only increased marginally. On the brighter side, buoyant international demand for fruit and vegetables contributed to a 27% increase in agricultural exports of Chile which, for the first time in many years, achieved a net agricultural trade surplus.

Export earnings from agriculture also declined in *developed countries*, though to a lesser extent than in developing ones. For the group

of developed countries as a whole, the dollar value of agricultural, fishery and forestry exports fell over 4% in 1985, thus continuing, at an accelerated rate, the downward trend of the previous four years. Exports of food crops, accounting for over half of the total agricultural exports of this group of countries, fell 8% (−18% in the case of cereals).

The bulk of the overall decline in export earnings of developed countries occurred in North America (−16%). In particular, exports of cereals by the United States fell 32%, bringing the share of this country in world cereal exports down to 34% of the total, compared with 42% in the previous two years and 44% in 1980.

Other major exporters among developed market economies moderately expanded their export earnings from agriculture: those of Western Europe and Oceania rose 2-3% over the levels of 1984, though remaining substantially lower than those of the early 1980s.

As regards developed centrally planned economies, the steady decline in their agricultural exports since the early 1980s continued in 1985, though at a slower pace.

Complete trade data for 1986 were not yet available in the first quarter of 1987. Forecasts, based on market conditions and trade performances for individual commodities and countries, suggested only a small increase in the overall volume of agricultural trade above the levels of 1985. With the continuing downward pressure on prices of some major commodities, the global value of

BOX 1.2

The International Tropical Timber Agreement

The International Tropical Timber Agreement was launched in 1983 under the auspices of the United Nations Conference on Trade and Development (UNCTAD) within its Integrated Programme for Commodities (IPC). The objectives of the Agreement include: (i) the provision of an effective framework for cooperation and consultation between tropical timber producing and consuming countries, with regard to all relevant aspects of the tropical timber economy; (ii) the promotion of the expansion and diversification of international trade in tropical timber; and (iii) the improvement of structural conditions in the market. The Agreement does not contain trade or price stabilization measures.

After lengthy negotiations, the International Tropical Timber Organization (ITTO) was established in mid-1986 to administer the provisions and to supervise the operation of the Agreement, with its headquarters in Yokohama, Japan.

ITTO operates under the authority of the International Tropical Timber Council, which has 41 member countries, including producing and consuming countries. The main operational areas of ITTO include:

— Research and development, to improve forest management and wood utilization;
— Market intelligence, to ensure greater transparency in the international tropical timber market;
— Increased processing in producing member countries, to promote their industrialization and increase export earnings; and
— The promotion of tropical timber, reforestation and forest management, and conservation of tropical forests and their genetic resources, as well as the maintenance of the ecological balance in the regions concerned.

agricultural exports was not expected to change significantly in 1986.

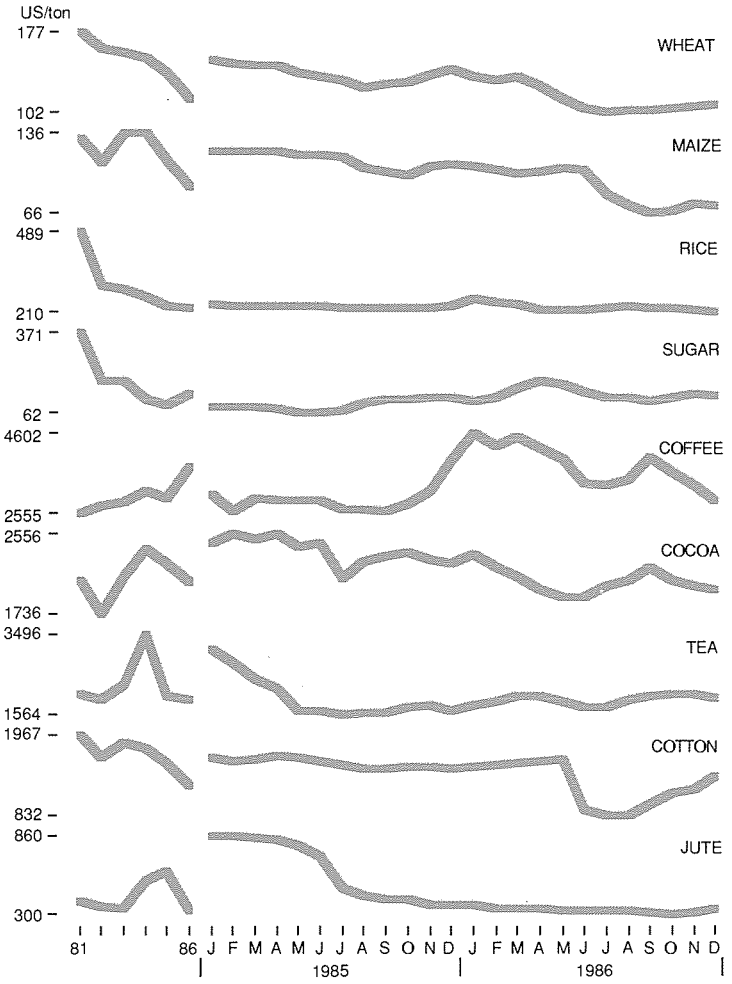
Terms of Trade

International prices of virtually all main agricultural commodities suffered sharp losses in 1985 and in the first three-quarters of 1986. The UN's world export price index for food products fell 9% and that for non-food agricultural products, 14% in 1985. Against this, prices of manufactured goods increased 1%, crude petroleum declined 8% and minerals (excluding petroleum) rose 3%. Using the composite price index of manufactured goods and crude petroleum as a deflator, the net barter terms of trade of agricultural products therefore fell 7% in developed and 8% in developing market economies in 1985 (Table 1.17). This fall largely cancelled the gains of the two previous years and marked a return to a deterioration in terms of trade that began in 1977. Among developing regions, the Far East, in particular, was severely affected by adverse movements in agricultural terms of trade in 1985.

A similar trend is observed in income terms of trade, which represent changes in the purchasing capacity of agricultural exports. In a historical perspective, the sharpest losses were experienced by developed-market economies: at 9%, the fall in their agricultural income terms of trade in 1985 was the most pronounced year-to-year decline since the first oil crisis in 1973-74.

Developing-market economies suffered a decline of 8% in income terms of trade of agricultural exports in 1985. While Africa and Latin America partially compensated for the fall

Figure 1.2 **INTERNATIONAL PRICES OF SELECTED AGRICULTURAL COMMODITIES, 1981-86**



WHEAT, Hard Winter No 2, ordinary protein, f.o.b. Gulf, U.S.A.
MAIZE, No 2 yellow, f.o.b., Gulf, U.S.A.
RICE, milled, Thailand 100%, II grade.
SUGAR, raw, ISO Daily, f.o.b. and stowed Caribbean ports, bulk.
COFFEE, green 1979 International Coffee Agreement, composite price.
COCOA, U.K. export, London Spot.
TEA, London Auction, weighted average, all origins.
COTTON, lint, Memphis Territory MI-3/32.
JUTE, Bangladesh Chittagong, f.o.b., BWC.

Source: FAO. Statistics Division

BOX 1.3

Agriculture in the GATT: the Uruguay Round

At a Special Session of contracting parties to the General Agreement on Tariffs and Trade (GATT), held at Punta del Este in September 1986, Ministers decided to launch a new round of Multilateral Trade Negotiations (MTNs), the Uruguay Round.

For the first time in a GATT round of MTNs, special prominence is given to agriculture. In the part of the Ministerial Declaration which covers negotations on trade in goods, the contracting parties have agreed that "there is an urgent need to bring more discipline and predictability to world agricultural trade by correcting and preventing restrictions and distortions including those related to structural surpluses so as to reduce the uncertainty, imbalances and instability in world agricultural markets". Indeed, in recent years many of the long-standing distortions of world agriculture occasioned by protectionist policies have been aggravated at both international and domestic levels.

Tensions among agricultural trading partners have intensified, in particular over the use of export subsidies and similar practices, and resort to bilateral agreements has been in the ascendancy, at the expense of an open, multilateral system for trade in agriculture.

Domestic problems resulting from protectionist policies have also been mounting. Domestic prices have become strongly isolated from world prices. Budget expenditure on farm support programmes has reached record levels in many industrial countries. Yet farm incomes lag behind non-farm incomes, compounded by a dramatic increase in bankruptcies in some countries.

The aim of the GATT negotiations on agriculture is, according to the Ministerial Declaration, "to achieve greater liberalization of trade in agriculture and bring all measures affecting import access and export competition under strengthened and more operationally effective GATT rules and disciplines". To these ends, the negotiations shall aim at "improving market access through, *inter alia*, the reduction of import barriers; improving the competitive environment by increasing discipline on the use of all direct and indirect subsidies and other measures affecting directly or indirectly agricultural trade, including the phased reduction of their negative effects and dealing with their causes; (and) minimizing the adverse effects that sanitary and phytosanitary regulations and barriers can have on trade in agriculture, taking into account the relevant international agreements".

The agreement thus covers both tariff and non-tariff border measures and subsidies which directly affect import and export trade. It also implicitly recognizes that distortions in agricultural trade arise from the implementation of subsidy measures which are geared mainly to the achievement of domestic objectives, such as farm income and price support, and which affect trade indirectly through their impact on domestic production or consumption.

Negotiations will include agriculture as well as tropical products and natural resource-based products, including forestry and fishery products and will be carried out through different groups. The negotiations on agriculture will proceed in two principal phases.

Activities to be undertaken in the initial phase to be completed by end of 1987, include "identification of major problems and their causes, including all measures affecting directly or indirectly agricultural trade"; "concurrent submission of supplementary information on measures and policies affecting trade"; "consideration of basic principles to govern world trade in agriculture"; and "submission and initial examination of proposals by participants aimed at achieving the Negotiating Objective". The second phase will deal with further examination of proposals, initiation of negotiations, and will cover negotiations proper, with a view to fulfilling the objectives of the Ministerial Declaration.

With respect to tropical and natural resource-based products, the aim will be to achieve the fullest liberalization of trade, including their processed and semi-processed forms. Emphasis is given to the interests of developing countries and the particular situation and problems of least developed countries.

in prices by increasing their export volumes, the Far East failed to do so, and export volumes in the Near East declined sharply.

Available data on trade volumes and prices do not yet allow agricultural terms of trade for 1986 to be fully assessed. However, with the continuing decline in international prices of most major traded agricultural products in recent months, coupled with firmer prices of other products, in particular manufactures, a further fall in agricultural terms of trade is expected in 1986. A notable exception may be coffee, the prices of which strengthened in late 1985 following drought in Brazil, but expectations of supply shortages later in 1986 failed to materialize and prices weakened again. Sugar prices also rose in mid-1986, but the rally was not sustained (Fig. 1.2).

The above discussion on changes in prices, values and terms of trade of agricultural exports should be assessed in the light of changes in exchange rates that took place during the period considered, in particular, the depreciation of the US dollar since the second quarter of 1985. Taking special drawing rights (SDRs) as a reference parity, the US dollar appreciated 4% during 1984, a further net 1% in 1985, but depreciated 6% during the first half of 1986.

Other things remaining equal, a depreciation of the US dollar, in relation to other currencies, would lead to lower returns for non-US exports and lower costs for non-US imports, than the trade figures based on the US dollar would suggest. Obviously, the impact of changes in the dollar's exchange rate on a country's competitiveness, of different countries' production cost-price relationships and agricultural and overall trade policies, depend on specific circumstances. For many countries where more flexible exchange rates and trading policies have been introduced recently, often as part of comprehensive adjustment programmes, national currencies have weakened vis-à-vis the US dollar. Conversely, currencies of other countries (e.g., African countries belonging to the CFA franc zone, pegged to the French franc) have appreciated against the US dollar since early 1985. Many of these countries have experienced higher costs of production in dollars as a consequence, less competitive agricultural exports and, as the local currency costs of food imports have fallen, downward pressure on domestic market prices. At the same time, producer prices, even if unchanged in terms of local currencies, have risen in dollar terms.

What has been the influence of the recent depreciation of the US dollar on commodity prices? It was often assumed that the strengthening of the dollar, until early 1985, was largely responsible for—and contributed to offset—the weakness of agricultural prices denominated in dollars. Vice versa, a depreciation of the dollar was expected to boost prices. Recent experience has shown, however, such an expectation to be wrong, at least in the short run, because commodity prices in many cases continued their downward trend throughout 1985 and most of 1986, underlining the far more important role of commodity-specific supply and demand factors in determining prices. The decline in dollar prices of commodities appears more significant when expressed in SDRs. For example, wheat prices in dollars fell about 20% during the first half of 1986; in SDR terms, the fall was 26%.

EXTERNAL ASSISTANCE

Resource Flows to Agriculture

In 1984, total official commitments of external assistance to agriculture (OCA) fell 9% in current prices but by less (5%) in 1980 prices, because of the strengthening US dollar, which did not reach its peak value until late February 1985 (Table 1.18). The decline was entirely in multilateral non-concessional commitments, which fell almost 28% in current prices, but which had increased by half between 1980 and 1983. In contrast, concessional commitments rose 3% in current prices and nearly 7% in 1980 prices because of a rise in bilateral commitments. Multilateral concessional commitments fell back, however.

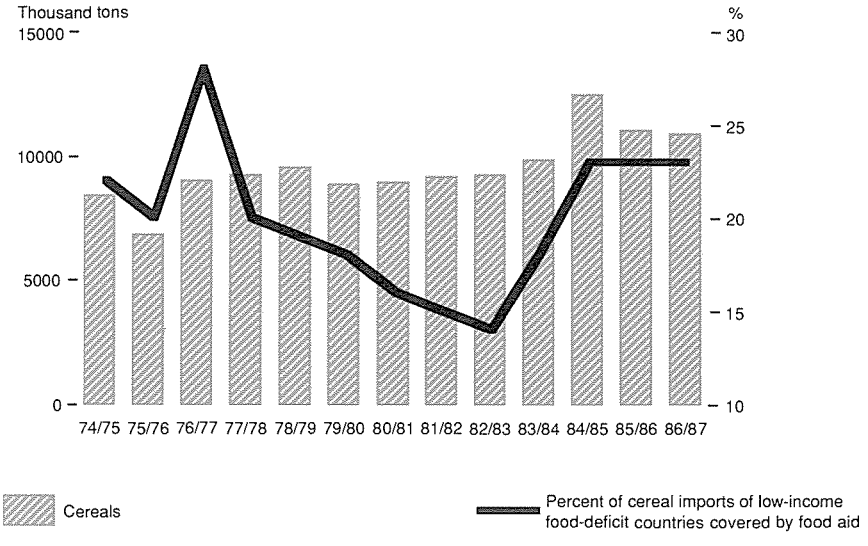
Estimates of total commitments for 1985 showed a modest recovery of 2-3% in current prices, which equalled a rise of only 1.4% in 1980 prices, because of the weakening US dollar from March 1985. Concessional commitments levelled off, but non-concessional commitments rose more than 9%. These changes reflected shifts in the flows of bilateral and multilateral commitments. The former was virtually all concessional, while more than 50% of the latter was on non-concessional terms. During each of the three years, 1983-85, the changes in these bilateral and multilateral flows were in opposite directions, which served to stabilize the total flows somewhat. Within the multilateral totals, commitments by the International Development Association (IDA) to agriculture continued to increase, but commitments by the International Bank for Reconstruction and Development (IBRD) were erratic.

Some recent events have taken place that have a bearing on future resource flows to agriculture, particularly for low-income countries qualifying for concessional assistance:

— A welcome event was the successful conclusion of negotiations in December 1986, for the eighth replenishment of IDA. Donor countries agreed to provide $12 400 million for the 1987-90 three-year period, thus substantially exceeding the $10 500 to $12 000 million target they had set themselves in January 1986, and the $9 000 million achieved for IDA VII. Between 45% and 50% of IDA loans will be channelled to sub-Saharan Africa, reflecting recognition of the grave problems of the region. A substantial part of the loans (between $3 000 million and $3 500 million) will also be devoted to supporting adjustment measures by borrowing countries.

— In early 1986, the second replenishment of the International Fund for Agricultural Development (IFAD) was agreed to at $500 million for a three-year period, backdated to begin in January 1985. This is less than IFAD's first replenishment of $1 100 million, which

Figure 1.3 **SHIPMENTS OF FOOD AID, CEREALS, 1974/75 TO 1986/87**



Source: FAO. Commodities and Trade Division.

TABLE 1.18. **Commitments of external assistance to agriculture (broad definition), 1983-85**

(US$ million)

Item	Total commitments			Concessional commitments			Non-concessional commitments		
	1983	1984	1985	1983	1984	1985	1983	1984	1985
AT CURRENT PRICES									
TOTAL	12 115	11 075	11 363	7 364	7 603	7 564	4 751	3 472	3 799
Bilateral	4 537	4 984	4 446	4 384	4 840	4 320	153	144	126
Multilateral	7 578	6 091	6 917	2 980	2 763	3 244	4 598	3 328	3 673
World Bank	5 280	3 261	4 235	1 334	1 487	1 862	3 946	1 774	2 373
IBRD	3 946	1 774	2 373	–	–	–	3 946	1 774	2 373
IDA	1 334	1 487	1 862	1 334	1 487	1 862	–	–	–
IFAD	258	188	182	258	159	159	–	29	23
Regional development banks	1 339	1 911	1 737	786	476	567	553	1 435	1 170
OPEC multilateral	224	253	266	125	163	159	99	90	107
UNDP	169	142	150	169	142	150	–	–	–
FAO (TF/TCP)	143	161	175	143	161	175	–	–	–
CGIAR	165	175	172	165	175	172	–	–	–
AT CONSTANT 1980 PRICES[a]									
TOTAL	13 767	13 029	13 213	8 368	8 045	8 795	5 399	4 084	4 417
Bilateral	5 516	5 863	5 170	4 982	5 694	5 023	534	169	146
Multilateral	8 611	7 166	8 043	3 386	3 251	3 772	5 225	3 915	4 271

[a] Deflator used: UN index of unit value of exports of manufactured goods, 1980 = 100.

Sources: FAO, Policy Analysis Division, and OECD.

covered a four-year period, 1981-84. IFAD also is mobilizing donor resources for a $300 million Special Programme for Sub-Saharan African Countries Affected by Drought and Desertification. At the Tenth Session of IFAD's Governing Council, held in December 1986, new contributions were announced for this Programme, which covers 22 countries, bringing the total of firm pledges and payments to $197 million.

— The recognition at the UN General Assembly's Special Session on Africa, held 27 May-1 June 1986, of the substantial amounts of resources needed to support the efforts of African governments to achieve economic recovery and development. Additional external resource needs of about $5 000 million a year have been identified for 1986-90. This is discussed in greater detail in the Regional Review chapter on Africa.

— The expansion of input availability being a key factor in improving the food situation in Africa, the Fourteenth FAO Regional Conference for Africa, held in September 1986, proposed that FAO undertake a feasibility study on stepping up aid-in-kind, particularly fertilizer aid. The final report of the study, due for presentation to the FAO Conference for decision in November 1987, should have two principal objectives: to determine likely input needs for the next five years; and to assess the potential role of aid-in-kind to meet them and the possible modalities for doing so. The study will focus on Africa.

— The IMF has recently announced a new lending facility for balance of payments assistance to low-income countries on concessional terms, the Structural Adjustment Facility. It consists of SDR 2 700 million (about $3 100 million, at current exchange rates) in Trust Fund reflows already received or expected during 1985-91. Sixty countries are currently eligible for the facility, but the two largest of these, China and India, have announced that they will not avail themselves of it. It is expected that a large share of the facility will be used to support agricultural activities.

Food Aid

FAO forecast total food aid in cereals in 1986/87 at 10.2 million tons, 7% above the estimates for 1985/86, but 18% less than those in 1984/85, when record levels of food aid were provided in response to the African food emergency (Fig. 1.3). About 8.6 million tons (or 84% of the total food aid shipments in 1986/87) were expected to be channelled to low-income food-deficit countries. This would be 6% more than the previous season and would account for about one-fifth of these countries' total cereal imports. At 2.5 million tons, shipments from multilateral sources were expected to be 8% larger than in 1985/86.

As of early December 1986, 47 FAO/World Food Programme (WFP) emergency operations had been approved (24 in Africa, 13 in the Far East, 2 in the Near East and 8 in Latin America). By comparison, the number of emergency operations in 1984 and 1985 had been 63 and 55 respectively. The operations approved in 1986 involved 392 619 tons of cereals and 54 848 tons of other foods, for a total value of $145.2 million. Of these, $119.7 million were from the International Emergency Food Reserve (IEFR) and $25.5 million from the WFP's annual emergency allocation of $45 million.

ANNEX 1.1. Recent economic, financial and institutional events related to agriculture

December 1985

23 — US president signed the *Food Security Act* setting out US agricultural policy for the next five years. It covered a broad range of agricultural commodities; gave increased emphasis to the role of market forces in the adjustment of supply and demand; recognized the need to lower domestic prices of cereals and cotton in order to increase US exports and reduce stocks; and gave the Secretary of Agriculture more flexibility in setting loan rates to improve the competitiveness of US cereal exports. The Act's main provisions included: target prices, loan rates, acreage reduction, farmer-owned reserves, export expansion and conservation.

January 1986

1 — Portugal and Spain joined the *European Economic Community* (EEC). However, clauses in the Acts of Accession on production of and trade in agricultural products applied from 1 March 1986.

February

5-7 — *International Conference on Trees and Forests,* held in Paris, discussed the threat of acid rain and called for North-South solidarity in battling against desertification in Africa.

March

17-21 — The *18th FAO Regional Conference for the Near East,* held in Istanbul, Turkey, called for better food security in the region and recommended training in all aspects of seed production.

April

6-7 — Currencies that make up the *European Monetary System* (EMS) were realigned (e.g., French franc devalued 3%, Deutsche mark upvalued 3%), thus raising farm prices in most EEC countries. (The United Kingdom is not a member of the EMS).

8-12 — *Group of 5, Group of 10, Group of 24, IMF Interim Committee* and the *IMF-World Bank Development Committee* held meetings in Washington. They agreed, among other things, to retain the current system of flexible exchange rates.

21-25 — Council of Agricultural Ministers of the EEC met in Luxembourg and agreed on *EEC agricultural prices* for 1986/87, which included: price freezes on most products; 3% tax on cereal production; 3% reduction in milk quotas to be phased in over three years; and various ways of cutting payments for storing food surpluses.

21-25 — The *FAO Committee on Forestry* stressed the urgent need for improving public awareness of the importance of forestry in human welfare and requested FAO to play the central coordinating role in implementing the Tropical Forestry Action Plan.

26 — Nuclear reactor accident in *Chernobyl,* USSR (116 000 people evacuated within a 30-km radius around the site).

28/4 - 2/5 — The *15th FAO Regional Conference for Europe,* held in Istanbul, Turkey, discussed ways of adjusting production and farm commodity prices; increasing developing country exports to Europe; transboundary air pollution; the role of crop protection policies in relation to food safety and environmental control; and the development of aquaculture in Europe.

May

4-6 Leaders of seven major *industrialized countries* met in Tokyo for their *12th Annual Economic Summit*. They agreed to the "close and continuous coordination" of their national economic policies; expressed concern over a "global structural surplus" for some important agricultural commodities and that such surpluses required action to redirect policies and adjust the structure of agricultural production in respect to world demand; and endorsed the use of indicators in multilateral surveillance.

7 At two donor meetings, held in May and July, FAO launched an internationally financed campaign to save African food production from plagues of *grasshoppers and locusts*. By December, pledges approximated $50 million, and latest estimates indicated that over 90% of crops in West and East Africa had been saved, but southern Africa remained a "danger zone".

9-25 Brasilia meeting of trade ministers of member countries of the Group of 77 launched the first round of negotiations for a *Global System of Trade Preferences* (GSTP) among developing countries.

12-22 The *EEC* banned the importation of food from Eastern Europe (excluding the German Democratic Republic) following radioactive contamination from the Chernobyl accident. This was replaced (end May 1986) by a Community regulation governing the maximum permissible concentration of radio-nuclides in agricultural produce.

27/5 - 1/6 *United Nations Special Session on Economic Problems of Africa,* held in New York, adopted a five-year development programme (the UN Programme of Action for African Economic Recovery and Development, 1986-1990), to rehabilitate agriculture and ease the regions's debt burden. The programme was estimated to cost around $128 000 million, one-third from external sources, and $82 500 million from African countries themselves.

July

8-17 The *18th FAO Conference for Asia and the Pacific,* held in Rome, concluded that while the region had made noticeable progress in raising agricultural production and increasing stability of food supplies, around 300 million people in the region were still affected by mass poverty and malnutrition.

16-26 Agreement was reached on a new three-year *International Cocoa Agreement,* which replaced the one that expired 30 September 1986, and was intended to stabilize cocoa prices that had fallen 16% since January 1986.

28-30 The *Organization of African Unity* (OAU) held its 22nd Annual Conference in Addis Ababa and elected President Denis Sasson-Nguesso of the Congo to chair the organization for the forthcoming year.

The United Nations Conference on Olive Oil adopted a fourth *International Olive Oil and Table Olive Agreement,* replacing the accord, which did not include table olives, that expired at the end of 1986.

28 The International Tropical Timber Council chose Yokohama, Japan for the headquarters of the *International Tropical Timber Organization* (ITTO) and elected Mr Bin Chem Yeong of Malaysia as its first Executive Director.

30 A new *International Wheat Agreement* — only marginally changed from its predecessor — replaced the one that expired 30 June; it is comprised of the Wheat Trade Convention and the Food Aid Convention.

The *price of oil* fell from $28 a barrel in January to well below $10 in July, but recovered to about $15 after OPEC agreed on production curbs.

August

1 — The *Multifibre Arrangement* was renewed. It was more restrictive than its predecessor; its coverage was extended to cover all vegetable fibres; its duration lengthened to five years; it offered more favourable treatment to less-developed countries; gave special consideration to cotton-producing countries; and reinforced action on circumvention.

5-13 — The *19th FAO Regional Conference for Latin America and the Caribbean,* held in Bridgetown, Barbados, asked FAO to carry out a comprehensive study on the potential and long-term prospects for agricultural development in the region (see Box 2.3).

FAO established the *Emergency Centre for Locust Operations* (ECLO).

September

2-11 — The *14th FAO Regional Conference for Africa,* held in Yamoussoukro, Côte d'Ivoire, was presented with FAO's in-depth study, *African Agriculture: the Next 25 Years* (see Box 2.1).

15-21 — Ministerial meeting of Contracting Parties to the GATT, held at Punta del Este, Uruguay, agreed to launch the eighth round of multilateral trade negotiations, which were scheduled to begin officially October 31, 1986 in Geneva and to be concluded within four years. Negotiations will be held on services as well as goods and include agriculture, tropical products and natural resource-based products such as fishery and forestry products (see Box 1.3).

30/9 - 3/10 — The *41st Annual Meetings of the World Bank and IMF,* held in Washington, agreed that more widespread support for more effective coordination of macro-economic policies was needed and to use economic indicators in IMF's surveillance of members' policies.

October

3 — UNCTAD's Trade and Development Board agreed on the venue dates and the provisional agenda of *UNCTAD VII,* scheduled to be held in Geneva on 6-31 July 1987, and include issues relating to resources for development, commodities, international trade and problems of LDCs.

16 — *World Food Day* was celebrated and had as its major theme the role and welfare of artisanal fishermen and small-scale fishing communities.

November

17-28 — The *90th Session of the FAO Council,* held in Rome, adopted, among other things, a resolution on migratory pest control (locusts and grasshoppers) in Africa.

20-21 — The International Sugar Council decided to extend the 1984 *International Sugar Agreement* for one year to 31 December 1987. The Agreement has no regulatory clauses and is intended to enable the International Sugar Organization (ISO) to remain operative.

December

16 — *EEC farm ministers* approved some measures to cut dairy and beef surpluses (e.g., quotas on milk production were to be reduced 9.5% over the next two years and the support price paid by the EEC to beef farmers was to decline 11%).

PART TWO
REGIONAL REVIEW

This chapter reviews food and agricultural performances, policies and other factors in developing and developed regions in recent years. The regions and countries covered are listed in Annex 2.1. The review of the situation in developing countries focuses more particularly on the monitoring of recent developments affecting African agriculture.

The section on developed regions includes a discussion on selected issues related to agriculture in Hungary and Poland, based on contributions provided by official East European institutions.

AFRICA

The 1980s has been a period of deepening economic and agricultural crisis for Africa. For the region as a whole, growth of total and agricultural GDP during 1980-84 was close to zero or even declined, implying declining rates on a per caput basis of up to 3% a year. Total merchandise and agricultural trade also fell in most subregions (Table 2.1).

Several factors, including the cessation of drought, the forecast economic growth in industrial countries (the principal trading partners of African countries), and the fall in the cost of oil-based energy, have helped to raise expectations somewhat of improved prospects for most African economies between 1986 and 1990.[1] The IMF forecasts for sub-Saharan Africa an annual per caput real GDP growth rate of 2.6% in 1986 and 1.1% in 1987 compared with an average annual decline of 1.3% during 1980-85.[2] The anticipated recovery in the region, however, is unlikely to be achieved without a marked and continuing improvement in the performance of the agricultural sector.

Political Commitment to Food and Agricultural Growth

Since the early 1970s per caput annual food production in Africa has declined, as the annual increase in production has been less than 2%, while that of population approximately 3%. The decline in agricultural production has been a cause of great concern to African governments as well as to the international community. Efforts have included the formulation of the Regional Food Plan for Africa (AFPLAN), which was endorsed by Africa's Ministers of Agriculture in 1978. Political awareness and concern for the disturbing deterioration in the performance of the agricultural sector was enhanced by the incorporation of the AFPLAN into the Lagos Plan of Action, which was endorsed by African Heads of State in 1980.[3]

These declarations of intent, however, were overtaken by events in the early 1980s, as further economic and financial difficulties coincided with a widespread and disastrous drought.

Food production growth rates declined even more during 1980-84, when only two subregions recorded per caput gains. This further deterioration, which led to serious food shortages and famine in 25 African countries between 1983 and 1985, not only brought forth a notable upsurge in worldwide sympathy and assistance, but also goaded governments to strive to evolve an "African strategy" for development, with food and agriculture as focal points.

Notable among these expressions of policy intent were the Harare Declaration of 1984, which emerged from the Thirteenth FAO Regional Conference for Africa held in Zimbabwe, and the Organization of African Unity's (OAU) Africa Priority Programme for Economic Recovery (APPER), 1986-1990 of 1985. Both documents spelled out basic strategies for the management of African economies, giving priority to the food and agricultural sectors, particularly the small-scale farm sector, in terms of allocation of resources and the formulation of policies. These strategies became the principal items in documents submitted by African governments to the UN General Assembly's Special Session on Africa, held 27 May-1 June 1986.

The Special Session adopted a declaration that was similar to the text prepared by the OAU in presenting Africa's case, but which reflected reservations by the donor community about the amount of additional aid available, the rescheduling of African debt and trade issues.

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[1] The majority of African countries are oil importers, some of which spend as much as 30% of their annual foreign exchange earnings on oil imports.

[2] Excluding Nigeria and South Africa.

[3] OAU, "Lagos Plan of Action for the Economic Development of Africa", 1980-2000, Geneva, 1981.

TABLE 2.1. **Africa: selected growth rates**

(Percentages)

Country/ Country group	Population 1980-86	Agricultural labour 1980-86	Total GDP 1980-84	Agricultural GDP 1980-84	Total $ value of exports 1980-85	Total $ value of imports 1980-85	$ value of agricultural exports 1980-85	$ value of agricultural imports 1980-85	Agricultural production 1980-86	Food production 1980-86
Tunisia	2.08	1.65	3.73	1.12	−6.40	−5.18	−5.11	−3.54	3.71	3.76
Algeria	3.09	5.01	5.51	1.79	−5.30	−0.96	−17.82	−1.31	2.39	2.24
Morocco	2.49	2.87	2.90	−0.77	−4.89	−3.82	−15.76	−5.11	5.19	5.20
NORTH-WEST	2.69	3.54	4.81	0.71	−5.39	−2.37	−13.68	−2.47	3.78	3.72
Senegal	2.60	1.21	5.01	2.69	0.28	−2.48	1.57	−1.03	2.30	2.14
The Gambia	1.99	0.67	−0.43	21.14	6.01	−7.55	2.44	2.14	2.98	3.17
The Niger	2.89	1.78	−3.67	1.24	−11.22	−11.51	−4.52	−2.42	−0.45	−0.46
Mauritania	2.99	3.29	0.41	2.88	11.80	−4.34	−2.41	2.65	0.52	0.52
Burkina Faso	2.45	1.13	−0.87	1.41	−0.25	−7.73	0.50	0.75	5.86	5.67
Mali	2.86	2.41	1.08	3.03	0.26	−3.08	0.76	7.93	2.35	2.13
Chad	2.33	1.21	−9.04	0.96	7.76	9.23	6.27	43.93	3.52	3.25
SAHEL	2.65	1.68	1.25	2.24	−0.17	−4.78	1.16	2.40	2.46	2.35
Togo	3.01	1.27	−3.87	−1.21	−9.34	−14.25	0.53	4.51	0.65	0.29
Benin	3.01	−2.92	3.07	0.94	13.43	5.72	20.65	2.53	7.82	7.17
Guinea-Bissau	1.83	1.24	4.60	7.67	−4.17	−13.22	1.55	−11.26	7.63	7.63
Sierra Leone	1.82	0.02	0.23	−2.55	−5.71	−17.64	5.00	−11.78	0.90	0.91
Guinea	2.37	0.40	1.58	0.37	−3.77	−1.64	−11.52	−4.66	1.84	1.89
Ghana	3.30	0.96	−2.07	−1.32	−10.76	−7.80	−11.42	−4.30	4.61	4.78
WEST, LOW-INCOME	2.83	0.28	−1.83	−1.24	−6.99	−4.33	−6.89	−3.87	4.05	3.93
Côte d'Ivoire	3.70	4.55	−2.61	−2.53	−1.35	−11.80	1.70	−10.61	2.89	3.85
The Congo	2.64	−5.27	10.11	−7.28	8.74	9.13	5.21	7.31	0.89	0.87
Gabon	1.63	1.14	0.0	0.0	0.17	−0.14	−13.88	2.39	0.98	0.96
Liberia	3.21	1.69	−2.08	−1.95	−7.24	−5.69	−2.46	−2.90	2.73	2.99
Nigeria	3.41	−0.61	−4.64	1.41	−12.24	−13.64	−3.27	−11.00	2.97	3.01
Cameroon	2.75	2.79	5.94	0.27	−4.12	−8.21	−3.43	−0.00	2.11	2.24
WEST, MID-INCOME	3.35	0.27	−3.17	0.85	−8.75	−11.80	−0.10	−9.27	2.11	2.36

TABLE 2.1. (cont.) **Africa: selected growth rates**

(Percentages)

Country/ Country group	Population 1980-86	Agricultural labour 1980-86	Total GDP 1980-84	Agricultural GDP 1980-84	Total $ value of exports 1980-85	Total $ value of imports 1980-85	$ value of agricultural exports 1980-85	$ value of agricultural imports 1980-85	Agricultural production 1980-86	Food production 1980-86
Burundi	2.86	1.00	2.50	1.84	11.93	2.94	9.38	−1.06	2.36	2.33
Zaire	2.99	3.52	0.29	1.84	−0.55	−0.43	−2.40	1.48	2.81	2.76
Rwanda	3.37	2.67	6.40	8.30	3.24	0.14	1.71	7.31	0.70	0.26
Central African Rep.	2.33	3.24	−0.27	1.57	0.52	3.18	4.08	2.37	1.22	1.01
CENTRAL	2.99	3.08	1.52	1.77	−0.05	0.24	1.37	1.95	1.76	1.61
Uganda	3.40	2.22	6.62	9.07	9.79	−0.70	7.65	−19.17	6.26	5.98
Tanzania	3.60	2.22	−2.47	−8.48	−5.93	−6.19	−4.50	−7.90	1.80	2.28
Somalia	2.88	4.79	6.43	13.40	−0.41	2.12	−11.05	−1.14	0.65	0.66
Kenya	4.22	3.07	2.94	3.20	−6.07	−10.73	2.67	1.29	3.21	2.22
Ethiopia	2.52	−0.25	2.76	1.47	0.67	6.55	−5.49	28.98	0.39	−0.11
EAST	3.21	1.54	2.86	2.24	−2.53	−4.77	0.06	3.84	2.57	2.31
Madagascar	2.85	2.36	−5.30	−0.32	−4.15	−7.76	−2.80	−9.94	2.18	2.20
Malawi	3.16	2.31	2.38	4.40	0.34	−8.12	1.76	−13.90	1.79	1.23
Namibia	2.84	2.40	0.0	0.0	0.0	0.0	−13.42	0.08	−1.18	−0.86
Mozambique	2.85	−1.13	−3.63	−6.56	−17.76	−1.67	−19.63	4.93	−0.49	−0.30
The Comoros	3.11	−0.06	0.0	0.0	8.99	3.45	28.68	−8.22	2.38	2.34
SOUTH, LOW-INCOME	2.92	0.91	−2.40	−6.56	−4.90	−5.55	−3.71	−2.83	0.98	0.96
Reunion	0.89	1.23	0.0	0.0	−11.26	−1.11	−10.07	−3.15	0.78	0.96
Mauritius	1.87	−0.07	3.74	5.69	3.33	−2.21	−4.44	−7.26	3.81	3.50
Swaziland	3.10	1.48	4.51	3.88	−8.45	−7.92	−11.45	3.00	2.04	2.32
Lesotho	2.58	1.42	6.17	6.62	−14.69	−0.32	−1.87	2.76	0.16	−0.08
Botswana	3.87	3.13	13.25	−9.47	12.03	−2.37	−0.78	1.40	0.36	0.36
Angola	2.53	−1.07	−2.62	0.69	−12.62	−11.96	−13.87	1.50	0.16	0.22
Zambia	3.39	1.49	−0.51	2.13	−12.38	−8.84	4.07	−12.35	2.62	2.42
Zimbabwe	3.57	0.32	3.09	−2.79	−3.62	−6.38	−0.86	2.33	4.10	2.64
SOUTH, MID-INCOME	3.04	0.42	0.90	0.40	−5.98	−5.79	−5.22	−1.80	1.79	1.56
AFRICA	3.06	1.38	−0.03	−0.21	−6.55	−6.38	−2.32	−3.40	2.39	2.30

Note: Countries are ranked within country groups according to dietary energy supply (DES) levels in 1981-83.

A consensus, however, was reached on the following:
— A frank analysis of the causes of Africa's economic crisis as presented in the documents;
— The need to assign absolute top priority to accelerating agricultural development and its supporting sectors with emphasis on small-scale and/or women farmers;
— The need for substantial amounts of resources to help restructure and develop African economies so as to promote a "pro-agricultural" development strategy;
— The need for African governments to significantly improve their economic and resource management, in particular, land use, price policies and the economic role of the state;
— No new structures or mechanisms for following up the Special Session would be necessary; and
— The need to replenish IDA up to $12 000 million. (As discussed in the World Review chapter of this report, this target in fact was exceeded, as donor countries agreed to provide 12 400 million for the 1987-90 period.)

According to the submission, the full implementation of APPER would require $128 100 million over the five-year period (1986-90). African countries have committed themselves to mobilize $82 500 million (64.4%), leaving $45 600 million (35.6%) from external sources. This comes to about $9 000 million annually from the international community. It was claimed, however, that $19 000 million was already available or pledged from external sources, leaving $27 000 million, or $5 400 million a year of additional resources. This latter sum is equivalent to about 14% of total official development assistance (ODA) to developing countries in 1984, and about 46% of the average yearly government planned investment in agriculture in Africa during 1986-90.

The World Bank, focusing on the 29 poorest countries of sub-Saharan Africa, with per caput incomes of less than $550 in 1984, assessed the need for additional resource flows (taking into account "known and foreseen" commitments) to be $2 500 million a year of concessional flows and debt relief. This would permit the volume of per caput imports during 1986-90 to regain the level of 1980-82, and to achieve the modest objective of a real GDP growth of 3-4%, which would barely keep pace with population growth.

The OAU's submission to the Session claimed that debt-service payments would total about $24 000 million a year during 1986-90, of which $6 800 million a year would be accounted for by low-income sub-Saharan countries. The rescheduling or cancelling of this debt was part of the additional aid required, but the major creditor countries were not prepared to negotiate on this issue at the session for fear of creating a precedent. Aid and debt negotiations were to take place on a country-by-country basis and not as a generalized approach between Africa as a "block" and donor/creditor countries.

Trade issues, particularly protectionism, access to markets and commodity prices, were deferred to the multilateral trade negotiations under the GATT, which officially got under way in Geneva in October 1986.

The UN Programme of Action, which arose from the Special Session, consists of: (i) the commitment of African governments to launch economic development programmes according to APPER; and (ii) the commitment of the international community to support Africa's own efforts. Several countries, including Canada, the Netherlands and some Scandinavian countries, announced during the Session initiatives involving higher levels of aid and a moratorium on or the cancellation of debts of certain African countries.

Causes of Retarded Agricultural Growth

Although specific causes of poor agricultural performance vary in each country, there have been a number of common internal and external features.[4] Internal policy factors include the following:
— The lack of political commitment of African governments toward agriculture and the rural sector;
— Inadequate management of resources; poor formulation of development strategies and policies; inefficient pricing systems, including exchange rates; high cost of state-operated production, marketing and agricultural finance institutions; and ineffective research and extension services;
— Inadequate physical infrastructure for transport and communications, and inadequate allocation of financial resources to the agricultural sector or to supporting sectors; and
— The region's rapid population growth rate of more than 3% a year coupled with an even

[4] These are discussed in greater detail in FAO's *African Agriculture: The Next 25 Years*, presented to the Fourteenth FAO Regional Conference for Africa, Yamoussoukro, Côte d'Ivoire, 2-11 September 1986.

faster urbanization growth rate and the absence in most countries of a coherent population policy designed to support development policy.

The adverse effects of these policy constraints were aggravated by periods of devastating drought, particularly in the Sahelian zone in the early 1970s and throughout all Africa from late 1982 to early 1985.

There were two related external factors contributing to Africa's economic crisis. The first concerned the export sector, where agricultural commodities play an important role and, in particular, the deteriorating terms of trade suffered by most African countries since the early 1980s. During 1981-83, Africa's terms of trade deteriorated by nearly 6%. The deterioration in terms of trade was worse in sub-Saharan Africa (18%), where agricultural commodities have a relatively greater weight in exports. Sub-Saharan countries, excluding Nigeria, suffered an estimated loss of $15 000 million through the deterioration in terms of trade during the early 1980s, an amount roughly equivalent to the increase in their external debt.

The second factor is Africa's total *debt*, which was estimated by the IMF to be approximately $140 000 million in 1986, having virtually doubled in eight years. IMF also estimated sub-Saharan Africa's debt at about $66 500 million, excluding Nigeria. Africa's current debt-service ratio is between 30-32%, having risen from around 15-17% in 1978.

Since the early 1980s, Africa in general and, sub-Saharan countries in particular, have been faced with a dilemma. Net external borrowing has been falling (from $8 400 million in 1981 to $3 900 million in 1985), while net investment income has become increasingly negative (−$2 000 million in 1981 to −$3 400 in 1985), mainly because of rising interest payments on debt. Export earnings have also declined (from $24 200 million in 1980 to $20 400 million in 1985). Therefore, imports had to be severely cut back (from $27 400 million in 1980 to $20 300 million in 1985), at a time when many drought-affected countries required larger imports of food and economic sectors, including agriculture, were badly in need of imported inputs, spare parts and fuel. The value of total merchandise imports fell more than 6% a year during 1980-85, while that of agricultural imports, including inputs and food, also fell more than 3% a year during the same period.

To enable agriculture to recover from the drought, exploit the return of more normal rains in 1985-86 and implement the APPER, more financial resources are required at a time when, paradoxically, external flows are continuing to diminish. It was on this basis that financial proposals for the UN General Assembly's Special Session on Africa were put together, involving a commitment on the part of African countries to mobilize domestic resources and make policy reforms, along with injections of additional external resources, either as capital flows or as debt relief.

Recent Policy Reforms

With the gathering appreciation of the gravity of the economic crisis in Africa, policy reforms have been widely introduced since 1980.[5] For example, during 1980-84, 26 sub-Saharan non-oil exporting countries were involved in IMF-supported structural adjustment arrangements, the peak year being 1981, with 19 countries participating.

The most striking macro-policy reforms have been the numerous devaluations of currencies. Between mid-1984 and early 1986, out of 43 African countries for which data were available, the exchange rates of currencies against the SDR remained unchanged for four countries, increased in 15 others—the majority being in the Communauté Financière d'Afrique (CFA) Franc zone—and declined in 24 others. Some of the devaluations were substantial: 372% for the Ugandan shilling; 311% for the Zambian kwacha and 274% for the Somali shilling. The unweighted average decline was nearly 39% from mid-1984 to mid-1986. Such major efforts to realign currency values in the light of economic realities often have been made in conjunction with other structural adjustment measures.

Far-reaching reforms in domestic policies toward the agricultural sector have frequently accompanied these adjustments in exchange rates. These reforms focus on: (i) institutional changes, particularly with regard to agricultural marketing boards, with a view to increasing efficiency and reducing costs; (ii) increasing producer prices, facilitated in the case of export crops by the devaluations that have taken place; and (iii) reducing subsidies on food and agricultural inputs. Some selected country examples follow.

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[5] A report published by the World Bank in 1986, *Financing Adjustment with Growth in Sub-Saharan Africa, 1986-90*, highlights some success stories and underlines how deeper policy reforms have been introduced, particularly since 1983.

Ghana recently announced its Agricultural Policy Action Plan, 1986-88, which supports the country's Economic Recovery Programme, giving agriculture a high priority. The drastic devaluation of the cedi has permitted increases in producer prices, although not comparable to the devaluation. For example, prices announced for 1985/86 were 367% and 100% higher for cocoa and maize respectively than those announced in April 1983.

Plans have been announced to privatize some parastatal functions that are non-viable under their existing management, and the the Ministry of Agriculture also is being reorganized.

Food production growth during 1980-85 averaged 4% a year (including the disastrous year 1983), compared with an average decline of nearly 2% a year during 1971-80. The increase in 1986 over 1985 was more than 10%.

Nigeria has not devalued the naira, but has focused its attention instead on reforms in institutional arrangements and trade policy. According to a Nigerian government announcement in April 1986, seven parastatal marketing boards for grains and other crops (cocoa, palm-oil, rubber, groundnuts, cotton, and roots and tubers) were to stop trading on 30 June 1986, and to cease functioning altogether by the end of the year (they owed 637 million nairas at the end of 1984). Much of the trade in these products was already in private hands, but now government intervention in agricultural marketing is limited to being a "buyer of last resort" through the state administration. State subsidies on fertilizer prices also have been reduced, from 80% to 20%.

In the area of trade policy, the major reform was the banning of imports of rice and maize, in effect from 1 October 1985, and vegetable oil from 1 January 1986. It is believed that Nigeria can be self-sufficient in these products; it once was a major exporter of vegetable oils.

Food production increased 4% in 1985 compared with an average growth rate of less than 1% during 1980-84 and less than 3% during 1971-80, while the population growth rate in 1985 exceeded 3% a year. Progress was maintained in 1986, with per caput food production increasing 1.3%.

In contrast, *Zambia* is relying more on price incentives than institutional reforms to expand agricultural output. Policy changes, however, also centre on the need to improve the efficiency of agricultural marketing and servicing institutions and to fund increased support programmes for agriculture.

The kwacha was formally devalued at intervals during the early 1980s, but in October 1985 the government introduced a system of auctioning foreign exchange on a weekly basis rather than setting a fixed rate. Within two weeks the kwacha had devalued 200% against the US dollar, and by the end of 1985, had settled to around 145%, but later on fell further. This decline necessitated considerable increases in producer prices, as import and export prices, in terms of the kwacha, rose proportionally. Producer prices rose 125% for maize and 103% for wheat between the 1983/84 crop year and November 1985.

The fertilizer subsidy was reduced 63% in 1983. Subsequent adjustments were made in the light of the exchange rate and the need to reduce the government budget. Fertilizer prices rose about 220% between 1983 and 1986. As a result, fertilizer consumption fell 18% in 1984/85, but was reportedly up again in 1986. Although the price of fertilizer is uniform throughout the country and is applicable for any kind of fertilizer, this leads to inefficiency in its distribution and use.

In 1985, food production in Zambia increased 5% (compared with an average rate of only 1.5% a year during 1980-84 and 2.8% during 1971-80), and maize output rose 13%. In 1986, food production again increased about 5%.

The radical agricultural policy reforms undertaken by African governments in recent years, often associated with changes in other areas, particularly macro-economic policy, have involved, at times, substantial costs to some sectors of the community. In particular, urban populations have faced increased costs in food and imported consumer goods, and job losses resulting from the restructuring or closure of various parastatals. The political cost of such sacrifices should not be underestimated.

Although these policy reforms will take time to implement and fully yield results, they have already contributed, together with improved weather conditions in 1985, to achieve significantly higher levels of food and agricultural output. For Africa as a whole, the increase in 1985 was about 7% for both categories, compared with an annual average increase of less than 2% during 1980-84 and about 2% during 1971-80.

Such welcome improvements also carry some accompanying problems. Difficulties from lack of transport and storage facilities have been widely reported with a consequent collapse of market prices. In other cases, bags have been in short supply, and problems of financing the expected crop, coupled with higher prices, have arisen. For example, in Zambia in 1984/85, it

BOX 2.1

FAO's in-depth study on food and agricultural problems in Africa

Conscious of the continent's deepening food production crisis, African Ministers of Agriculture at the Thirteenth FAO Regional Conference for Africa in July 1984, requested the Director-General to undertake an in-depth study of agriculture and food problems in the region and to propose concrete measures to overcome them. The study's findings, published in *African Agriculture: The Next 25 Years* (ARC/86/3), were presented to the Fourteenth FAO Regional Conference, held in Yamoussoukro, Côte d'Ivoire, 2-11 September 1986.

Although the study focused mainly on staple food production, it also emphasized livestock production, inland fisheries and forestry. Its five main conclusions were:

i) Africa's present food supply situation is not only inadequate but, in some instances, unsustainable. If present trends were to continue, the cost of cereal imports would rise sixfold in 25 years, many countries would lack the means to import sufficient quantities of food, and some would hover on the brink of survival.

ii) Africa can feed itself provided the potential of doing so is properly mobilized and safeguarded. Land resources are sufficient to meet future needs, but many of them are fragile and need greater care. With a minimum average growth of agricultural production of 3% a year as a realistic objective, staple crop yields can double over the next 25 years.

iii) Crop land is being overexploited, rangelands overstocked and forests destroyed. Desert encroachment and soil erosion are causing large areas of agricultural land to be lost or degraded. Proven measures exist to allow conservation-based development, but finance and institutional mechanisms are lacking.

iv) Four factors currently hold back agricultural development: inadequate incentives for farmers to produce for the market; lack of inputs; inappropriate institutions; and poor infrastructure. (These factors have become known as the four "i"s of agricultural development.)

v) Greater priority to agriculture should be given in national budgets; improvement in Africa's external economic environment is called for; and changes are needed in financial and technical assistance.

In the light of the above conclusions, a Programme of Action for African agriculture was presented to the Conference. It consists of two parts: (i) a four-point strategy to raise food production; and (ii) a specific initiative to greatly expand aid-in-kind to raise production quickly.

The *four-point strategy* concerns four interdependent actions: (i) internal reforms in national economies to give greater priority to agriculture; (ii) improvements in the four "i"s (incentives, inputs, institutions and infrastructure) outlined above; (iii) implementation of strategies for conservation of natural resources; (iv) improvement of the external economic environment (e.g., to help increase trade, reduce Africa's debt burden and higher levels of financial assistance to the region).

The *aid-in-kind* initiative is based on the fact that: (i) a rapid increase in production demands greater use of inputs (fertilizers, pesticides, seeds, implements and spare parts); (ii) many countries cannot afford to import such inputs; (iii) input shortages prevent farmers from fully responding to improved production incentives; and (iv) a better balance is needed between food aid and aid to produce food. The modalities for an expanded aid-in-kind programme, however, have to be explored for different inputs and country situations.

was estimated that financing the 1984/85 maize crop through the National Agricultural Marketing Board (NAMBOARD) required 210 million kwachas, and the Board already had an outstanding debt of 70 million kwachas.

This experience underlines the wisdom of the APPER in focusing, not only on measures to increase agricultural production directly and to improve the policy environment for agriculture, but on allocating resources to those sectors supporting agriculture, such as transport and communications. The danger is that the opportunity to exploit a rather more favourable economic environment will be lost because of an inability to finance the required levels of imports and investment.

In early September 1986, at the Fourteenth FAO Regional Conference for Africa, the Director-General of FAO introduced FAO's strategy for Africa's agricultural progress based on a four-point Programme of Action (see Box 2.1).

Food and Agricultural Situation in 1986 and the Early 1980s

Africa's agricultural sector showed a good recovery in 1985 and 1986 from the scourge of drought that had afflicted the early 1980s. Growth in food production in 1985 and 1986 combined was more than 8%. As a consequence, by early 1987, ten African countries had exportable surpluses of coarse grains from the 1985/86 crop and eight countries had exceptional local surpluses.[6] This situation also underlined the low prices prevailing in world markets, indeed the difficulty in obtaining any markets at all, the lack of purchasing power and the inadequacy of infrastructure to move supplies to deficit areas.

At the same time, however, five African countries were still facing abnormal food shortages.[7] Despite a marked overall improvement, localized but nevertheless serious food problems remain in Africa. The region's annual growth rate in food production during 1980-86 was only 2.3% compared to population growth of 3.1%. The value of its agricultural exports during 1980-85 declined 2% a year, while its agricultural GDP stagnated (see Table 2.1).

In *North-West Africa*, food production failed to increase in 1986, but this followed the exceptional gain recorded in 1985 and was mainly the result of a 30% reduction in the cereal harvest in Tunisia, compared with the record of the previous year. In Morocco, however, food production increased 14% in 1986. During 1980-86, the subregion's growth in food production increased 3.6% a year, nearly one percentage point above the rate of population growth; but agricultural exports slumped badly.

Cereal production in the *Sahel* was expected to attain a record level in 1986, although food production as a whole fell back in some countries such as Senegal. Both Mauritania and Mali recorded increases in food and agricultural production of between 11% and 12%. Growth in food production for the subregion during 1980-86, at only 1% a year, was below that of population (2.6%). Annual growth in agricultural exports during 1980-85 was modest (1.2%), but at least positive, while real growth of agricultural GDP was better than that of total GDP.

For *West Africa*, 1986 was, on the whole, a favourable year for agriculture, although experiences varied among countries. Production fell back in Côte d'Ivoire, Liberia and Togo, but other countries, Ghana and Cameroon in particular, recorded significant gains. The increase in food production of the low-income countries of the subregion during 1980-86, at nearly 3% a year, was a little better than that of the medium-income countries (2.7%). The former countries' agricultural exports, however, declined much more rapidly during 1980-85 (by nearly 7% a year) than the latter's, largely because of increased exports by Côte d'Ivoire and the Congo, both mid-income countries.

Growing conditions in 1986 in *Central Africa* were normal, although food production in the Central African Republic failed to increase. Nevertheless, the increase for the subregion as a group was nearly 3.5% in 1986, although this good performance served to pull up the region's average growth of food production to only 2% during 1980-86, nearly one percentage point less than population growth. There was modest annual growth (1.4%) in agricultural exports during this period.

In *East Africa*, above average crops were harvested in most countries of the subregion, although conditions were not so favourable in Somalia, and food production has not attained its pre-drought level in Ethiopia. The short rains

[6] Exportable surpluses: Benin, Burkina Faso, Côte d'Ivoire, Kenya, Malawi, Mali, Niger, Sudan, Uganda and Zimbabwe.

Exceptional localized surpluses: Burkina Faso, Chad, Malawi, Mali, Senegal, Sudan, Uganda, and Zimbabwe.

[7] Angola, Botswana, Ethiopia, Lesotho and Mozambique.

of late 1986 were also favourable, again with Somalia as an exception, so that the outlook was good for the secondary food crops coming onto the market in early 1987. The subregion's annual average growth in food production (2%) during 1980-86 was severely depressed by drought compared to a population growth rate of over 3%. The value of agricultural exports remained virtually unchanged during 1980-85, but there were wide differences among countries in East Africa.

The situation in *southern Africa* for 1986 crops was also mixed, although food production actually declined only in Lesotho, with very little growth in Angola. In 1986 most countries, however, consolidated the major and, in some cases, record increases of 1985, and notable gains in particular were recorded in Mauritius and Swaziland. The rains began toward the end of the calendar year in this subregion, and so far, with some exceptions, the rains of 1986-87 have been well distributed. Nevertheless, internal disorders continue to adversely affect food and agricultural production in Mozambique and Angola. During 1980-86, food production increased less than 1% a year in the low-income countries of the subregion and by 1.9% in the medium-income countries, whereas population grew by about 3% a year in both of them. Agricultural exports during 1980-85 declined 3.7% and 5.2% for low- and medium-income countries respectively, and only the Comoros, Zambia and Malawi increased the value of their agricultural exports.

The relatively abundant rains of the last two years have brought in their wake another

BOX 2.2

Locust and grasshopper attacks in Africa and the Near East

The return to near normal rains in Africa during 1985 created favourable conditions for locust and grasshopper infestations. In late summer 1985, there were widespread infestations in some Sahelian countries of West Africa, and FAO warned the international community that this posed an imminent threat of major proportions for food crops in large areas of the continent.

In 1986, intensive aerial and ground control operations, supported by FAO, UNDP, EEC and USAID, helped avert major food losses in western and eastern Africa. The Director-General of FAO launched an appeal at a donor meeting in Rome on 7 May 1986 for contributions to meet the costs of this campaign. These costs, estimated by FAO at almost $50 million in December 1986, were fully covered by bilateral and multilateral donors. Thus, a little more than one year after FAO's first warning of grasshopper and locust upsurge, the prompt response of African governments and the international community could be credited as largely successful.

The danger however, still exists in 1987, of an upsurge of the Desert Locust in the Sudan and on the Arabian peninsula. By the beginning of the year, at no time during the last 20 years, has the situation along the Red Sea coast been so serious. The Brown Locust also remains a threat in southern Africa, thus requiring continuing control efforts. Furthermore, the grasshopper problem in the western Sahel is as potentially dangerous in 1987 as it was in 1986. Eggs have been deposited in the soil and await the coming rains in mid-1987. If weather conditions are favourable, large swarms of grasshoppers and locusts are inevitable. A meeting of donors and affected countries in December 1986 in Rome drew promising reactions, so it appears that the international community is prepared to cope with such an eventuality. The main concern is in monitoring and managing the problem where so many factors are unpredictable across a wide geographic area, spanning many countries.

age-old threat to African food supplies, that of locusts and grasshoppers, a menace which threatens to assume disastrous proportions in some areas. Since October 1985, FAO has increased its efforts to counter the locust threat, and the Emergency Centre for Locust Operations was established in August 1986 to help mobilize funds and equipment and coordinate action. Over 1 million hectares of ripening crops in the Sahelian countries of West Africa were protected by an aerial spraying campaign (see Box 2.2).

Therefore, the food supply situation of the 1985/86 crop year was generally satisfactory in most African countries. By early 1987, however, there were still problems that required urgent attention. They can be summarized as follows:
1) Priority to implement emergency control programmes against grasshoppers and locusts, and the need for donors to provide additional assistance at short notice;
2) Swap arrangements, triangular transactions and local purchases to dispose of unutilized surpluses of cereals from 1985 harvests;
3) New food aid allocation needs in 1986/87. For 30 countries, still uncovered needs were estimated at 1.2 million tons of cereals; these include nearly 800 000 tons of emergency assistance needed by five countries facing exceptional food emergencies (Angola, Botswana, Ethiopia, Lesotho and Mozambique);
4) Careful scheduling of the arrival of undelivered food aid pledges; and
5) National and regional early warning and food information systems to be established or strengthened in many of the drought-prone areas.

LATIN AMERICA

Recent Food and Agricultural Performance

For the region as a whole, annual increases in agricultural output in the 1980s were markedly lower than during the 1970s. In per caput terms, recent food and agricultural growth rates even turned negative, with only a few major crops—namely sugar, oilcrops and fruits—showing any gains. Nearly all Latin American countries experienced declining growth rates. Central American, Caribbean and Andean countries, however, were particularly hard hit; their agricultural output during 1980-85 increasing at barely half the average rate of the 1970s.

Nevertheless, compared with non-agricultural sectors, agriculture did relatively well. Total agricultural production grew 1.4% a year during 1980-86, while total GDP (measured in constant local currencies) declined 0.3% during 1980-84 (Table 2.2). Apart from its inherent resilience in relation to other sectors, agriculture escaped the worst effects of the general economic crisis partly due to previous large-scale investments that matured during the early 1980s.

Several countries, including Brazil, Argentina, Chile, Venezuela and Uruguay, appear to have reached the point in their development process where their agricultural labour force has slowly started to decline, pointing to an increase in labour productivity.

The value of agricultural imports fell significantly, although by less than total imports, as a consequence of nearly equal declines in unit values and import volumes. The former fell because of the 1980-82 world recession, the latter because of reduced import demand and currency devaluations, which reflected the region's economic crisis and the policies that were combating it. The reduction in agricultural imports was especially noticeable in Argentina, Brazil, Costa Rica, Guatemala, Honduras, Uruguay and Chile, though in the latter country, this was mainly due to greater levels of self-sufficiency in wheat.

The value of agricultural exports also fell, but much less than imports. Export values fell, not because of decreasing export volumes, which increased at a rate similar to that of total agricultural output, but because of falling unit values of export commodities. The reduction of agricultural export revenue was particularly severe in Bolivia, El Salvador and Trinidad and Tobago.

As regards recent performance, food and agricultural production increased substantially in

TABLE 2.2. **Latin America: selected growth rates**

(Percentages)

Country/ Country group	Population 1980-86	Agricultural labour 1980-86	Total GDP 1980-84	Agricultural GDP 1980-84	Total $ value of exports 1980-85	Total $ value of imports 1980-85	$ value of agricultural exports 1980-85	$ value of agricultural imports 1980-85	Agricultural production 1980-86	Food production 1980-86
Mexico	2.59	0.09	0.43	2.36	7.29	−11.91	−0.60	−8.03	1.33	1.59
Brazil	2.23	1.52	−0.13	1.95	5.08	−12.06	0.00	−12.46	2.97	3.20
Trinidad & Tobago	1.60	2.48	5.19	−1.20	−13.56	−14.56	−9.68	−0.37	0.06	0.20
Cuba	0.66	−2.35	0.0	0.0	2.83	5.91	2.19	−0.83	2.65	2.48
Jamaica	1.46	−5.57	1.31	2.00	−9.98	−2.30	2.44	−1.24	3.18	3.18
Costa Rica	2.63	1.42	−0.80	2.05	−0.80	−4.96	−1.13	−8.43	1.53	0.57
Dominican Republic	2.34	3.21	2.23	3.33	−6.21	−3.17	−5.58	−1.32	2.44	2.58
Guyana	1.94	−2.72	−5.18	−2.58	−13.63	8.15	−14.75	−14.19	−1.77	−1.74
Panama	2.18	0.68	3.56	3.47	−3.92	−1.51	−2.89	0.36	1.13	0.45
Nicaragua	3.40	0.69	2.18	4.67	−7.01	−2.61	−6.64	−2.05	0.61	1.14
Guatemala	2.86	1.99	−1.73	−1.49	−3.53	−6.46	−4.73	−6.63	0.00	1.53
Honduras	3.40	3.07	0.23	2.03	−0.04	1.23	−1.63	−10.18	1.75	0.93
El Salvador	2.99	2.80	−2.89	−3.43	−2.84	0.88	−7.46	−3.39	−1.06	0.78
Haiti	2.56	0.91	−1.12	−1.64	−0.61	5.95	−1.32	−1.89	1.37	1.19
CENTRAL CARIBBEAN	2.27	1.38	1.93	1.84	−3.60	−0.76	−0.86	−2.05	1.03	1.13
Venezuela	2.86	0.44	−1.93	0.83	−5.41	−12.09	19.18	−4.08	1.04	0.73
Chile	1.58	−0.16	−2.69	0.92	−2.76	−13.13	4.75	−19.29	2.08	2.10
Colombia	2.16	−2.81	1.67	1.05	−0.30	−4.35	−2.79	−3.80	0.90	1.49
Peru	2.62	−0.01	−1.64	1.86	3.07	−7.81	1.09	−12.86	2.58	2.91
Bolivia	2.73	2.33	−5.84	−4.35	−7.56	−2.56	−21.98	−3.02	0.60	0.78
Ecuador	2.91	2.37	0.72	−1.50	1.83	−2.67	−1.10	2.94	2.80	2.33
ANDEAN	2.42	−0.22	−1.11	0.37	−3.13	−9.12	−1.48	−7.00	1.69	1.73
Argentina	1.58	−0.77	−1.67	3.90	−0.13	−17.97	0.95	−17.37	1.30	1.31
Paraguay	3.01	2.27	0.48	−0.76	0.35	−1.20	5.64	−9.27	3.08	2.55
Uruguay	0.71	−4.59	−4.40	−3.02	−5.95	−18.25	−7.11	−12.82	0.60	0.06
SOUTHERN CONE	1.65	−0.15	−1.66	3.47	−0.71	−17.05	0.53	−15.96	1.68	1.30
LATIN AMERICA	2.30	0.77	−0.34	1.79	0.88	−9.23	−0.41	−7.44	1.39	1.43

Note: Countries are ranked within country groups according to dietary energy supply (DES) levels in 1981-83.

1984 and 1985, the increase in the latter year being significantly higher than the average rate of the 1980s. Brazil, Ecuador and Venezuela had particularly high growth rates, while Peru, Haiti, Nicaragua and Costa Rica suffered declines. However, 1986 was another disappointing year for Latin American agriculture. After the encouraging performance of the previous two years, agricultural output fell again, approximately 1.5% below the level of 1985. Food output declined nearly 2% in per caput terms, reflecting poor harvests in most major staples, with the notable exception of roots and tubers. Food production kept pace with population growth in only four countries: Chile, Colombia, Argentina and Uruguay. On the other hand several countries, already affected by severe food supply and nutritional problems, experienced losses of 3% to 8% in per caput food output (Bolivia, Ecuador, Nicaragua and El Salvador). Non-food crops showed even more pronounced losses: oilcrops, −11%; fibre crops, −21%; and primary stimulants, −21%.

Natural factors played an important role in the overall poor agricultural performance of Latin America during 1980-86. An unusually unfortunate period of climatic and other natural disasters affected the region in the early 1980s, followed more recently by prolonged dry spells in Brazil, floods in Argentina, and food supply disruptions caused by the Mexican earthquake and the volcanic eruption of Nevado del Ruíz in Colombia. Such events, however, only partially explain the shortcomings. Various forms of government intervention in agricultural development, played an equally important role along with policy changes imposed by the economic crisis.

Characteristics of Agricultural Policies

Public policies influencing agriculture during this period were traditionally characterized by an urban-industrial bias that placed the agricultural sector in a secondary position. There was a tendency to favour commercial agricultural production and exports of agro-industrial products (e.g., feed-grains, oilseeds and food commodities) destined for urban markets.

Public policies also favoured "cheap" food supplies, while stimulating economic activity in urban areas, and allowed food imports, which often competed with domestically grown traditional foods. Industries were, at times, excessively protected, and national currencies overvalued in order to promote industrial growth, seen as the "engine" of development. With inadequate links between domestic agriculture and other sectors, a considerable part of the domestic demand for agricultural products was met by food imports.

Within agriculture, the bias toward large- and medium-scale enterprises was evident in public investments, pricing, resource allocations for the development of science and technology, mechanization and allocation of credit. The neglect of the small, traditional farmer resulted in imbalanced patterns of agricultural production and income distribution. These were only partially compensated by land reform measures, which in any event lost momentum, and by rural development and credit schemes.

Adjustment Policies and the Agricultural Sector in the 1980s

Macro-economic measures, including monetary, fiscal, exchange rate, commercial and wage policies, have had an impact on agricultural performance comparable to policies specifically designed for the sector. In fact, agricultural policies were often attempts to correct the undesired effects of macro-economic policies. This clearly has been the case since the early 1980s, a period dominated by acute internal and external disequilibria.

Agricultural policy adjustments tended to be product-specific and did not fit any definite pattern. They were often applied within the framework of overall economic strategies that were increasingly market-oriented (price and interest rate liberalization, cuts in subsidies, privatization of marketing enterprises, etc.). In countries where a liberal economic policy was more rigorously followed, the need for more flexibility and pragmatism eventually became evident. Also, many traditional forms of state intervention were re-established.

Specific measures included a significant decrease in the availability of credit and a drastic increase in its cost. Interest rate differentials in favour of agriculture often were abandoned, except for certain products, producers or areas. For example, since 1981, Brazil has gradually reduced subsidies, curtailed credit allocations to agriculture, and in 1984, indexed interest rates at 3% above the full rate of inflation. In Argentina, Uruguay and Chile, public credit was reduced in the late 1970s and commercial, short-term credit became more important. Interest rates were deregulated and thus became extremely high in real terms.

Adjustment measures included budgetary restraint. For example, in Mexico, the public sector deficit was reduced from 17.6% of GDP in 1982 to 8.9% in 1983, and to 6.9% in 1984,

although it rose again to 9.9% in 1985. Similarly, Brazil reduced its public sector deficit from 6.2% of GDP in 1982 to 2.7% in 1983 and achieved a surplus of 0.2% in 1984.

Apart from a few countries that increased public revenues, reductions in the public deficit resulted from sharp cuts in current and capital public expenditures, including long-term investment of crucial importance for agriculture. While the effects of the crisis were initially lessened by investment and technology introduced during the 1970s, recent investment cuts will inevitably reduce the momentum of agricultural development in the near future.

Savings in public sector expenditure on salaries and numbers of employees contributed to the deterioration of the quality of technical, educational and health services to rural populations, although programmes that were tied to external financing tended to be maintained. There was also a widespread reduction or abolishment of subsidies on staple foods and agricultural inputs.

Although measures to increase tax revenues did not have important direct effects on agriculture, higher prices of public or parastatal services did raise agricultural production costs.

In most countries, income policies resulted in decreases in employment and wages, increases in inflation and consequently, large reductions in the purchasing power of wage-earners. The negative impact on food production of lower real incomes and higher food prices—while smaller than in other sectors with higher price and income elasticities—was nevertheless considerable. Agricultural and particularly occasional workers, who have become so important in the region's agriculture, suffered greatly from falling real wages and intensified competition in the labour market.

Massive devaluations, the main instrument to increase the prices of imports and stimulate exports, were major factors behind the large fall in imports of food, fertilizers, pesticides and agricultural machinery. The reduction of imported inputs had significant negative effects on agricultural productivity.

Devaluations also combined with specific export promotion policies to favour agricultural exports. In some countries, exports of agricultural goods increased because of reduced internal demand, as in the case of meat.

Although increases in the relative prices of imports sometimes led to import-substitution, it is too early to assess the long-term viability of this process.

The social pressures emerging from the crisis contributed to a growing recognition of the need for food security policies. In some cases, these consisted of food distribution programmes for needy groups. In others, they took the form of interrelated rural development and national food and nutrition plans.

Although the crisis has prompted cancellation or reduction of many of these programmes, interest in them has recently re-emerged. Examples are the Brazilian and Peruvian development plans, the Mexican national food programme (PRONAL), and the distribution programmes to help low-income families in Argentina, the Dominican Republic, Jamaica and Uruguay.

BOX 2.3

FAO's in-depth study on agriculture in Latin America and the Caribbean

One of the main outcomes of the Nineteenth FAO Regional Conference for Latin America and the Caribbean, held in Bridgetown, Barbados, 5-13 August 1986, was the request made to the Organization to carry out an in-depth study on the potential and long-term prospects for agricultural development in the region.

The request emerged from the critical economic situation facing many countries in the region since the early 1980s, the deterioration in their food and agricultural situations, and the perceived need for a plan of action covering national efforts as well as the role of the international community.

A number of factors in the recent evolution of the region's agricultural sector have underlined the need for such a study. First, the sharp deceleration of agricultural output growth in the early 1980s after more than two decades of sustained growth.

Second, the persistence of structural problems and imbalances, which modernization of the sector has not overcome. Paramount among these are: an increased dualism between modern and traditional agriculture; the continuation of severe poverty in many rural areas; persistent malnutrition; rapid environmental degradation of the ecologically fragile rain-forest areas; and increased food dependency that only the drastic macro-economic adjustment measures of recent years have been able to reduce, albeit at a high cost.

Third, the difficulties faced by agricultural exports of the region in world markets. These derive mainly from widespread protectionist policies, and the use of subsidies and other means to promote exports, together with the technological advantages of developed country producers. The rapid growth of substitutes has also reduced market opportunities. The short-term prospects in most world agricultural markets of interest to the region are bleak.

Fourth, the urbanization explosion has created new food-marketing needs, contributing to the reshaping of food markets, the greater importance of food industries, the growth of food imports, the change in overall food consumption patterns and a move toward more product specialization both at farm and subregional levels.

Finally, the current economic and financial crisis. The constraints on developmental public expenditure, foreign exchange restrictions for importing food and agricultural inputs, stagnation of domestic demand for food and a virtual halt of foreign capital inflows, brought about by the crisis, have set back agricultural development and nutritional improvements.

Against this background, the purpose of the study/plan is to provide an assessment of the current agricultural situation, to present possible scenarios up to the year 2000, and to offer a plan of action for solving the major food and agricultural development problems of the region. In doing so, the study will highlight the importance of these problems and options for remedying them for the international community, and hence, help to attract additional technical and financial assistance to the region.

The study will be formally presented at the next FAO Regional Conference for Latin America and the Caribbean, to be held in October 1988.

FAR EAST

Recent Food and Agricultural Performance

Food production in the region, including China, rose almost 4% a year, and per caput production by 2.7% a year during 1980-86. China recorded spectacular annual gains approaching 6% a year or 4.4% above population growth (Table 2.3). A considerable expansion in food and agricultural output was also achieved in India (about 4% a year), resulting in plentiful supplies of cereals, cotton and tea, and a substantial increase in the production of edible oils. Nevertheless, the value of agricultural exports stagnated despite rapid growth for China.

Food production did not grow as fast as population in only a few countries, including Bangladesh, Sri Lanka and the Philippines, mainly because of floods, typhoons and unfavourable monsoon conditions. Another negative factor, particularly in the case of the Philippines, was the disruption imposed by economic difficulties on farm credit, imports of inputs and consumer demand. The slowdown in food production in these countries during the early 1980s should be considered, however, against their generally successful long-term performances. Conversely, the relatively strong growth in food output in Nepal should not conceal the fact that this country, together with Democratic Kampuchea, is still among those facing the most serious food shortages in Asia.

In the region as a whole (excluding China), agricultural GDP increased 3.7% a year during 1980-84, or approximately two-thirds that of total GDP. The agricultural labour force expanded only moderately (0.8-1.8% a year in the subregions), implying an increase in agricultural value added per caput more than 1% to over 3% a year. The growth of labour productivity in Southeast Asia appeared to be substantially faster in agriculture than in the rest of the economy, while the opposite held true in South Asia. China and the Republic of Korea showed extremely fast increases in agricultural GDP—among the fastest in the world during 1980-84—coupled with actual declines in the number of people employed in agriculture in the latter country.

Variations in these productivity and income levels reflected changes in the terms of trade of agriculture compared with the rest of the economy, which were strongly influenced by policy interventions in support of agriculture or, vice versa, by the amount of resource transfers from agriculture to the rest of the economy. The impact of such factors can only be adequately observed in a longer time period than that covered in this review. Nevertheless, it appears that in South Asian countries and China, efforts to shift terms of trade in favour of agriculture, particularly through more flexible producer price policies, have been fairly successful since the late 1970s.

For a large majority of countries in the Far East, 1986 was another good agricultural year, which consolidated the remarkable improvement in food supply achieved by many of them since the early 1980s. All countries in the region recorded further gains in per caput food production except Sri Lanka, Bangladesh, Nepal and Brunei. On the other hand, several of the most populated countries (China, Malaysia, Pakistan and India) achieved gains of 2% to nearly 6%, the latter being among the highest of all developing countries.

The overall growth in agricultural production in 1986 (1.8%) resulted from gains in food crops (2.7%) and livestock products (3.8%), more than outweighing a fall of nearly 8% in non-food products. In particular, output of fibre crops, of considerable importance for export earnings of some countries in South Asia, fell 16%.

Emerging Issues and Problems

Although the recent progress of agriculture has been impressive, internal conditions in the sector and its relative position in the economy continue to create problems. In several countries, progress in both output and income in agriculture remain relatively slow. Also, several countries are experiencing difficulties with the intricate problem of adjusting supply to demand.

Grain surpluses—a welcome development in a food security context—have emerged as a problem in countries like China, India, the Republic of Korea and Indonesia. In the depressed price situation currently prevailing in world agricultural markets, these surpluses can neither be exported without subsidies, nor disposed of internally without reductions in market and support prices, or through costly, difficult to administer, targeted distribution programmes.

Furthermore, the persistance in some of these countries of massive pockets of malnutrition among low-income groups indicate that agricultural surpluses persist because of a lack of effective market demand. In India, financial and administrative constraints limit the use of

TABLE 2.3. **Far East: selected growth rates**

(Percentages)

Country/ Country group	Population 1980-86	Agricultural labour 1980-86	Total GDP 1980-84	Agricultural GDP 1980-84	Total $ value of exports 1980-85	Total $ value of imports 1980-85	$ value of agricultural exports 1980-85	$ value of agricultural imports 1980-85	Agricultural production 1980-86	Food production 1980-86
Brunei	4.53	−17.71	0.0	0.0	−8.81	0.75	−32.44	5.18	2.34	2.34
Fiji	1.86	−1.38	0.48	0.79	−8.77	−6.40	−13.78	−0.96	1.52	1.55
Korea Rep.	1.60	−1.27	7.46	7.79	11.50	6.56	−10.69	−5.09	4.07	4.30
Hong Kong	1.92	−2.07	6.16	−1.21	8.81	5.46	14.16	−0.09	0.16	0.16
Singapore	1.16	−0.99	7.89	−0.60	3.74	1.65	5.02	4.39	1.23	1.31
Malaysia	2.45	1.73	6.35	3.28	5.88	4.12	2.65	2.52	3.24	4.25
Indonesia	1.95	0.61	4.70	4.05	−5.28	−1.57	1.34	−11.27	3.28	3.33
The Philippines	2.42	−0.07	1.01	1.21	−3.71	−5.82	−10.15	−2.86	1.01	1.02
Thailand	1.98	1.70	5.44	3.47	1.54	0.49	−2.37	−1.66	3.50	3.35
Papua New Guinea	2.59	3.18	0.64	3.15	−0.92	−2.94	3.54	−7.76	2.13	2.43
Macao	4.06	−24.32	0.0	0.0	8.14	6.17	26.10	3.20	−0.63	−0.63
EAST + SOUTH-EAST ASIA	2.01	0.66	5.49	4.15	3.84	2.89	−0.50	−2.16	3.93	4.08
Burma	1.96	1.08	5.65	6.05	−9.30	−7.57	−11.80	−8.91	5.96	6.04
Sri Lanka	1.77	1.45	5.18	4.17	7.12	−0.04	5.23	−3.90	−0.37	−1.00
Pakistan	3.01	1.97	5.84	1.56	0.41	3.53	−9.67	11.91	3.90	3.40
Nepal	2.35	2.17	3.82	4.00	8.30	8.03	−19.57	1.51	2.79	2.92
Bangladesh	2.75	3.34	3.28	2.44	6.60	3.75	4.19	2.64	2.21	2.11
Bhutan	2.04	2.01	0.0	0.0	0.0	0.0	1.31	6.56	2.35	2.39
SOUTH ASIA	2.65	2.48	5.12	2.86	2.44	2.66	−3.60	5.26	2.87	2.74
India	1.93	−0.02	4.66	2.82	−1.00	−2.85	−3.97	3.99	4.08	4.20
China	1.23	−2.06	8.94	10.09	6.30	10.32	10.72	−19.99	5.87	5.66
FAR EAST	1.72	−0.58	6.48	6.28	3.87	3.48	0.54	−4.93	3.65	3.67

Note: Countries are ranked within country groups according to dietary energy supply (DES) levels in 1981-83.

surpluses in subsidized distribution programmes to alleviate malnutrition, although major efforts have been made in this area. In the case of China, while the problem of malnutrition has been largely overcome, the burden of grain surpluses mainly derives from limitations in storage capacity, congested internal transport systems and inadequate processing facilities.

Policy-makers are being faced with an extremely difficult dilemma. On the one hand, they have to confront immediate concerns for food security, remunerative returns to farmers and alleviation of poverty, many of which can only be answered in the short run by protectionism and subsidy programmes. On the other hand, it is evident that lasting solutions call for reforms aimed at structural adjustment, particularly in countries that have not yet reached the stage of food self-sufficiency. The awareness of this need has supported varying degrees of boldness in policy action. In China, the new stage of agricultural reforms include attempts to improve the marketing system by limiting the government's role in pricing and procurement, and by liberalizing farmgate and retail prices.

While no comprehensive package of reforms have been implemented in other surplus countries, budgeting pressures and the need to reduce burdensome stocks have imposed reduced public involvement in food marketing and distribution. In the Republic of Korea support is shifting from staple foods toward vegetables and forage crops involving reductions in price support for wheat and possibly rice. A similar situation has developed in Indonesia. The production intensification programmes—the basis of generating the country's rice surpluses—are now being shifted to secondary crops. In India, measures to reduce stocks include an expansion of targeted distribution such as food-for-work programmes and a gradual liberalization in cereal trading, which may eventually reduce the share of production handled by the government.

In general, however, policy-makers have not always been able to adapt their policies to a rapidly changing internal and external environment. This has accounted for a non-integrated policy approach, with agricultural policy measures not always complemented by wider and coordinated action. At the same time, policy measures have not been sufficiently differentiated according to the problems of agriculture in different areas and localities, nor according to available technology.

In the coming years, agricultural development and adjustment policy measures will be severely constrained by financial difficulties. Inadequate savings mobilization, budgetary deficits, precarious balance-of-payments positions and declining concessional financing are placing increasing pressure on investment budgets. Although agriculture is a priority area in most countries, and other sectors may be more affected by stringency, cuts may also prove necessary in agricultural financing, raising questions on the region's ability to sustain the remarkable production achievements of the past decade.

Budget constraints in Indonesia reduced the number of its agricultural development projects from 458 in 1985-86 to only 273 in 1986-87. Public sector allocations for agriculture in 1985 rose only slightly in Pakistan, where bad weather has contributed to this country encountering difficulties in meeting its 1984-88 production targets for some food commodities. A negative climate for savings-investment also prevails in Bangladesh due to the country's very weak export, savings and tax bases, while the need to incur large debts to finance commercial food imports in recent years is also imposing austerity.

Liquidity problems are affecting even countries with the highest regional savings-investment ratios. In the case of India, only limited incremental gains in savings can be expected, while investment from alternative sources such as exports and external borrowing are constrained by the economic and financial environment. At the same time, efforts to liberalize trade have had the short-term effect of adding to the import bill.

BOX 2.4

Growth, equity and poverty in the Far East

Any inter-country comparison of socio-economic performance is subject to major conceptual, statistical and definition problems. Even in limited geographical areas, widely varying country situations can be found with regard to resources, constraints and policies affecting performance. Inter-country peformances can also greatly diverge according to the sectors and time periods studied.

Bearing these limitations in mind, a recent FAO study compared the experiences of 11 countries in Asia during the last 23 years.[1] Sixteen indicators of performance related to economic growth, income distribution and social welfare were examined.

Although the study reviewed socio-economic performances in a broad sense, agriculture was a central element of the analysis. The sector, which remains a major component of the economies of most countries in the region, has several growth indicators related to it, such as agricultural GDP, food and cereal output, etc. Similarly, the analyses of distribution indicators, such as income inequality and the incidence of poverty, are largely based on factors related to agriculture, such as expenditures on food and distribution of landholdings. Social indicators include an analysis of the nutritional levels of the populations.

The performance ranking of the countries reviewed, according to a standard system of weighting the different indicators, was as follows (composite index numbers indicating quantitative differences are shown in parentheses):

Highest performance:
Republic of Korea (160), Malaysia (145);

Above average:
Thailand (112), China (109);

Average:
Philippines (99), Indonesia (98);

Below average:
Sri Lanka (91), Pakistan (85), India (78);

Lowest:
Bangladesh: (62), Nepal (61).

It was observed that poor performers were predominantly agricultural countries (Nepal, 59% and Bangladesh, 47%), as the contribution of agriculture to total GDP was highest for them. Conversely, the share of agriculture was lowest, and that of industry highest, for the best performers (Republic of Korea, 14% and Malaysia, 21%).

A very strong relationship was found between GDP growth rate and performance, and per caput GDP and performance. The relationship between performance and social indicators was also high, but less so for distribution indicators.

The very close relationship between GDP and performance confirmed the importance of adequate growth, not only in generating income and investment, but also, in many cases, in creating conditions for reducing inequality and improving social welfare. This is subject to some qualification, however, in view of the variety of country situations with regard to the consistency of their performances. These ranged from:
(a) all-around *poor performance* (Nepal and Bangladesh both had the lowest ranking in nearly all component indices); (b) relatively balanced development, but *below average performance* (Sri Lanka, Pakistan and India); (c) imbalanced *average performance*, with higher inequality and population growth rate and better social measures (the Philippines) or with higher levels of growth, but lesser achievements in social aspects and equity (Indonesia); and (d) balanced *positive performance* (Republic of Korea, Malaysia, Thailand and China, countries with widely different ideological and policy orientations, but an equally strong commitment to public sector policy). The Republic of Korea achieved the highest degree of performance, followed by Malaysia and Thailand, all developing market economies; while China, a centrally planned economy, despite starting from a lower level of development, was able to attain fourth ranking overall in performance.

[1] FAO, *Growth, Equity and Poverty in Asia: Comparative Country Performances*, ESP (1987).

NEAR EAST

Recent Economic and Agricultural Performance

Extremely varying country situations are found in the Near East with regard to economic and agricultural performances, as can be expected from the region's wide disparity in resources, production systems and policy stances. The most striking recent economic developments occurred in oil-exporting countries, which faced a precipitous fall in export earnings from oil caused by a collapse in international fuel prices. Nearly all oil-exporting countries experienced a marked fall in GDP. With export earnings falling 19% annually, oil exporters resorted to stringent trade adjustment measures. After a buoyant growth during the 1970s, merchandise imports declined nearly 2% annually in value terms during 1980-85 (Table 2.4).

Reduced economic activity and employment activities in oil-exporting countries caused a massive reversal in the migratory labour flows among countries in the region. Since the early 1980s, more than a million people were estimated to have repatriated from Saudi Arabia and about 70 000 from the Libyan Arab Jamahiriya (see Box 2.5).

In non-oil exporting countries, the economic situation was also largely linked to developments in the oil market. While lower fuel bills provided financial relief and economic stimulus, an important source of gain for labour-surplus countries—remittances from expatriates—were drastically cut. For a country like Egypt, relying on oil-linked revenues from the Suez Canal, another source of foreign exchange was heavily reduced. Furthermore, financial flows from abroad, in particular new loans from regional bilateral/multilateral financing agencies, became rarer, and several countries faced increasing problems of liquidity and indebtedness. On the whole, however, the growth in economic activity during 1980-84 was relatively sustained in non-oil-exporting countries, except in several where the economic difficulties were aggravated by armed conflicts and civil unrest such as in Lebanon, the Syrian Arab Republic, the Sudan and Afghanistan.

As regards agriculture, production performances presented opposing features in oil-exporting and low-income countries. In the former, agricultural GDP and food output rose particularly fast—in sharp contrast with the fall in total GDP—reflecting highly subsidized policy action to increase levels of food self-sufficiency. Between 1980 and 1984, agricultural GDP expanded 22% in Kuwait, 9.3% in the United Arab Emirates and 8.3% in Saudi Arabia. Such results were achieved against harsh natural impediments to agriculture through heavy infrastructural investment and massive recourse to imported inputs and modern technology.

Agricultural performances, far more crucial in the group of low-income countries, were nonetheless generally disappointing during 1980-84, with only a few countries succeeding in expanding food output faster than population growth. In this notoriously weather-dependent group of countries, where about 70% of cultivated land is rainfed, performances were erratic and suffered in particular from severe drought conditions in 1984.

In the region as a whole, 1985 witnessed greatly improved weather and a remarkable recovery in agricultural output. In Egypt, agriculture was one of the few bright spots in an overall depressed economy, as food output rose 4.2% and expanded cotton output and exports provided relief to a difficult foreign exchange situation. Dramatic increases in food output were also achieved by Iraq, the Syrian Arab Republic, Jordan and the Sudan. Saudi Arabia achieved several successive bumper wheat crops, generating exportable supplies as well as problems of surplus disposal.

Recent estimates for 1986 point to a further substantial rise in agricultural output in the main producing countries of the region. At 5.8%, the estimated rise in food output in 1986 would exceed that achieved in 1985, resulting in a cumulative gain of over 5% in per caput terms over the two years. Particularly dramatic was the performance of Saudi Arabia which achieved an annual average increase in food production of 17.5% during 1980-86. Sizeable increases in food output were also achieved in Iraq and the Syrian Arab Republic in 1986, although in the latter country these only partially offset the losses in per caput food production incurred during 1980-85.

The region's gains in agricultural output were most pronounced in cereals, pulses and oil-crops. On the other hand, growth in livestock output fell well below long-term trends.

As regards agricultural trade, the widening gap between food supply and demand in the region caused imports to expand further, though at markedly lower rates than during the 1970s. Cereal imports peaked in 1984 and accounted for half of the region's total requirements. A moderate decline in cereal imports took place in 1985, but these may again rise in 1986.

TABLE 2.4. **Near East: selected growth rates**

(Percentages)

Country/ Country group	Population 1980-86	Agricultural labour 1980-86	Total GDP 1980-84	Agricultural GDP 1980-84	Total $ value of exports 1980-85	Total $ value of imports 1980-85	$ value of agricultural exports 1980-85	$ value of agricultural imports 1980-85	Agricultural production 1980-86	Food production 1980-86
UAE	5.96	33.47	−3.72	9.25	−8.11	−6.59	−17.60	−2.98	0.0	0.0
Kuwait	5.51	4.20	−2.54	22.06	−11.22	2.60	−9.02	−1.08	0.0	0.0
Oman	4.60	5.66	0.0	0.0	3.84	10.42	14.86	11.00	0.0	0.0
HIGH-INCOME	5.38	12.71	−3.22	12.78	−8.10	−0.70	−11.73	−0.12	0.0	0.0
Libya	3.90	−4.69	−6.93	1.72	−12.61	−0.19	0.0	−3.91	9.78	9.84
Saudi Arabia	4.22	4.28	−1.20	8.32	−25.32	−0.58	−1.39	−1.84	17.36	17.52
Iran	2.91	1.62	0.0	0.0	0.46	−0.65	−8.87	2.73	1.38	1.26
Iraq	3.62	3.57	0.0	0.0	−11.06	−6.66	−4.86	−0.04	4.69	4.57
OIL-EXPORTERS	3.30	2.47	−2.38	6.85	−18.97	−1.84	−5.48	−0.47	8.87	8.89
Cyprus	1.22	1.75	3.60	−0.51	−1.68	1.90	−0.94	0.30	−1.00	−1.00
Turkey	2.08	−1.19	4.65	2.57	19.64	7.11	−0.15	14.83	2.17	2.28
Syria	3.62	5.50	2.37	−2.14	−4.73	−2.00	1.51	5.97	1.38	0.97
Lebanon	0.28	−9.27	0.0	0.0	−5.59	−0.33	−15.70	−5.83	3.26	3.46
Jordan	3.79	8.00	5.98	6.84	4.91	0.33	−11.82	1.15	2.44	2.61
MID-INCOME	2.32	−0.22	4.11	1.26	8.69	2.80	−1.47	3.42	1.70	1.72
Egypt	2.45	2.48	5.66	1.82	2.71	13.08	0.50	6.68	2.59	3.42
Democratic Yemen	2.83	5.07	−0.78	−13.98	−2.53	1.28	−9.22	−0.26	0.63	0.28
Afghanistan	1.02	1.63	0.0	0.0	5.15	8.08	−9.04	−7.32	0.08	0.03
Yemen Arab Rep.	2.77	2.28	10.10	0.59	−0.95	−8.31	−35.14	−1.02	4.45	4.57
Sudan	2.89	2.88	1.23	−0.54	0.40	−7.02	−4.51	−5.03	2.84	2.43
LOW-INCOME	2.32	2.45	5.31	1.10	2.00	6.07	−2.70	4.15	2.17	2.23
NEAR EAST	2.67	1.79	0.09	2.02	−14.40	0.05	−2.52	1.26	4.08	4.11

Note: Countries are ranked within country groups according to dietary energy supply (DES) levels is 1981-83.

BOX 2.5

Labour mobility in the Near East

International labour migration, a common and long standing phenomenon in countries of the Near East region, has increased significantly since the early 1970s. Migration, largely from non-oil to oil-exporting countries, intensified by the end of the 1970s and into the 1980s. With the end of the oil boom, however, it reversed abruptly and large-scale repatriations have taken place.

During the first phase, the economic boom enjoyed by oil-exporting countries brought about a massive increase in their investment programmes and associated labour requirements. For neighbouring low-income countries, such demand for additional manpower was both a source of badly needed foreign exchange, in the form of remittances, and an opportunity for their surplus labour to be absorbed.

The growing flow of this expatriate workforce ended up assuming major proportions. Although estimates differ on the number of expatriate workers in oil-exporting countries, those from other Near East countries may have reached over 4.5 million by the early 1980s. About 70% of these were temporary workers. A major movement of South Asian immigrants also took place—Indian and Pakistani nationals accounting for about 23% of the total labour force.

In recipient countries, the number of expatriates reached considerable numbers in relation to the local labour force and, in some cases, to the country's total population. For example, in the early 1980s, as much as 90% of the total population in the United Arab Emirates was expatriate, and 70% in the Gulf states of Kuwait and Qatar. Although the proportion was smaller in other recipient states, expatriates still accounted for half of the domestic labour force in Oman and one-third in Saudi Arabia.

The phenomenon of labour migration, and the remittances it created yielded unquestionable economic and social benefits for labour-surplus countries. It improved current account balances, boosted savings and investment in domestic construction, and improved access to foreign technology. However, it also had a negative impact on agriculture in some respects, as a substantial part of the agricultural labour force of these countries was involved. For instance, it is estimated that farmer migrants from the Yemen Arab Republic totalled 14% of the total agricultural labour force, and those from Jordan one-third of the total.

For these countries which, together with Egypt, contributed more than 75% of the migrant workers within the Near East, migration caused severe labour shortages in agriculture and, in some cases, transformed the patterns of production. For example, production of labour-intensive crops, such as winter wheat, declined in Oman; unusual scarcities of labour during the harvest season affected cotton picking in the Sudan; "Qat" narcotic leaf increasingly replaced coffee, with a virtual collapse of the terrace system in the Yemen Arab Republic. At the same time, migration also resulted in distortions in the labour market, as trained workers tended to migrate in relatively larger numbers than unskilled workers.

The fall in oil prices, combining with the completion of a large number of infrastructural projects launched during the 1970s and early 1980s, resulted in a sharp fall in labour needs. Since 1984 about 150 major contracts with foreign companies have been cancelled in the Libyan Arab Jamahiriya and 70 000 expatriates have returned home. A more large-scale repatriation—over a million workers—has begun in Saudi Arabia. Other oil-exporting countries are preparing themselves for similar movements of repatriation.

It is still too early to assess the net effect of these movements on labour-surplus countries. On the one hand, the influx of new skills and experience and private investment in foreign currency by repatriates, are boosting their economic activity. On the other, the suddeness and massive scale of the repatriation prevents an early, complete and orderly reabsorption of even skilled labour into the domestic work force.

Emerging Issues and Problems

The economic and financial difficulties that have developed during the 1980s have required major economic adjustments. Most oil-exporting countries, notably Saudi Arabia and the Libyan Arab Jamahiriya, are gearing themselves for austerity measures which are bound to have wider repercussions throughout the region. In these countries, there has been a massive decrease in public expenditure to reconcile budget deficits, while the declining trend in the construction industry, which emerged in the early 1980s, has been sharply accentuated since the recent decline in oil prices.

In the short run, however, the need for adjustment is likely to affect more the extent than the nature of the government's involvement in food and agriculture. In order to stimulate production and achieve higher levels of self-sufficiency, the oil-exporting countries will continue to provide subsidized inputs, albeit at gradually reduced levels, as well as incentive producer prices. In the near future, consumers in high-income countries will continue to benefit from large food price subsidies, through various food-import and distribution systems. The maintenance of food subsidies will be more of a challenge for low-income countries, many of which are facing overwhelming budgetary problems.

As government policy options are constrained by the region's tradition of providing ready access to cheap food, shifts in consumer subsidy policy can only be implemented gradually to avoid widespread public disapproval, as has occurred in the past in some countries. For instance, while Egypt has recently allowed price increases for wheat flour and bread, social pressures have prevented sharp increases in prices. A closer re-examination and rationalization of consumer food subsidies appears however inevitable, in view of the drain on resources represented by these subsidies, which comprise a large proportion of public expenditure.[8]

With regard to measures affecting production, the recent crisis has increased awareness among policy-makers that agriculture, which is not a depletable resource like oil, may offer the best long-term guarantees of development and social welfare.

The region's agricultural production potential has yet to be fully utilized. Since most of the region's agriculture is rainfed, efforts to increase food production entail reducing the level of risk and uncertainty that arise from unfavourable agro-climatic conditions. In most countries of the region, quicker returns are being sought by revamping and strengthening present irrigation schemes and streamlining ongoing projects, so as to avoid the high costs of new investment projects.

In view of the variability in production in the different subregions, an effective early warning system has yet to be set up, which would provide reliable information and forecasts of food requirements and availability. Food security will also necessitate further establishment and maintenance of strategic reserve stocks as in the Syrian Arab Republic and Iraq.

Price policies, a major factor behind recent agricultural performances and consumer welfare, have become an extremely difficult issue, in view of increasing pressure on scarce financial and management resources. Whatever the changes in the nature and extent of government intervention, it remains essential that the continuity and credibility of support price measures be preserved. The need for austerity and rationalization constitutes a challenge, but also an opportunity to improve coordination of institutions involved in domestic price policy formulation.

The attainment of self-sufficiency in food remains a difficult objective in the Near East, even in countries with high agricultural potential. Despite the decline in export earnings, the growth in food imports in several of the main agricultural producing countries in the region still exceeds that of food production during the early 1980s. In volume terms, food and agricultural imports have not been curtailed significantly except for a few countries like the Sudan.

Although the growth in food imports in oil-exporting countries has generally decelerated in recent years, it is unlikely to be significantly reduced in the short-medium term. Food imports in these countries only account for a modest share of total imports (about 15%) and their reserves (which declined in early 1986 for the first time since the oil boom), remain sufficiently ample to sustain import needs. In addition, investment cuts, and the resulting savings in labour and machinery imports, will create alternative sources for financing food imports.

The maintenance of high imports of food will present far greater difficulties in low-income countries and those dependent on foreign

[8] Budgetary expenditure on consumer food subsidies in the late 1970s accounted for about 7% of total public expenditure in Saudi Arabia and 17% in Egypt.

exchange remittances and other transfers (e.g., Egypt, Jordan and the Yemen Arab Republic). Recent austerity measures in Egypt included a sharp cut in imports of commodities deemed non-essential, such as frozen beef and poultry. It has only been through food aid that Egypt's food imports have been maintained at high levels in recent years.

Agricultural policies have tended to emphasize one food commodity, wheat, to the detriment of coarse grain and other staples. However, the income benefits that spread throughout the region during the oil boom, brought about a significant shift in food consumption patterns, especially toward livestock products. This new demand widened the gap between supply and requirements of feed grain and became a financial burden that may assume considerable proportions in the medium/long term. Although the response of domestic livestock production to the new demand has been, in some cases, encouraging (e.g., Saudi Arabia, Iraq and the Syrian Arab Republic), such expansion has often been achieved through heavy imports of feed, veterinary equipment and technology, underscoring the region's deficiency in these inputs.

DEVELOPED MARKET ECONOMIES

Performances in food and agricultural production in the main groups of developed market economies are shown in Table 2.5. With the major exception of Japan, almost all developed market economies experienced surpluses in agricultural production in the 1980s and were vigorously competing in world markets. The result has been lower world commodity prices, yet because of a slowdown in demand growth, stocks have accumulated to historically high levels. Budget expenditure on agriculture has soared, particularly in the two major protagonists: the United States and the EEC. Until recently, it has been the United States that has reacted most strongly to the growing crisis. Other major agricultural exporters, particularly Australia, New Zealand and Canada, also have seen export revenues and farm incomes decline.

The United States

The US farm sector continued to produce surpluses in 1985 and 1986 despite a financial crisis that saw farm prices of crops fall sharply and the largest number of farmers and rural bankers forced out of business since the depression of the 1930s. One indication of the severity of the crisis was the $240 000 million decline in the value of US farmland during 1981-85.

Since the early 1980s, a number of factors have combined to turn the financial and economic tide against US farmers. These include:

— The combination of US monetary restraint and fiscal stimulus in macro-economic policies that raised interest rates. These, in turn, increased both farmers' costs and the value of the dollar, which slowed export demand for US farm products. In addition, phased deregulation of US financial institutions, begun in 1980, has had the effect of integrating farm and national finance, thus making the farm sector more vulnerable to financial instability.

— The 1981 Farm Bill was written during a period of high inflation, low real interest rates, rapid economic growth, expanding agricultural and world trade, and widespread hunger in many countries, with projections for the situation to worsen. Cereal and cotton loan prices were set at sufficiently high levels that effectively placed a floor under world prices after the world recession slowed demand growth. Domestic and foreign demand was not

TABLE 2.5. **Developed market economies: annual rates of change in production of agricultural and food products, 1984-86, and 1980-86**

(Percentages)

Item	North America [a]			EEC (12 countries)			Oceania [b]			Japan			Western Europe (excluding EEC)		
	1984-85	1985-86	1980-86	1984-85	1985-86	1980-86	1984-85	1985-86	1980-86	1984-85	1985-86	1980-86	1984-85	1985-86	1980-86
Agriculture	5.3	−4.3	0.9	−2.7	−	1.2	3.0	−1.4	2.1	0.2	0.2	2.3	−7.0	1.9	1.1
Food	5.6	−3.5	1.0	−2.8	−	1.1	1.1	−1.5	2.0	0.7	0.2	2.7	−7.2	1.9	1.1
Non-food	0.6	−22.0	−2.6	7.1	−2.6	4.0	12.8	−0.9	2.8	−7.4	1.6	−3.7	4.0	2.9	4.0
Cereals	10.2	−6.6	1.8	−8.1	−4.6	2.6	−10.5	−5.6	7.6	−1.2	−0.3	3.5	−9.5	4.0	2.6
Oil crops	10.3	−4.7	1.7	4.3	0.3	4.2	56.8	−14.4	13.0	−0.6	4.7	3.3	1.2	4.0	4.2
Livestock products	2.4	0.5	1.2	−0.6	0.7	0.8	4.9	−0.4	0.5	3.4	1.2	2.5	−2.0	−0.5	0.8
Meat	1.8	0.3	1.2	−0.1	1.1	1.1	4.8	−0.2	−0.8	5.0	1.1	3.4	−2.1	−2.8	1.1

[a] United States and Canada
[b] Australia and New Zealand
Source: FAO, Statistics Division.

sufficient to absorb production, especially since US prices were no longer competitive in world markets. In addition, some agriculture-importing countries became relatively more self-sufficient or became net exporters of agricultural products.

— World economic growth was sluggish and growth markets for US exports were hit by debt problems depressing import demand in general and demand for US farm products in particular. In 1985, US agricultural exports totalled $29 000 million compared with $43 300 million in 1981. In fact, the United States had a monthly agricultural trade deficit in May 1986 for the first time in 15 years.

The US Farm Security Act of 1985, which came into force in 1986, was discussed and debated amid wide public concern over the financial position of farmers and the sharp decline in exports. Its main purpose is to make US cereals and cotton more competitive in world markets while protecting farm revenues. This is to be done mainly by lowering market price supports to a competitive level in international markets and increasing direct income transfers to producers. Farmers are encouraged to place land in a "long-term reserve" and are required to "set aside" land annually to be eligible for farm programme benefits. The Secretary of Agriculture has considerable flexibility in implementing the Act's provisions. This discretionary power will likely result in an intensification of domestic and foreign lobbying efforts to influence US decisions on prices.

Besides competitive prices, the Act seeks to improve US export quality, counter alleged unfair trading practices, remove foreign policy constraints, reduce trade barriers through GATT's multilateral trade negotiations, and make decision-makers in the United States aware of the farmers' dilemmas brought about by fiscal and monetary policies outside their control.

Another feature of the 1985 Act is a policy on food aid, which involves promotion of private enterprise in recipient countries through Public Law (PL)480. The minimum food aid donation under Title II of PL480 was raised from 1.8 to 1.9 million tons.

Agricultural production in 1985 was above trend, mostly due to a record maize crop. While agricultural production in 1986 was estimated to be 4% less than in 1985, stocks would continue to accumulate, particularly of maize which was expected to be the second largest crop in history. Maize stocks were forecast to triple from 58 million tons in 1984/85 to 171.5 million tons in 1986/87; while wheat stocks were forecast to rise to 53 million tons in 1986/87.

Total net farm income was $30 500 million in 1985, over $2 000 million lower than the previous year, while the figure for 1986 was expected to be somewhat lower than 1985, from $25 000 to $29 000 million. Nearly one-quarter of 1986 farm income is expected to come from government sources, according to US Department of Agriculture (USDA) estimates.

Nevertheless, USDA also forecasts that conditions may improve for financially pressed farmers in the country. During 1983-86, there was a decrease of $20 000-22 000 million in farm debt. The USDA expects the debt/asset ratio to stabilize and possibly even decline in 1987-88, along with the interest cost/income

ratio, thus giving greater financial stability to the farm sector.

Soil conservation has become an important issue in the United States and is a major provision in the 1985 Farm Bill. It has been estimated that 84 million farmland acres in the country are eroding at a rate faster than that of regeneration. Forty-nine million of these acres are eroding at a rate three times their regeneration rate and are eligible for the Conservation Reserve Programme (CRP). By August 1986, 8.4 million of these acres had been accepted into the CRP. It was anticipated that an additional 10 million acres (4 million ha) would be idled in 1987 after the October 1986 announcement of what was expected to be the largest acreage reduction programme in US history.

The European Economic Community (EEC)

The continuing growth of many commodity surpluses, which were the result of annual production increases of 2-3% up until 1984, and annual consumption increases, which have averaged less than 1%, have contributed to creating agricultural stocks that are financially intolerable in the EEC. A decline in agricultural production in 1985 and no growth in 1986, may signal, however, a tendency to lower production. Nevertheless, depressed world markets, a falling US dollar and threats of increasing competition in agricultural markets have worsened the outlook for farm incomes in the EEC and for the Common Agricultural Policy (CAP) budget, despite lower production.

The EEC faces some additional difficulties as Spain and Portugal become more integrated into the Community. Spain began its seven-year transition period into the CAP 1 March 1986, while Portugal began a two-stage transition period on the same date, but to last 10 years. Spain is a major producer of both olive oil and wine, of which the EEC has surpluses. There has been international concern about Spain's and Portugal's adoption of EEC rules, particularly those concerning grains. This fear was well founded, as in March 1986, the levy on Spanish maize imports jumped from 20% to nearly 100%. The United States engaged in some intensive discussions with the EEC on this issue and a "trade war" was narrowly averted in late January 1987 (see Box 2.6).

The more or less permanent budget crisis has been exacerbated by the falling value of the US dollar, which means that export subsidies are expected to have cost $1 500 million more than expected for this reason alone in 1986. Also, international commodity prices for major grains have plummeted, which has been costly for the EEC budget because of its variable levies, export restitutions and high book value of stocks.

The 1986/87 EEC price agreement represents the third consecutive year of a freeze on prices, although France, Italy and Greece will register slight positive changes in their national currencies. In addition, cereal farmers will pay a 3% co-responsibility levy to help pay for storage costs and export subsidies, and there will be a 5% price penalty for low-quality cereals.

The EEC Commission had forecast a shortfall of 4 000 million European currency units (ECUs) in the 1987 budget, which was rejected by the European Parliament. This, combined with international pressure to decrease production, and rapidly accumulating stocks of grain, dairy products, beef, wine and olive oil, prompted the EEC Council to take action in mid-December 1986 to cut milk production 9.5% by 1989 and to reduce the guaranteed beef price an average 11% in 1987. These revisions are the most significant ever achieved in the CAP and should set the stage for further cuts in production of wheat, wine and olive oil. However, each of these subsectors is unique and production of wine and olive oil by the Mediterranean members of the EEC will be especially difficult because farms producing these products generally have the lowest incomes in the Community.

Non-EEC member countries in Western Europe fared better than the EEC in 1986, but are having to review their agricultural policies in view of difficult world supply problems. Most of these countries are mountainous and have enacted special legislation in the past to protect their mountain farms. This legislation has recently been broadened to cover farms in valleys and plains in order to make farms more financially viable and to serve agriculture in the long term. A central goal of this legislation is to allow farmers to leave farming, either through early retirement or conversion of farmland into national parks.

Canada, Oceania and Japan

Canada has been able to avoid a major catastrophe in its agricultural sector despite drought in 1984 and 1985, low grain prices and extreme competition in the export market. Farmers have been helped by financial support received from federal and provincial budgets, a depreciating Canadian dollar, relatively low interest rates and a good wheat crop in 1986.

Net farm incomes have not fallen drastically, although over 10% of the farmers appear to be in financial difficulty.

A Farm Debt Review Act was passed in August 1986, which established a Farm Review Board in each province to aid farmers in severe financial difficulty. This followed a moratorium in September 1985 on farm foreclosures which involved debt to government agencies. In addition, a special Canadian Grains Programme was announced in December 1986, which will make available C$1 000 million to grain and vegetable oil producers adversely affected by EEC and US trade actions.

Low world prices have reduced the value of Canada's agricultural exports, although the export market for its high quality spring wheat has remained relatively firm. Because of the 1984-85 drought and efforts to maintain export volumes, Canadian grain stocks are at their lowest level in 30 years, and cattle inventory, at its lowest level since 1960.

There is very real concern in Canadian agricultural circles about the financial health of its agricultural sector, given the fierce competition for export markets, the low world commodity prices and the fact that about 50% of Canadian farm income comes from exports. As a result, the Canadian government has applied a severe countervailing duty on imports of US maize and EEC beef to protect its domestic industry from what it feels to be unfair subsidization.

Both Australian and New Zealand farmers have been hit very hard by low commodity prices and increased competition for their principal export products, as well as high interest rates and rising production costs. It is estimated that 12 000 Australian farmers were threatened by bankruptcy in 1986. Because neither Australia nor New Zealand can match the subsidies given to producers of other major exporting countries, they have been forced to squeeze even harder what are already seen as "technically efficient" farm sectors.

Australian wheat farmers have also seen the guaranteed minimum price for wheat decline 13% in 1986. Nevertheless, because of a falling Australian dollar and a strong export drive, wheat exports will probably reach a record 16 million tons in 1986 and livestock exports also increased substantially. However, net real value of farm production is expected to be down by over 20% in 1986 because of low prices.

New Zealand farmers have been affected by a new farm programme that reduces support to farmers and by an appreciation of the New Zealand dollar that has held down exports. Interest rates continue to be high in the country and net real value of farm production is down by over 20%.

In 1986, the Rural Bank of New Zealand, a government agency, reported that 80% of its farmer clients were in financial trouble. Sheep and beef farm incomes were down 52% in 1985-86 compared with one year earlier, and the overall situation has been compared to the previously unparalleled 1930s.

In contrast, Japan's cereal and livestock production continued to increase in 1985-1986, and an appreciating yen cut imported agricultural input costs, further enhancing net farm incomes. Farming increasingly has become a part-time business in Japan and it was estimated that in 1984, about 86% of the farming families were involved in non-farm economic activities during the farming season.

Japanese agricultural policy has emphasized a diversion programme for rice production to forage, wheat and soybeans. In 1986, 610 000 ha of rice land were diverted to production of these crops. Despite this programme, rice continues to be protected from imports and Japanese officials are very concerned about the consequences of its rice market being opened to imports as a result of the GATT negotiations. Other markets such as beef and oranges have been recently liberalized somewhat. Japan remains around 50% self-sufficient in food production.

BOX 2.6

US/EEC agricultural trade relations: some success, continuing differences and third-party reactions

The United States and the EEC figured prominently in the preliminaries to the multilateral trade negotiations (MTN), as many of the GATT cases have been concerned with disagreements involving these two important trading partners. In 1986, some long-standing differences between the two were settled, while others remain unsolved.

In February 1986, the United States and the EEC reached a mutually satisfactory settlement concerning EEC production aid for canned peaches, canned peas, canned fruit cocktail and dried grapes. The agreement was significant in that it was the first time domestic production subsidies were found by a GATT panel to interfere with international trade. In August, the so-called "pasta war" was defused temporarily when the United States lowered its tariffs on EEC exports of pasta, and the EEC did the same for US exports of citrus and walnuts.

Another dispute, resulting from the EEC enlargement, involved the adoption of EEC rules and regulations by Spain and Portugal. As a consequence, US exports of maize were subjected to new trade barriers for which the United States demanded appropriate compensation. Under EEC rules, Spain and Portugal had to raise their tariffs on maize and sorghum products imported from the United States. The US government claimed it would cost US farmers about $430 million a year. A temporary resolution of the conflict for six months was agreed to so that the MTN could proceed normally, but on 1 January 1987, the US announced that a 200% duty on a number of EEC imports would be imposed at the end of January on imports such as Gouda and Edam cheeses, canned ham, carrots, olives in brine, gin, brandy and low-quality white wines. On January 29, 1987 an accord was reached between the two parties over grain sales to Spain. The four-year agreement calls for the EEC to allow annual exports of 2 million tons of maize and 3 000 000 tons of sorghum into Spain at low tariffs. It also requires Portugal to lift the year-old practice of buying 15% of its grain imports from the EEC. The United States is expected to gain about two-thirds of Spanish and Portuguese quotas.

While the bilateral agreements between the United States and the EEC have produced some positive results, the effects on other countries have been largely ignored. Both the United States and the EEC have domestic agricultural policies that attempt to support farm income through various methods that have resulted in large surpluses and low world prices. In a period of shrinking export markets, both the United States and EEC have attempted to maintain market shares through unilateral and bilateral actions which, in some cases, have led to alleged incursions in traditional markets of other trading countries. Many of these countries are relatively more exposed economically to trade fluctuations and have been hurt significantly by shrinking markets and increased competitiveness.

Fourteen of these countries formed a new alliance in 1986 and held meetings in Thailand and in Cairns, Australia. The so-called "Cairns group" of countries account for 20-25% of world agricultural trade.[1] It has already exerted pressure at the Uruguay Round in Punta del Este to include agricultural export subsidies on the negotiating agenda and is prepared to continue this pressure in future.

While none of these countries alone has a budget that can compete with the United States or the EEC, as a group they hope to exert sufficient pressure in international fora to affect fair-trading practices. Even acting individually, some of these countries can exert pressure on the import side, as shown by Canada's recent imposition of stiff duties on US maize and EEC beef.

Also, Australia, Canada and New Zealand are members of the OECD Committee for Agriculture, which could play a role in alleviating problems in agricultural trade in the near future.

At its meeting in December 1986, the Committee agreed in principle to prepare a basis for negotiating "arrangements" that would alleviate short- and medium-term trade problems in agriculture. These understandings would presumably conform to GATT principles and would parallel the long-term negotiations of the GATT. Discussions along these lines are also expected to take place at other international fora in early 1987.[2]

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[1] These countries include Argentina, Australia, Brazil, Canada, Chile, Colombia, Hungary, Fiji, Indonesia, Malaysia, New Zealand, the Philippines, Thailand and Uruguay.

[2] At the GATT MTN in January, at a broad range of trade talks beginning February 9, the Wheat Exporters' meeting in February, the Trade Ministers' meeting in March, the OECD Ministerial meeting in May, and the World Food Council meeting and Western Economic Summit in June.

CENTRALLY PLANNED ECONOMIES

Eastern Europe and the USSR[9]

Overall economic performance in 1985

Economic growth in Eastern Europe and the USSR, which had accelerated in 1982 and 1983, slowed slightly in 1984 and again in 1985 (Table 2.6). The regional performance concealed, however, substantial differences among the seven countries as regards policies, plan targets and actual achievements.

Economic regional performance in 1985 can be assessed through an analysis of developments in supply and demand factors. On the supply side, an unusually harsh winter in early 1985 and a prolonged drought in the summer had a considerable negative impact on key sectors such as energy, and hence, on industry, transport and agriculture in most countries of the region. Agricultural output fell between 4.8% and 13.1% in Bulgaria, Hungary and Romania; did not significantly change in Poland; and modestly increased in the remaining countries, including the USSR. Overall, energy production rose only marginally or declined; in the case of the USSR, oil production fell 3%.

The region's export volume growth rate was reduced from 6% in 1984 to around 1% in 1985, while the import growth rate slightly slowed from 5% in 1984 to 4.7% in 1985. As a consequence, the regional trade surplus was reduced by $7 000 million in 1984-85.

On the demand side, the slowdown in world trade and in the import demand of developed market economies in particular, adversely affected export opportunities for most East European countries and the USSR. However, the long-standing deficit (based in rubles) of East European countries in their trade with the USSR shifted to a surplus in 1985.

The still positive results—though considerably reduced—of most East European countries in their external financial situations, were obtained through strict import controls and constrained domestic demand. In some countries, these austerity measures resulted in food shortages, rationing of foodstuffs and increases in consumer prices.

Recent developments in agriculture

In the last few years, several countries in the region introduced policy changes affecting the management and planning of the agricultural sector. A review of these changes focuses mainly on Hungary, Poland and the USSR, for which more complete information was available.

In 1985, the growth rate of agricultural production in Hungary fell from its record of the previous year (Table 2-7). Crop production dropped 6.9% mainly due to adverse weather conditions, and livestock production fell 8.3% because of declining profitability; this was accompanied by worsening economic conditions in the sector. Increases in producer prices of agricultural commodities in 1985 were lower than those of input prices, as in previous years. As a result of falling incomes and increasing fertilizer prices, which rose 8.6%, fertilizer consumption declined almost 12% in 1985. Taxes paid by large-scale farms increased and a 20% tax on investment was imposed, with the exception of investment in new plantations, land reclamation and agricultural machinery. Also, taxes to local governments trebled between 1984 and 1985, albeit from very low levels, and as a result, growth in agricultural investment slowed.[10]

In view of the difficulties facing the sector by mid-1985, the Government of Hungary increased producer prices and reduced taxes imposed on the sector. Despite these measures, agricultural production continued to fall in 1986, owing, in part, to a drought which was in its second year and a fall in demand for traditional exports.

In 1985, agricultural output did not significantly change in Poland after having expanded almost 6% in 1984, when record yields of major crops were achieved. Crop production fell, but livestock output rose, particularly meat, a traditional Polish export. The increase in meat production made it possible to raise domestic consumption and exports. The latter, in turn, eased the country's problems with its negative trade balance in convertible currencies, as did new policies introduced in 1983, by which Polish agriculture strongly reduced its former heavy dependence on imported feedstuffs.

Changes in price policy were instrumental in increasing production of grains, rapeseed, livestock and meat. While the declared policy

[9] Bulgaria, Czechoslovakia, the German Democratic Republic (GDR), Hungary, Poland, Romania, and the USSR. (Albania is not included for lack of data.)

[10] See also the following section on "Some characteristics of agricultural policy in Hungary".

TABLE 2.6. **Eastern Europe and USSR: annual changes in selected economic indicators, 1981-85**

(Percentages)

Item	1981	1982	1983	1984	1985
NET MATERIAL PRODUCT					
Bulgaria	5.0	4.2	3.0	4.6	1.8
Czechoslovakia	−0.1	0.2	2.3	3.5	3.2
German Dem. Rep.	4.8	2.6	4.6	5.5	5.2
Hungary	2.5	2.6	0.3	2.5	−1.4
Poland	−12.0	−5.5	6.0	5.6	3.2
Romania	2.2	2.7	3.7	7.7	5.9
USSR	3.3	3.9	4.2	3.2	3.5
Eastern Europe and USSR	1.7	2.8	4.1	3.8	3.5
RETAIL PRICES					
Bulgaria	0.5	0.3	1.4	0.7	0.9
Czechoslovakia	0.8	5.1	0.9	0.9	2.5
German Dem. Rep.	0.2	–	–	–	–
Hungary	4.0	6.6	7.2	8.5	6.3
Poland	18.4	109.4	21.9	14.5	14.1
Romania	2.1	16.9	5.2	1.1	0.4
USSR	1.0	2.8	0.7	−1.3	0.7
Eastern Europe and USSR	...	...	...	...	...
EXPORT VOLUMES					
Bulgaria	8.4	11.3	4.4	11.6	2.2
Czechoslovakia	0.5	6.1	5.7	8.5	2.6
German Dem. Rep.	8.4	5.4	10.6	3.7	1.7
Hungary	2.6	7.3	9.4	5.8	−0.3
Poland	−19.0	8.7	10.3	9.5	1.6
Romania	13.6	−7.6	0.9	15.0	1.6
USSR	1.9	4.5	3.3	2.5	−4.3
Eastern Europe and USSR	1.5	5.1	5.7	6.0	−0.6
IMPORT VOLUMES					
Bulgaria	9.3	3.2	5.2	5.6	10.9
Czechoslovakia	−6.9	2.9	2.0	4.8	4.6
German Dem. Rep.	− 1.3	− 4.7	5.3	5.7	2.3
Hungary	0.1	− 0.1	3.9	0.1	1.1
Poland	−16.9	−13.7	5.2	8.6	7.2
Romania	− 7.2	−22.8	−5.0	9.9	10.3
USSR	6.4	9.7	4.0	4.4	4.0
Eastern Europe and USSR	− 0.1	1.5	3.7	5.0	4.7

Source: UN, Economic Commission for Europe, Geneva.

target of parity of incomes between peasant farmers and non-agricultural workers was not entirely achieved, profitability, together with political guarantees for "stability" in peasant farming, were strong incentives for farmers to increase output, sales and investment. State farms were given full autonomy in management and their operations placed on a strictly economic basis, eliminating the former extensive system of state subsidies.

The success of these policy measures for agriculture, however, requires an increased supply of inputs from industry, if the record levels of crop output of 1983-84 are to be maintained and livestock numbers to increase. There was concern that the industrial sector would be incapable of sustaining the production of such imports in 1986; nevertheless, agricultural output, favoured by good weather conditions, increased around 4% in 1986.

In the USSR, in view of the wide fluctuations

TABLE 2.7. **Eastern Europe and USSR: annual changes in food and agricultural output, 1983-86**

(Percentages)

Item	1983	1984	1985	1986
AGRICULTURAL OUTPUT				
Bulgaria	−9.6	8.3	−13.1	8.7
Czechoslovakia	4.3	5.6	1.0	−3.7
German Dem. Rep.	2.4	8.3	1.2	2.3
Hungary	−2.8	6.2	−7.7	−4.7
Poland	4.7	3.1	0.2	3.9
Romania	−1.7	11.8	−4.8	0.5
USSR	5.2	−0.6	0.7	5.5
Eastern Europe and USSR [a]	3.7	0.9	0.2	4.1
FOOD				
Bulgaria	−8.3	7.0	−13.3	7.4
Czechoslovakia	4.3	5.6	0.9	−3.8
German Dem. Rep.	2.5	7.9	1.2	2.3
Hungary	−2.7	6.2	−7.8	−4.6
Poland	4.7	3.0	−0.1	4.3
Romania	−1.7	11.6	−4.8	0.4
USSR	5.7	−	0.3	5.9
Eastern Europe and USSR [a]	4.0	1.3	−0.1	4.3

[a] Including Albania

Source: FAO, Statistics Division.

in crop output caused by the weather, the achievement of sustained and steady output increases, particularly of grain remains a basic goal. Continuing growth in grain production is needed to fill the still large gap between domestic availability and feed requirements of livestock. Therefore, the 1986 Agricultural Plan, announced in 1985, stipulated an increase of 6% in crop production, but a 1-2% in livestock output. Shortcomings in agricultural infrastructure, which have resulted in large production losses, are an additional basic problem still to be overcome.

1985 also marked the finalization of the 1986-90 Plan and the introduction of some far-reaching new strategies and policies. In November 1985, the State Agro-Industrial Committee of the USSR (GOSAGROPROM) was established as the central managerial body for the Agro-Industrial Complex (APK) with responsibilities for increasing production, fulfilling farm produce procurement plans, providing storage facilities, creating farm-product processing capacity and increasing the variety of farm products available. This new State Committee replaced the former Ministries of Agriculture, Fruit and Vegetables, Meat and Milk Industry, Food Industry, Rural Construction, and the State Committee of Material and Technical Supplies for Agriculture.

Major *reforms* were also introduced in March 1986 to further improve management and planning of the agricultural sector:

— A 50% price bonus on production above the average 1981-85 targets for grain, meat, milk, cotton, soya, sugarbeet, tea, wool, etc. The previous incentive system had tied bonuses to current plan targets that were often unrealistic. For example, grain plan production targets during 1981-85 averaged 239 million tons compared with an actual output of 180 million tons.

— State and collective farms are now authorized to sell to local shops and markets 30% of the state procurement target of fruit and vegetables produced. This new flexibility could increase consumption of these products, not only because of output increases, but because of more efficient means of distribution.

— Local authorities can also fix the retail prices of fruit and vegetables in local state shops. Prices will therefore vary so as to respond better to local market conditions and provide more flexibility for changes in output. In 1980, production of fruit and vegetables from household and auxiliary farms represented 42% and 33% respectively of total output. In May 1986, however, the government decided to introduce more controls on prices in the so-called *kolkhoz* markets.

Gross agricultural production increased moderately in 1985. Grain output, however, was estimated at about 192 million tons, or 11% more than in 1984 when it was abnormally low. Grain imports exceeded 55 million tons during the 1984/85 season, a record level.

In 1986, as a result of a bumper crop of USSR grains, officially estimated at about 210 million tons (including pulses), agricultural and food production of the USSR increased 5.5% and 5.9% respectively. Output of grains was about 18 million tons more than the 1985 harvest and almost 27 million tons higher than the average for the previous five years, leading to a reduction in cereal imports. Also the decline that took place in 1986 in world prices of oil—somewhat reversed more recently —reduced hard currency earnings from energy exports and contributed to a reduction of agricultural imports.

Bulgaria was affected by a severe winter and a prolonged dry summer in 1985. Agricultural output—particularly grain—and consequently exports, drastically fell, and thus grain imports increased to meet domestic requirements. While production recovered in 1986, it was not enough to offset the previous year's decline.

In Czechoslovakia, 1985 crop production fell 2.7%, although grain harvests were quite good and almost equalled the record 12 million tons in 1984. Self-sufficiency in cereals was almost

reached in 1984-85. At the same time the country managed to satisfy domestic demand for meat and dairy products and produce exportable surpluses for some agricultural commodities. Nevertheless, agricultural production fell back by nearly 4% in 1986, mainly because of drought.

In the German Democratic Republic, agricultural output increased moderately in 1985, after the exceptionally favourable results in 1984. Grain harvests reached about 12 million tons and plan targets were exceeded. Such good harvest results made it possible to maintain livestock numbers and output, and meat production rose 5.2%. In 1986, agricultural and food production grew by another 2.3%.

In Romania, agricultural output in 1985 fell by 4.8% over the previous year, which had recorded exceptionally high growth. At the end of 1985, a special programme on self-management and self-sufficiency in agriculture was adopted to ensure adequate supplies of agricultural products. Production gains, however, were modest in 1986.

Some characteristics of agricultural policy in Hungary

Since the mid-1960s and the introduction of a new economic mechanism into agriculture and other sectors, state intervention in agriculture has become increasingly focused on price policies, subsidies and taxes.

Prices are determined primarily by direct state regulation, but also, in some cases, by market forces. During 1980-85, about 60-63% of agricultural output was transacted through *official prices*, compared with about 33% for the output of all sectors.

Prices for agricultural products can be classified as follows:

— Fixed official prices for cereals, beef and pork;

— Maximum prices for the main inputs, including mixed feeds of agricultural origin;

— Orientation prices, fixed within maximum and minimum limits, for important seasonal products such as potatoes and apples; in the setting of limits, the size of the harvest is taken into consideration:

— Protective prices for seasonal products for food processing, such as vegetables and fruit;

— Free market prices, determined between buyer and seller for products traded without a production contract.

Official prices, announced each autumn for a one-year period, apply only when production contracts are concluded between agricultural producers and the food industry or wholesale enterprises.

The setting of official agricultural prices is based on estimated average production costs and on actual or expected developments in market conditions. The development of world market prices has no direct influence on domestic prices in the short term. In the food industry, the majority of producer prices belongs to the so-called "free price category". Industrial enterprises cannot freely set prices, however. Their profit margins are severely limited, largely by official prices of agricultural products for processing and from energy sources, and controlled prices of consumer goods. Hence, the state is, at times, forced to introduce subsidies that impose a burden on the budget and reduce the incentive for food industry enterprises to improve their efficiency.

The level of agricultural contractual prices is higher than that of free prices. Adjustments are made in the contractual prices for quality differences, volume of purchases and seasonality of delivery; the latter particularly for dairy products, seasonal products such as fruit and vegetables and, since 1983, poultry and rabbits.

The authorities apply a complex system of agricultural *subsidies and taxes*. Their net effect on agricultural incomes has tended to be increasingly negative in recent years. Subsidies are currently estimated to contribute about 10-11% to agricultural revenues, while taxes reduce it by 13-14%. A decade ago the amounts were 20% in subsidies and 11-12% in taxes. Hence, the agricultural sector is now a net and important contributor to the state budget.

There are indirect and direct subsidies. Indirect subsidies are related to production requisites and have been rapidly decreasing in recent years. No subsidies are now paid on small-scale machinery and pesticides, and those on fertilizer have been much reduced.

There are several forms of direct subsidies. Those related to agricultural investment have tended to lose importance in relation to other areas of subsidy allocation. Indeed, the share of agricultural subsidies in total subsidy expenditure has fallen from about 40% in the early 1970s to less than 15% at present. The following types of investment are currently subsidized: (i) investment in construction and building modernization, in particular in dairy and pig farming; (ii) establishing vineyards and orchards in designated areas; and (iii) land improvement.

Investment subsidies take the form of, for

BOX 2.7

Agriculture in Poland in the 1980s

In the early 1980s, Poland faced a deep economic crisis. In the agricultural sector that was characterized by (i) a heavy deficit in foreign trade of food and agricultural products; (ii) an imbalanced domestic market for food products, with demand being higher than supply because of the former policy of maintaining low food prices; (iii) a structural stagnation of peasant farms, which cover about two-thirds of total farm land; and (iv) the failure of the industrial sector to produce an adequate supply of agricultural inputs.

Since 1982, the government has introduced a series of economic measures designed to overcome the crisis. The measures include: (i) a farm price policy to stimulate domestic agricultural production, particularly grains and rapeseed; (ii) a policy of self-sufficiency in food and agricultural products to halt the increasing foreign debt of the 1970s to which imports of livestock feed contributed more than one-half; (iii) a gradual reduction of food price subsidies, from the equivalent of about 41% of total food sales in 1980 to 19% in 1985, which entailed a sharp increase in retail food prices; and (iv) a system to negotiate between peasant farmer unions and the state so as to fix prices, thus compensating for rising costs of production due to higher prices of inputs, and partially offsetting increases in the cost-of-living.

As a result, and helped by favourable weather conditions, the pace of agricultural output growth accelerated, from 1.3% a year during 1971-80 to 2.8% during 1980-86. Grain yields increased 11% between the second-half of the 1970s and first-half of the 1980s; and rapeseed output, the major oilcrop in Poland, doubled between 1984 and 1986 to reach over 1 million tons. The high annual rate of growth of crop production during 1980-86, of 4.7% a year, resulted in an increase in the domestic supply of animal feeds. Grain imports were reduced from some 7 million tons at the end of the 1970s to 2.2 million tons in 1985, and oilcrops from 1.3 million to 1 million tons. About $8 000 million of grains and oilcrops were imported between 1970 and 1980, which accounted for about one-half of the trade deficit in convertible currencies. This was the cost of significantly increasing the consumption of meat from 53 kg per caput in 1970 to 74 kg per caput in 1980. With the reduction of imports of animal feeds, however, per caput annual meat consumption sharply declined to 58 kg in 1982 to rise again to 60 kg in 1985.

A major threat endangering the future of the, so far, successful farm policy is that the performance of the industrial sector has lagged behind. This sector has not only failed to provide attractive consumer goods, but has not met the planned supply targets for major farm inputs. The output of fertilizers, crop protection chemicals and processed livestock feeds not only remains below the pre-crisis levels of 1978, but has been growing more slowly than the output of the industries they are associated with. This is the result of past investment policies that have neglected the development of industries which are linked to agriculture. For example, a growing supply of agricultural raw materials faces bottlenecks in food processing and distribution, leading to waste; and an incomplete range and poor quality of inputs result in their productivity being lower than expected. The successful agricultural production policy has showed up the constraints in food processing and distribution, in the industries supplying inputs for farming, as well as the whole infrastructure serving agriculture.

Costly investment programmes are currently being undertaken by the Government of Poland to alleviate these barriers so as to increase agricultural production.

example, a fixed amount of money on each head of livestock housed, or per hectare of land, or it finances part of the total investment cost.

A much wider range of investments are subsidized through reductions in interest rates on loans. This form of subsidy has gained significance with the recent increases in interest rates (about 13-14% in 1986), which are now more in line with market realities and prevailing international rates. For instance, loans for the construction of storage facilities, warehouses, plants for processing food and mixing feed, water mains, roads, etc., receive a 2% interest refund. There is also a 4% refund on interest paid on loans for livestock breeding centres, irrigation systems and polythene sheeting for vegetable production.

Production subsidies are also granted to encourage expansion of milk and beef-cattle production and for the opening up of agricultural land (50% of the cultivation cost is borne by the state budget). There is also a temporary subsidy on fuel, which is used to help offset the increases in energy prices.

Special subsidies for the promotion of local employment opportunities are granted to large-scale enterprises operating under worse than average conditions. In these cases, incomes are supplemented by tax exemptions and price bonuses. For example, depending on the estimated productive capacity of the soil, the state gives a price supplement of 6-20%, according to the products sold. Qualifying enterprises are also granted tax exemptions. In particular, to encourage alternative sources of income, 15-40% of the tax payable on non-agricultural activities can be withheld, provided it is invested in industrial activities.

Small-scale farms receive special subsidies that enable them to purchase pesticides and fertilizers at the same advantageous prices as those paid by large enterprises. They also benefit from grants to increase their stock of cattle. Another form of subsidy covers 40% of the initial investment costs of producing vegetables. Grants are also provided for the planting of vineyards and orchards, provided they meet the technical requirements of, and are linked to, large enterprises. In addition, several small-scale producers can qualify for grants if the combined size of their plantings covers a minimum area.

Turning to the tax system, the state levies various duties and taxes on agricultural producers to raise revenue and control the activities of enterprises. One group of *obligatory payments* include the following:

— National insurance contribution, which rose from 17% in the mid-1970s to 33% in 1986;
— Land tax, assessed on the basis of a land value scale. The tax is payable only from value 14 on the scale (Ft56/ha) to value 40 (Ft 1 680/ha).[11] Farm enterprises pay taxes on the average value of their entire holding; and
— Industrial production tax and turnover tax, calculated as a percentage of gross income, depending on activity or product. Both taxes were devised to ensure that agricultural enterprises make tax contributions equivalent to those of industrial firms.

Another group of taxes applies to incomes:
— Communal tax of 3% on an enterprise's gross income;
— Tax on profits or income, applied progressively to income exceeding Ft33 000; it rises from 4% on incomes between of Ft35 000-40 000, to 34% on incomes over Ft75 000.
— Personal income tax, levied on increases in average income exceeding 5%. Greater increases may be penalized by tax rates of more than 100%;
— Accumulation or investment tax of 5-20%, to steer investment into priority areas. For example, investments in land improvement or environmental protection are exempt from the tax.

[11] The current value of the forint is US$1 = Ft45.

ANNEX 2.1. **List of countries covered in the regional review tables**
(No. of countries in region shown in parentheses)

Africa (44)	*Algeria*	*Ghana*	*Nigeria*
	Angola	*Guinea*	*Reunion*
	Benin	*Guinea-Bissau*	*Rwanda*
	Botswana	*Kenya*	*Senegal*
	Burkina Faso	*Lesotho*	*Sierra Leone*
	Burundi	*Liberia*	*Somalia*
	Cameroon	*Madagascar*	*Swaziland*
	Central African Republic	*Malawi*	*Tanzania*
	Chad	*Mali*	*Togo*
	The Comoros	*Mauritania*	*Tunisia*
	Congo	*Mauritius*	*Uganda*
	Côte d'Ivoire	*Morocco*	*Zaire*
	Ethiopia	*Mozambique*	*Zambia*
	Gabon	*Namibia*	*Zimbabwe*
	The Gambia	*The Niger*	
Latin America (23)	*Argentina*	*Ecuador*	*Nicaragua*
	Bolivia	*El Salvador*	*Panama*
	Brazil	*Guatemala*	*Paraguay*
	Chile	*Guyana*	*Peru*
	Colombia	*Haiti*	*Trinidad and Tobago*
	Costa Rica	*Honduras*	*Uruguay*
	Cuba	*Jamaica*	*Venezuela*
	Dominican Republic	*Mexico*	
Far East (19)	*Bangladesh*	*Korea, Republic of*	*Pakistan*
	Bhutan	*India*	*The Philippines*
	Brunei	*Indonesia*	*Singapore*
	Burma	*Macau*	*Sri Lanka*
	China	*Malaysia*	*Thailand*
	Fiji	*Nepal*	
	Hong Kong	*Papua New Guinea*	
Near East (17)	*Afghanistan*	*Jordan*	*The Sudan*
	Cyprus	*Kuwait*	*Syrian Arab Republic*
	Democratic Yemen	*Lebanon*	*Turkey*
	Egypt	*Libyan Arab Jamahiriya*	*United Arab Emirates*
	Iraq	*Oman*	*Yemen*
	Islamic Republic of Iran	*Kingdom of Saudi Arabia*	

PART THREE
FINANCING AGRICULTURAL DEVELOPMENT

INTRODUCTION

The significant variations in agricultural production and trade, over time and among developing countries and regions, as documented in the previous chapters, raise questions as to the role that agricultural finance plays in creating such differences. Past levels of investment in livestock, tree crops, land improvement, irrigation works, agricultural machinery and infrastructure, are powerful explanatory factors. Similarly, relative levels of expenditure on agricultural services and inputs can also help explain the variations. An analysis of these flows could identify useful policy prescriptions, leading to a more rational use of scarce resources and the attainment of higher performance levels.

Unfortunately, the nature of development finance is too complex to be analysed in a way that would yield unambiguous conclusions, especially as regards the agricultural sector of developing countries. For most of these countries, agriculture is a major source of development finance, as well as a user of it. A large part of investment is non-monetized, for example, in the form of labour-time to clear or improve land, or to tend to breeding livestock.

Investment is needed outside the agricultural sector for infrastructure such as roads and port-handling facilities, to enable the output of investment within the sector to be properly exploited. Similarly, the effectiveness of government current expenditure on research and veterinary services, for example, depends on how *efficiently* it is provided and not just on levels of expenditure. It also depends on whether the rural population is capable of fully exploiting the services offered, reflecting past levels and distribution of expenditures on farm supply and service networks, rural education and even health. Questions must be raised also about the comparability of expenditure data at the country level in times of rapid inflation and distorted exchange rates. Furthermore, the public and private sectors (government and private interests) play widely varying roles among countries in mobilizing financial resources and making decisions on their use.

Nevertheless, there are other compelling reasons for surveying the financing of agricultural development at this time, even in a preliminary and exploratory way. The convulsions that have shaken the world economy with gathering force in recent years, have cast doubt on the continued application of conventional thinking which underlaid much of development efforts during the past 30 to 40 years. The belief in the primal role of the public sector in accelerating development through its fiscal policies was sustained during the 1970s by the ease and low cost of external borrowing from world capital markets. It led to a surge in external borrowing in the decade until the early 1980s. Another line of thinking, which has buttressed the important role of external assistance in promoting economic development, is associated with the "two gap" thesis that chronic shortages of capital and foreign exchange are major constraints to development. Recently, however, there have been signs of "aid fatigue" in some donor constituencies, a pronounced cutback in capital flows to developing countries from external private sources, and reductions in government expenditures. Consequently, the magnitude and reliability of financial flows from conventional sources, as well as the uses to which they are put, have become more pressing issues.

This chapter, therefore, is a "ground-clearing" exercise, which attempts to give a perspective on the various flows of financial resources to agriculture and their uses during a decade of major economic adjustment and stress. It provides a framework for analysing the role and place of agriculture in overall development finance, discusses some major issues raised, and puts forward possible courses of action for policy-making and areas for future research.

MACRO-ECONOMIC OVERVIEW

This section discusses patterns of macro-economic adjustment during 1974-84 for a sample of 35 developing countries.[1] It provides the framework and context for subsequently examining in greater detail the individual components of agricultural finance, the mobilization of which took place in an economic environment characterized by adjustment and change.

The flows of financial resources have been divided into two groups: those passing through the fiscal budget of governments and those more within the private domain. Within each group, the flows are identified by major source and use.

In macro-economic terms, adjustment of a country's economy in any given year can be divided into external (as regards the world) and domestic adjustments. The two adjustments are related by the following *ex-post* national accounting identity:[2]

$$(M - X) + R = I - S_n$$

where: M = imports of goods and non-factor services
X = exports of goods and non-factor services
R = net factor payments, made up principally of interest payments on external debt; profits and dividends paid on foreign direct investment; and remittances received from residents working abroad
I = total investment, including variations in stocks
S_n = national savings, which is the sum of savings of businesses, households and government.

The left-hand or external adjustment side of the equation comprises the current account deficit or surplus, and the right-hand or domestic adjustment side comprises the investment-savings gap. Therefore, *ex-post*, external adjustment equals domestic adjustment, and the variation in the current account deficit or surplus equals the variation in the investment-savings gap.

For all 35 countries as a group, the current account deficit widened in 1975 following the first oil price rise in 1973, but by 1977, external adjustment measures aimed at curbing imports had reduced it to 3.5% of GDP (Figure 3.1).[3] After the second oil price rise in 1979, the current account deficit again increased sharply and by 1981 reached on average 6.9% of GDP for the 35-country sample. A deficit of this size was unsustainable for a long period, and thus most countries subsequently implemented external adjustment measures. By 1984, the deficit of the 35 countries as a group had declined to 3.5% of GDP.

Following the trend in the current account deficit, the investment-savings gap for the 35 countries as a group widened between 1977 and 1981, and declined between 1982 and 1984. In theory, the widening investment-savings gap that accompanied the growing current account deficit might have been accompanied by rising or falling rates of either investment or national savings, depending upon the strength of the underlying savings response and investment opportunities. In fact, the average national savings rate of the 35-country sample declined every year from 1977 until 1982, when the downward trend was reversed. The fall in the investment rate started several years after the national savings rate had already begun to decline and held fairly constant until 1980. However, investment continued to fall after 1982 in most regions, when the national savings rate began to show some improvement.

This brief overview of macro-economic adjustment during 1974-84 for the 35-country sample masks the considerable diversity among regions. Hence, a closer look is needed at regional patterns and timing of external and domestic adjustment.

External Adjustment

The average current account deficit of African countries covered in the sample was

[1] This sample was drawn from the list of 39 countries selected for FAO's study on "Agricultural Price Policies: Issues and Proposals", (Rome, 1987) and for which some agricultural financial data had been collected. The list of countries is shown in Box 3.1.

[2] For further discussion of "national accounting identity", see Paul Høst-Madsen, "Macroeconomic Accounts: An Overview", IMF Pamphlet Series, No. 29, Washington D.C. 1979; and, for its practical application, see Inter-American Development Bank, "Economic and Social Progress in Latin America, External Debt: Crisis and Adjustment", Washington D.C. 1985, (particularly chapters 1 and 2).

[3] According to national accounting conventions, a current account deficit has a positive sign.

BOX 3.1

The 35-country sample

The 35 developing countries used in the sample in this chapter are:

Far East (9)	*Latin America (10)*	*Africa (12)*	*Near East (4)*
1. Bangladesh	10. Argentina	20. Ethiopia	32. Egypt
2. India	11. Bolivia	21. Ghana	33. Sudan
3. Indonesia	12. Brazil	22. Côte d'Ivoire	34. Syria
4. Korea, Republic	13. Colombia	23. Kenya	35. Turkey
5. Malaysia	14. Costa Rica	24. Malawi	
6. Pakistan	15. Dominican Rep.	25. Morocco	
7. Philippines	16. Ecuador	26. Niger	
8. Sri Lanka	17. Jamaica	27. Nigeria	
9. Thailand	18. Mexico	28. Senegal	
	19. Peru	29. Sierra Leone	
		30. Tanzania	
		31. Tunisia	

A comparison was made between these "sample developing countries" and "all developing countries", as represented by 103 developing countries, data for which are held in *The State of Food and Agriculture*'s data bank.

Four indicators were used for this comparison: (i) the share of agricultural GDP per total GDP; (ii) the share of agricultural exports per total merchandise exports; (iii) GDP per caput; and (iv) total merchandise trade as a share of total GDP, as a measure of the economy's "openness". All data referred to the average for 1981/83, except GDP per caput, which was for 1983.

The results of this comparison, shown as regional or total simple averages, are summarized in the table below:

	Agricultural GDP per total GDP	Agricultural exports per total exports	GDP per caput	Total trade per GDP
35-country sample	(%)	(%)	($)	(%)
Africa	32	39	819	45
Latin America	14	33	1 475	33
Near East	24	37	1 018	33
Far East	27	27	755	46
Total	25	34	1 019	41
103 developing countries				
Africa	33	42	732	58
Latin America	15	41	1 820	42
Near East	12	15	5 696	88
Far East	27	23	1 347	72
Total	25	35	1 919	62

The Near East was the most "atypical" region among the 35-country sample, because the selection was made on the basis of a country's agricultural importance.

The 35 sample countries compared with the 103 developing countries, had lower GDP per caput, except for Africa, and had less "open" economies.

persistently greater than that in the Far East, Latin America or the Near East. Between 1977 and 1982, the deficit in Africa averaged 9.4% of GDP compared with 5% in Latin America, 4% in the Far East and 3.1% in the Near East. Thus, Africa was relying comparatively more on external sources of finance.

The effects of the 1973 oil price rise were strongly felt in 1974 when the current account deficit widened in all four regions; but by 1976, it began to be reduced somewhat. By 1977, the deficit was reduced further in the Far East, Latin America and the Near East; but in Africa, it continued to widen and by 1978, reached 10.7% of GDP. In 1980 (after the 1979 oil price increase), the average current account deficit in the African sample countries reached an unsustainable level of 11.2% of GDP.

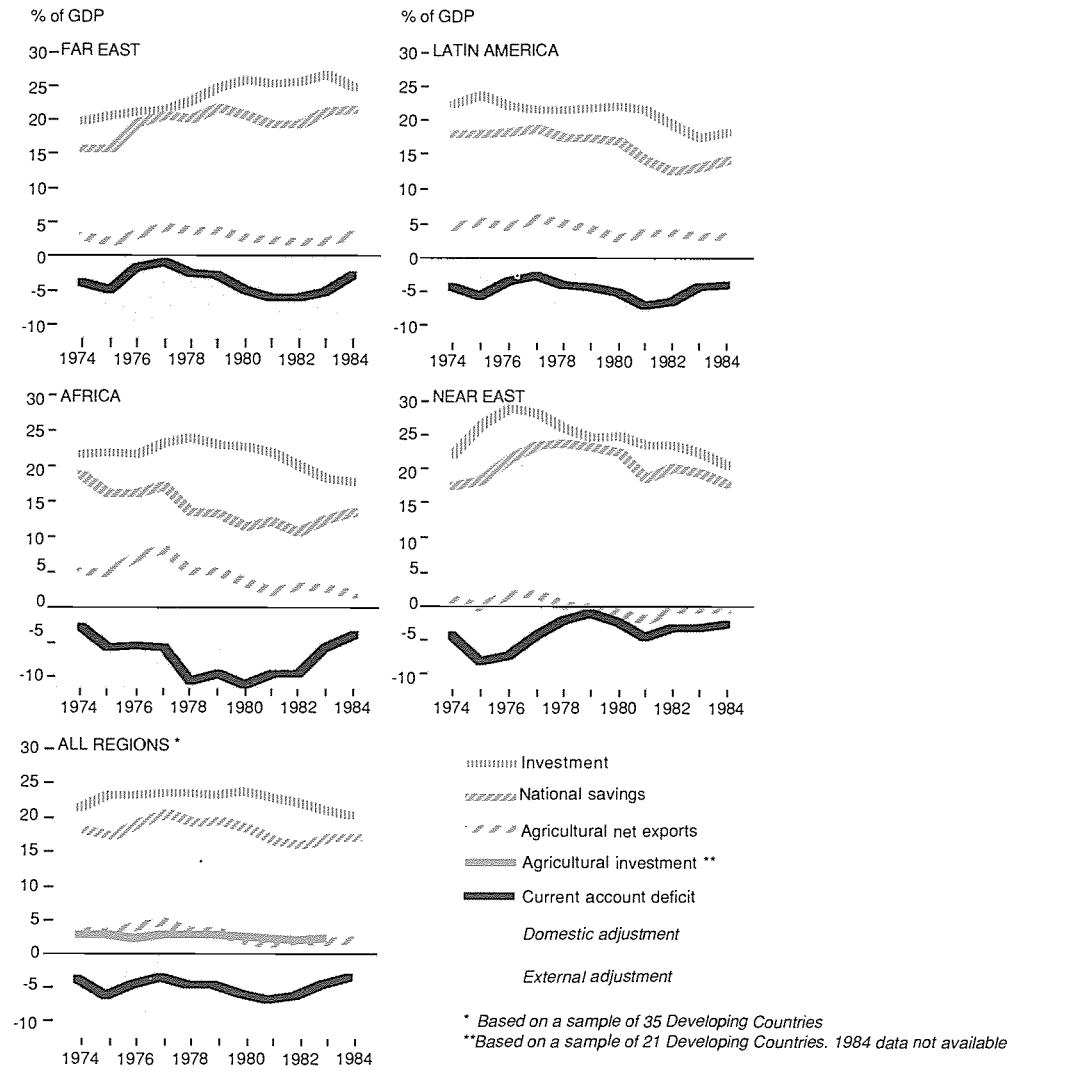
In the early 1980s, external adjustment measures were adopted in all regions, with the result that after 1982, the pattern of widening current account deficits was reversed.

By 1984, external adjustments in Africa and Latin America brought their average current account deficits back to 4% of GDP, a remarkably sharp adjustment for Africa. In the Far East and the Near East, the figure was reduced to about 3% of GDP respectively.

In order to better understand the pattern and timing of these external adjustments, it is helpful to trace through the key components underlying the current account deficit, including terms of trade, volume of exports and their purchasing power, volume of imports and debt-service ratios.

During 1974-84, the international terms of

Figure 3.1 **EXTERNAL AND DOMESTIC ADJUSTMENT, BY REGION*, 1974-84**



* *Based on a sample of 35 Developing Countries*
***Based on a sample of 21 Developing Countries. 1984 data not available*

Sources: IMF. International Financial Statistics; FAO. Policy Analysis Division

TABLE 3.1. **Total external merchandise trade, by region,[a] 1974-84**

(Percentage change over the period)

Item	1974-1980	1980-1984	1974-1984
TERMS OF TRADE			
Far East	−26	0	−26
Latin America	−15	−2	−17
Africa	−13	−4	−17
Near East	−4	−3	−7
All regions	−17	−2	−19
VOLUME OF EXPORTS			
Far East	53	35	88
Latin America	21	13	34
Africa	5	−13	−8
Near East	9	17	26
All regions	19	11	30
PURCHASING POWER OF EXPORTS			
Far East	4	35	39
Latin America	0	11	11
Africa	−8	−16	−24
Near East	4	14	18
All regions	−3	9	6
VOLUME OF IMPORTS			
Far East	39	24	63
Latin America	2	−14	−12
Africa	13	−20	−7
Near East	44	43	87
All regions	−10	0	10

[a] Based on the sample of 35 developing countries but excluding Tanzania and Turkey.
Sources: UNCTAD, *Handbook of International Trade and Development Statistics*, 1985; IMF, *World Economic Outlook*, April 1986.

trade declined significantly for the 35 developing countries, by 17% on average (Table 3.1). The deterioration in world prices was greatest for Far East exports and least for exports from the Near East region, which includes Egypt.

There were marked regional differences in the growth of export volumes, which reflected a combination of demand and supply factors such as: the commodity composition of exports from each region; demand for these commodities on world markets; climatic conditions affecting the supply of agricultural commodities; and domestic price and non-price policies affecting domestic demand and supply. Over the 1974-84 decade as a whole, however, while the export volumes of the Far East, Latin America and the Near East expanded (particularly in the Far East), they actually declined in Africa. Therefore, despite the worsening terms of trade, the purchasing power of exports from the Far East, the Near East and Latin America rose between 11-39%. In contrast, the purchasing power of African exports fell 24%. Most of the changes, both positive and negative, in the purchasing power of exports occurred during 1980-84.

The volume of imports rose considerably in the Near East and the Far East during 1974-84. Africa and Latin America recorded only moderate or slight increases during the earlier period 1974-80, showing that the rises in their current account deficits were due mainly to rising prices, particularly of oil, and because of shortages of foreign exchange, they were forced to cut back imports severely during 1980-84.

Many countries borrowed from abroad to increase or protect their imports, but the terms of borrowing hardened during 1974-84, with shorter average grace and amortization periods, a falling proportion of concessional lending and higher average interest rates. In all four regions, the cost of servicing foreign debt rose more quickly than did export earnings (Table 3.2). The sharpest increase was recorded in Africa, where owing in part to falling export volumes, noted above, the average debt-service ratio increased from 6.5% to 22.5% of export earnings between 1975 and 1984. Nevertheless, Latin America persistently had the highest regional debt-service ratio, with repayments of principal and interest absorbing more than one-quarter of export earnings during 1980-84. Even for the group of countries in the Far East, the average debt-service ratio rose from a low of 8.4% of total exports of goods and services in 1980 to 13.6% four years later.

To help finance the overall deficit in the balance of payments, many developing countries outside the Far East ran down their foreign exchange reserves. In the Far East, foreign exchange reserves, as a share of imports of goods and services, were on average the same during 1980-84 as they had been in 1975 (Table 3.3). Latin America maintained the highest average level of reserves among the four regions during 1980-84, reflecting in part its need to finance debt-service payments, which were also generally higher than those in other regions in this period. For Africa, which had maintained the largest current account deficit throughout 1974-84, it was not surprising to find that foreign exchange reserves declined rapidly. While international reserves had covered 23% of the annual import bill in 1975, by 1984 the figure was only about 10%, or sufficient to cover only five weeks of imports. Moreover, as already noted, since 1978 the volume of imports had annually declined. In the

TABLE 3.2. **Debt-service payments as a percentage of total exports of goods and services, by region,[a] 1975, 1980-84**

Region	1975	1980	1981	1982	1983	1984
Far East	11.3	8.4	9.1	11.2	13.7	13.6
Latin America	14.4	21.3	25.4	28.0	26.7	27.1
Africa	6.5	14.7	17.1	17.9	19.4	22.5[b]
Near East	17.6	17.9	17.9	18.4	19.2	23.5
All regions	11.3	15.3	17.5	19.1	20.0	21.2

[a] Based on the sample of 35 developing countries.
[b] Seven countries only.
Source: IMF, *International Financial Statistics Yearbook*, various issues.

TABLE 3.3. **Foreign exchange reserves as a percentage of total imports of goods and services, by region,[a] 1975, 1980-84**

Region	1975	1980	1981	1982	1983	1984
Far East	23.4	29.6	22.0	20.8	22.1	21.4
Latin America	18.4	35.9	24.2	25.4	21.6	29.1
Africa	22.8	15.7	12.0	10.8	12.6	10.4[b]
Near East	21.0	21.2	13.5	13.3	11.7	9.4
All regions	21.5	25.7	18.2	17.2	17.5	17.6

[a] Based on the sample of 35 developing countries.
[b] Six countries only.
Source: IMF, *International Financial Statistics Yearbook*, various issues.

Near East, foreign exchange reserves also decreased rapidly in relation to the annual import bill, partly because of the large expansion in the volume of imports, particularly food, that took place during the decade.

Domestic Adjustment

The patterns of domestic adjustment by region during 1974-84 showed wide differences, as seen in the levels and trends of investment and national savings (see also Figure 3.1).

During 1974-84, the sample countries in the Far East and Near East had the highest average levels of national savings (around 20% of GDP) and investment (23-25% of GDP).[4] While investment rates were similar in Latin America and Africa (21%), national savings rates were higher in Latin America (16%) than in Africa (14%), and tended to be more stable.

Total investment rates in the Far East during 1974-84 increased each year except in 1984, and fluctuations in the current account deficit were associated with higher investment rates. A decline in investment rates began after 1976 in the Near East and two years later in Africa. Investment rates in Latin America held fairly constant until 1980, and after deteriorating for three years, showed some improvement in 1984. They continued to fall, however, in the Near East and Africa.

Similarly, the underlying savings response was much stronger in the Far East than in other regions where national savings as a share of GDP declined almost continually between 1977 and 1983, reflecting the increasing flow of net factor payments abroad. There was a sharp drop in the share of investment financed by national savings, particularly in Africa where national savings financed only 55% of investment during this period.

After 1982, the current account deficit declined in all four regions; and while the most satisfactory pattern of domestic adjustment would have been to increase domestic savings, which offsets the fall in external savings to leave capital formation unaffected, this was not the case. Between 1982 and 1984, no region managed to raise both the rate of national savings and investment. In Africa, the Far East and Latin America, the rates of national savings improved, but investment rates either continued to fall (Africa) or showed no particular trend (the Far East and Latin America). In the Near East, both national savings and investment rates continued to decline.

[4] Recall that national savings equals domestic savings minus net factor payments. Therefore, if the latter increases while domestic savings remain unchanged, national savings will decline.

BOX 3.2

Agriculture's share of investment

An important policy issue is the share of agricultural investment in total investment required to achieve agricultural and overall economic growth objectives. Attempting to answer it involves the use of incremental capital output ratios (ICOR), which should be regarded as useful rules of thumb rather than reliable targets or indicators of performance.

Nevertheless, if reliable data on agricultural output and capital formation are available, agricultural ICOR can be calculated for periods of time sufficiently long for random fluctuations in outlook to be smoothed out, but not long enough for output to be significantly affected by shifts in technology or other structural changes. Clearly, a good knowledge of a country's agricultural sector within the overall economy is necessary to determine the length of these periods.

The share of agricultural investment of total investment can be determined for planning purposes from the following relationship.

$$I_A/I_T = g_A/g_T \cdot GDP_A/GDP_T \cdot ICOR_A/ICOR_T$$ [1]

Where the new expressions are:

I = investment
g = growth rate of output

Subscripts A and T = agricultural and total (for the economy) respectively.

Using some typical figures, g_A = 4%, g_T = 5%, GDP_A/GDP_T = 25%, $ICOR_A$ = 3.3 (the median $ICOR_A$ for the 21 country sample); and $ICOR_T$ = 4.

Expressing these in decimals, I_A/I_T = 0.04/0.05 x 0.25 x 3.3/4 = 0.165

In other words, to achieve a target agricultural growth rate of 4% a year, on the above assumptions, agriculture's share of total investment should be 16-17%. The computed figures are rather sensitive to changes in the variables. For example, changing $ICOR_A$ from 3.3 to 4 in the above example will raise the agricultural investment rate to 20%.

Of course very important questions remain unanswered by such rule of thumb methods: the areas of investment in agriculture that should be given priority; the levels of recurrent expenditure available to sustain the investment; investment in non-agricultural sectors such as transport, directly supporting agriculture; and the overall policy and incentive framework within which the investment is taking place.

Nevertheless, unless one has good reason to believe that the ICOR are changing rapidly or will be changing during a planning period (and if so, why), the method is a starting-point for setting sectoral investment targets.

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[1] There are alternative formulations. For example, the capital requirement for agriculture can be determined from gkr/s where g is the desired growth rate of agricultural output, k is $ICOR_A$, r the share of agriculture in GDP and s the proportion of GDP going to gross capital formation. See Rajkrishna, "Some Aspects of Agricultural Growth, Price Policy and Equity in Developing Countries", *Food Research Institute Studies*, vol. 18, no. 3, 1982.

AGRICULTURAL PERFORMANCE

While these economic adjustments were continuing, how did the agricultural sectors of the 35 developing countries perform? In an economic sense, agricultural performance here is measured by (i) growth in value added (agricultural GDP); (ii) the sector's contribution to reducing the current account deficit by generating a trade surplus (external adjustment); and (iii) closing the investment-savings gap (domestic adjustment).

Growth of Agricultural Value Added

For the 35 countries as a group, total GDP grew faster than agricultural GDP (Table 3.4). During 1974-80, total GDP per caput rose on average 2.6% a year, compared with an average per caput rise of only 0.2% a year in agricultural GDP. During 1980-84, however, both total GDP and agricultural GDP failed to expand as quickly as population, although the fall in total GDP per caput (about −0.7% a year) was less than that of agricultural GDP per caput (−1.1% a year). Nevertheless, the setback sustained by agriculture in 1980-84 was less than that of the economy as a whole. Growth of agricultural GDP was halved in 1980-84 compared to 1976-80, but growth of total GDP fell by two-thirds. In this respect, agriculture made some contribution to stabilizing total GDP growth.

In Africa, there was zero growth in agricultural GDP during 1980-84, and agricultural value added expanded only half as quickly as did population for the decade as a whole (1974-84). The poor performance of African agriculture, exacerbated by the drought of 1983-84, was a source of the region's overall economic crisis. Agricultural performance in Latin America was little better than in Africa and growth of agricultural value added slowed considerably in 1980-84. Agriculture performed, however, much better than the region's non-agricultural sectors as the debt-related economic crisis unfolded in the 1980s. In the Near East, the rapid growth in agricultural value added in 1974-80 was not sustained in 1980-84, although agricultural GDP just managed to keep pace with growth in population over the decade as a whole. Here again, the performance in the Far East outstripped that of other regions, where agricultural GDP per caput increased steadily in 1974-80, and further improved in 1980-84.

As total GDP grew more quickly than agricultural GDP in all regions during 1980-84, the share of agriculture in total GDP declined quite sharply, particularly in countries in the Far East and the Near East where non-agricultural GDP grew particularly fast (Figure 3.2). The share of agricultural GDP in these latter two regions declined by four percentage points between 1974-80 and 1980-84, falling from 32% to 28% of total GDP in the Far East, and from 28% to 24% of total GDP in the Near East. The agricultural sector remained the largest in Africa where it accounted for 35% of total GDP in 1974-80, compared with only 15% of GDP in Latin America. In both these regions, the share of agricultural GDP declined by two percentage points between 1974-80 and 1980-84.

Agriculture and the Current Account Deficit

The links among trade, savings, investment and economic growth underlie the well-known concept of the gains from trade. Exports allow a country to specialize in the production of commodities in which it has a comparative advantage. In this way it can economize on resources that can be used for investment to promote economic growth. Similarly, a country can bring unutilized agricultural resources into use to produce commodities for export markets—the vent for surplus argument. An agricultural trade surplus permits imports of goods for which there are no or only imperfect domestic substitutes, relieve production bottlenecks and so increase savings and investment. As the agricultural sector continues to dominate the economies of most developing countries, the agricultural trade surplus plays an important role in development finance.

Turning to the 35-country sample, the volume of agricultural exports expanded proportionately less than the volume of total exports during 1974-84 in all regions (except Africa in 1980-84), reflecting in part poorer prospects for agricultural commodities on world markets than non-agricultural products, and the slower rate of agricultural growth than total growth (Table 3.5).[5] The 35 countries as a group had only a 5% improvement in the volume of their agricultural exports, with all of the increase coming in 1980-84. Nevertheless, the value of agricultural exports benefited from the commodity price boom of 1975-77.

[5] See Table 3.1 for data on total merchandise exports of these countries.

TABLE 3.4. **Average annual growth rate of total GDP, agricultural GDP and population, by region,[a] 1974-84**

(Percentages)

Region	Total GDP			Agricultural GDP			Population
	1974-80	1980-84	1974-84	1974-80	1980-84	1974-84	1974-84
Far East	6.4	4.9	5.8	3.1	3.4	3.2	2.3
Latin America	3.8	−0.4	1.8	2.2	1.3	1.7	2.3
Africa	4.1	0.3	2.8	2.2	−	1.6	3.0
Near East	7.3	3.5	5.6	4.0	0.5	2.9	2.8
All regions	5.0	1.7	3.6	2.6	1.3	2.2	2.4

[a] Based on the sample of 35 developing countries.
Source: FAO, AGROSTAT.

TABLE 3.5. **Agricultural merchandise exports and imports, by region,[a] 1974-84**

(Percentage change over the period)

Item	1974-80	1980-84	1974-84
VOLUME OF AGRICULTURAL EXPORTS			
Far East	32	11	43
Latin America	−4	2	−2
Africa	−10	−5	−15
Near East	−10	30	20
All regions	−	5	5
VALUE OF AGRICULTURAL EXPORTS			
Far East	90	1	91
Latin America	89	−	89
Africa	52	−18	34
Near East	25	16	41
All regions	79	−1	78
VALUE OF AGRICULTURAL IMPORTS			
Far East	97	−5	92
Latin America	101	−25	76
Africa	129	−12	117
Near East	194	48	146
All regions	102	−1	101

[a] Based on the sample of 35 developing countries.
Source: FAO, AGROSTAT.

External adjustment efforts in the early 1980s were made all the more difficult for the 35 developing countries because of the lack of any significant improvement in agricultural export earnings, whether measured in current US dollars or as a share of GDP. Agricultural exports, measured in current US dollars, generally declined in 1980-84 and only in the Near East was there any sizeable increase in their value. Moreover, in most of the sample countries, agricultural exports declined as a share of total GDP from 1977 until 1983 (see Figure 3.2).

The value of agricultural imports doubled during 1974-80, and nearly tripled in the Near East. However, they generally declined in 1980-84. Only in the Near East was there a continued and substantial rise in agricultural imports, mainly in the form of food imports by Egypt. This widespread reduction of imports demonstrated the efforts of many countries to undertake external adjustment measures. However, agricultural imports (as a share of total GDP) in Africa increased in 1983-84, reflecting the drought situation then existing.

The 35 countries as a group had an agricultural net export surplus every year during 1974-1984, averaging 2.7% of GDP, whereas, as noted above, the current account deficit averaged 5% of GDP over the same period (see Figure 3.1). Nevertheless, while macro-economic adjustment measures since 1982 reduced the current account deficit, there was little contribution from the net export earnings of agriculture.

In the Far East, agricultural net export earnings during 1974-84 averaged 2.9% of GDP, but tended to decline from the late 1970s. In the other regions, prior to 1982, the fall in the foreign exchange contribution of agriculture was much greater than in the Far East, and the recovery since was much weaker. The surplus of agricultural net exports continued to decline in Africa from 1977 up to 1984, when severe drought, which had been affecting many countries, reduced the supply of exports and prompted additional food imports. Yet the impact of the drought should be kept in perspective: the net export surplus of Africa's agricultural sector had been falling for some years prior to 1984.

Agricultural Investment and the Investment-Savings Gap

From data available for a sub-sample of 21 countries, agricultural investment (gross capital formation or GCF) maintained relatively stable shares of about 8-15% of total investment, and of about 2.5-3% of total GDP (see Figure 3.1). The agricultural investment rate, as measured

by the share of agricultural GCF of agricultural GDP, was much more variable, however, with an average figure of 13% but a range of 5-29%.

This overall picture leads to two general conclusions on agricultural investment in developing countries:

i) Agricultural investment rates tend to be higher as per caput incomes rise and the share of agriculture of total GDP typically decreases; and

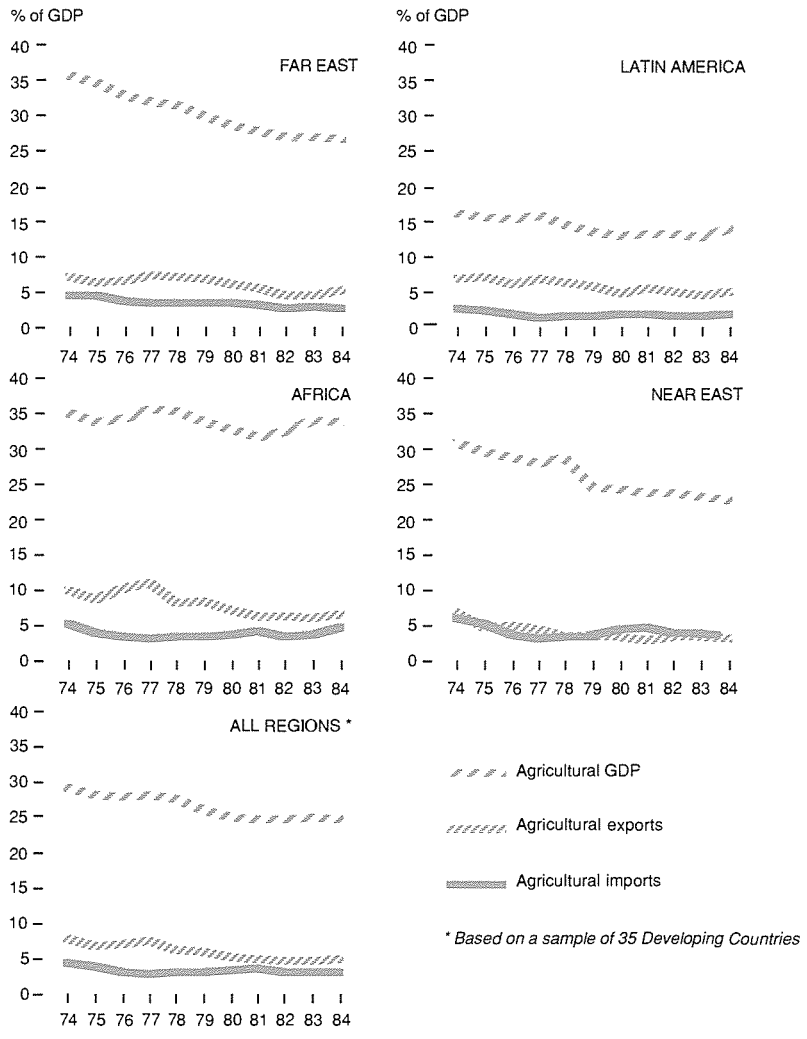
ii) The share of agricultural investment in total GCF moves in the opposite direction, however, showing that lower-income countries tend to invest relatively more in agriculture.

Therefore, agricultural investment intensifies (i.e., has a rising share of agricultural GDP) as economic development proceeds.

These two relationships of agricultural investment to income levels and the share of agriculture in the economy, allow attempts to be made to identify countries that are or have been investing in agriculture more than: (a) their income levels indicate, a measurement of investment effort; and (b) the agricultural shares of their GDP apparently warrant, as measured by a standardized index.

As might be expected, the results of these measurements using investment data from a limited sample of countries is not conclusive, although some countries, such as India, Kenya, Pakistan and Tanzania, stand out as having made a significant investment effort in agriculture during the 1970s and early 1980s. Some of these countries also have recorded increases in agricultural output in recent years that are better than the average, but the relationships do not appear to be significant.

Figure 3.2 **AGRICULTURAL GDP, EXPORTS AND IMPORTS AS A SHARE OF TOTAL GDP, BY REGION*, 1974-84**



Sources: World Bank, FAO. Policy Analysis Division

Furthermore, when relating the limited statistical information on price policies as measured by price bias to investment effort, some inconsistencies in policies are apparent.[6] Such inconsistencies are shown by agricultural prices being strongly biased against producers on the one hand, while a significant investment effort toward agriculture has been made on the other. The evidence is not conclusive, however, one reason being that it is difficult to get an unambiguous measurement of price bias. Another is that clearly some governments believe investment to be a more powerful policy tool than producer prices to promote agricultural development.

Returning to the 1974-84 period of economic adjustment under review, no major trend in agricultural investment is apparent, but there was some falling away in 1979, parallel with that seen in total investment. Hence, agricultural investment apparently suffered little from the pressures to close the investment-savings gap. One reason may be that in most countries a relatively large share of agricultural investment is private (50-60% is typical), and much of private investment is non-monetized and in the form of own-labour in such activities as land improvements, building stockyards and rearing livestock. An analysis of investment data for 21 countries, prepared for FAO's study *Agriculture: Toward 2000*, showed that typically 30-33% of total agricultural investment could be accounted for by such activities. Therefore, agricultural investment is not likely to be very sensitive to changes in policies operating through prices, interest rates, etc. Another possibility is that estimates of agricultural investment are not accurate enough to capture relatively minor, but nevertheless significant changes in them.

Reliable data on agricultural savings are not available for a sufficient number of countries. Hence, the net contribution of the agricultural sector toward the investment-savings gap on the side of savings cannot be quantified with any accuracy. The potential for mobilizing additional savings from rural areas for use in profitable investment opportunities in the private sector, and to help finance the fiscal deficit, will be discussed later in the section on rural financial markets. The financing of government revenues through agricultural taxation is addressed in the next section on the fiscal budget.

In conclusion, the performance of the agricultural sector, in terms of its rate of growth in value added and its contribution to the current account deficit and investment-savings gap, has not been uniformly satisfactory, although the data available are incomplete. During a period when major adjustments in the structure of the economies of most developing countries were taking place, with some exceptions, agricultural growth fell back and its trade surplus declined (the external adjustment typically being achieved through the compression of merchandise imports), but investment in the sector was not noticeably reduced. Only in its contribution to GDP growth did it prove to be a reasonably robust performer in some regions. As noted, however, the regional performance was very diverse. Some of this disappointing performance stems from elements external to the agricultural sector itself, particularly the deterioration in agricultural terms of trade and the slowdown in growth of agricultural exports volumes because of the economic recession during the early 1980s. Yet this experience poses questions regarding the efficiency of agricultural investment and government expenditures on the sector and the policy framework in which they were set.

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[6] For a description of price bias, see FAO, "Agricultural Price Policies: Issues and Proposals", Rome, 1987.

THE FISCAL BUDGET

Introduction

A broad picture of the different components of agricultural finance can be obtained by breaking down further the right-hand or domestic side of the national accounting identity introduced at the beginning of Section 2. This provides a framework for the further analysis of each component although, to simplify matters, the distinction between current and capital account transfers is not too rigorously made.[7]

$$(M - X + R) = (I_G + G - T) + (I_p - S_p)$$

foreign sector public sector private sector

The right-hand side of the identity is composed of the public sector (or fiscal budget) and the private sector, which will be discussed in a following section.

Within the public sector:

I_G = capital formation by the public sector, or the development budget.
G = public sector consumption expenditures, or the recurrent budget.
T = tax and non-tax revenues (for convenience all sources of funds accruing to public authorities may be included here).

The major uses and sources of fiscal finance related to agriculture include on the side of *uses* (I_G and G):
— capital and recurrent expenditures on agriculture by parent ministries and agricultural parastatals; and
on the side of *sources* (T):
— revenue from external borrowing for agriculture, including official and officially guaranteed loans on concessional and non-concessional terms;
— grants of development assistance, including food aid that finance agricultural projects and provide budgetary support; and
— domestic revenues raised, including agricultural taxation.

These however, do not encompass all government expenditures and revenues related to agriculture and provide only a general indication of the size and pattern of fiscal finance for agricultural development. Particular attention is paid in this section to the financing of agriculture in the 1980s, at a time when domestic adjustment measures have sought to reduce the overall fiscal deficit.[8]

Overview of the Fiscal Budget

For the 35 countries as a group, total central government expenditure occupied a large—and rising for much of the period—part of their economies, averaging one-quarter of their total GDP during 1974-83 (Figure 3.3). Among the regions, the share ranged from 21-22% in Latin America and the Far East, 28% in Africa and 35% in the Near East. The pattern shows that total expenditure increased steadily between 1974 and 1982, but was cut back sharply in 1983 as a result of domestic adjustment measures. Data for 18 of the 35 countries indicate that the downward trend continued in 1984.

Central government expenditure as a share of total GDP rose six percentage points between 1974 and 1982 for the 35 countries as a group, with much of this increase coming in 1974-75, as the budgetary effects of the first oil price rise in 1973 were felt. It continued to drift upwards from 1976 to 1979. With the second oil price rise in 1979, it increased further and reached a peak in 1982, when it averaged 28% of GDP.

The fiscal deficit followed a pattern similar to that of total central government expenditure. For the 35 countries as a group, the deficit continued to widen from 2.2% of GDP in 1974 to 8.6% of GDP in 1982, after which it decreased. By 1983, the overall size had been cut back to 7.1% of GDP, and data available for 18 of the 35 countries suggest that it was further reduced in 1984. The four regions each followed a similar pattern with the overall deficit rising until 1982, when it reached 8.3% in the Far East, 8.6% in Africa and the Near East, and 9% in Latin America. The overall

[7] For example, R comprises private and official unrequited transfers. Migrant worker remittances and interest payments on private external debt comprise the bulk of private transfers and may be regarded as current. The main component of official transfers is grants of development assistance, a capital transfer.

[8] While data on agricultural expenditure are presented for the sample of 35 countries during 1974-84, information on external and domestic sources of revenue related to agriculture was difficult to obtain for this period. Hence, attention has been focused on the 1980-84 period.

deficit was reduced in all regions in 1983, with the sharpest cutback occurring in the Far East. Data on eight of the nine countries in the Far East show that by 1984, the fiscal deficit in the region had been reduced to 5.9% of GDP, which was the size of the deficit prevailing in the late 1970s, prior to the second oil price increase.

Efforts to trim the size of the fiscal deficit in the early 1980s were made more difficult by the decline in total revenue. The decline was due primarily to a reduction in non-tax revenue and external grants. Total revenue had risen from 1976 until 1980, when it reached 20.8% of GDP. By 1983, this figure had declined by two percentage points for the 35 countries as a group. In the Far East, total revenue was maintained in the 1980s, but declined in Latin America, Africa and the Near East. Total tax revenue rose slightly during 1974-84 and accounted for more than four-fifths of total revenue throughout this period. Most of the changes in total revenue were due to major fluctuations in non-tax revenue, particularly external borrowings.

Agricultural Expenditure by the Public Sector

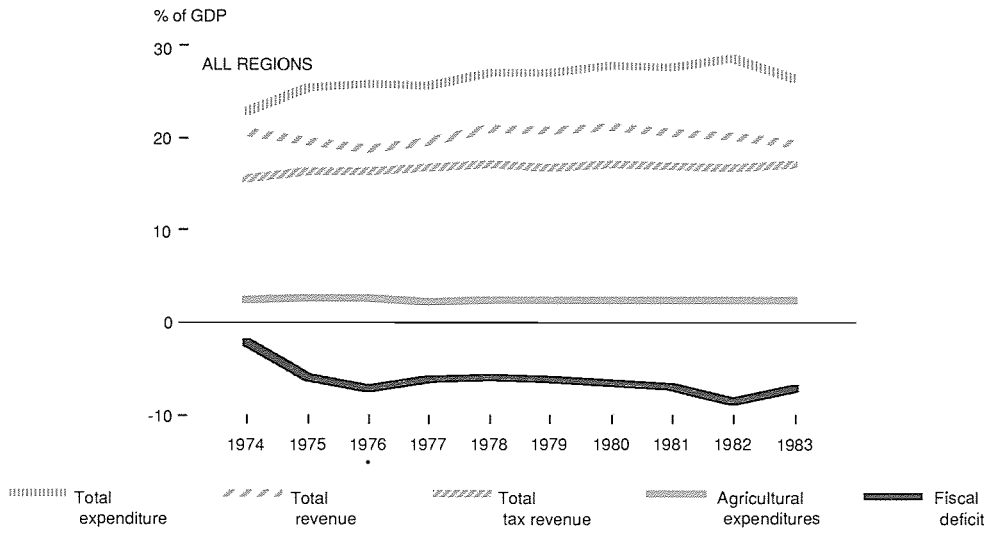
Agricultural expenditure averaged 2.2% of GDP for the 35 countries as a group during 1974-83, and remained remarkably constant, showing little tendency to follow the pattern of total expenditure (see Figure 3.3). Among the regions, however, agricultural expenditure ranged from 1.5% to 1.9% of GDP in Latin America and the Far East, to 2.4% of GDP in Africa, and 2.8% in the Near East. Between the earlier years (1974-80) and the latter years (1980-83), there was a tendency for agricultural expenditure to decline slightly as a share of GDP in Latin America and the Near East, while the share remained relatively constant in the Far East and actually increased as a percentage of GDP in Africa.

The proportion of total expenditure allocated to agriculture increased in Africa in the early 1980s, during a period of domestic adjustment efforts to reduce the fiscal deficit. Agricultural expenditure (development plus current expenditures) averaged 7.7% of total government expenditure between 1974 and 1979, and this share rose to 9.2% of total spending in 1980-83. In contrast, the proportion of total government spending on agriculture was lower in the other regions in the 1979-83 period than in 1974-79 (Table 3.6).

Development expenditure on agriculture in the Far East and the Near East declined as a proportion of total development expenditure from 1979, but rose in Africa and Latin America.

Somewhat in contrast, the share of agricultural current expenditure of total expenditure fell in all regions except Africa from 1979. The share of current expenditure was also significantly smaller than that of development

Figure 3.3 **CENTRAL GOVERNMENT EXPENDITURE AND REVENUE AS A SHARE OF TOTAL GDP, ALL REGIONS*, 1974-83**



* *Based on a sample of 35 Developing Countries*

Sources: Government Finance Statistics: FAO. Policy Analysis Division

TABLE 3.6. **Annual average central government agricultural expenditure, by region,[a] 1974-83**

(Percentages)

Item	1974-79	1979-83	1974-83
AGRICULTURAL EXPENDITURE AS % OF TOTAL EXPENDITURE (DEVELOPMENT + CURRENT)			
Far East	10.4	9.6	10.1
Latin America	7.0	6.0	6.6
Africa	7.7	9.2	8.3
Near East	8.4	7.2	7.9
All regions	8.4	8.3	8.3
AGRICULTURAL DEVELOPMENT EXPENDITURE AS % OF TOTAL DEVELOPMENT EXPENDITURE			
Far East	23.8	18.7	21.8
Latin America	15.4	17.6	16.3
Africa	16.2	19.2	17.4
Near East	14.2	12.5	13.6
All regions	17.9	17.8	17.9
AGRICULTURAL CURRENT EXPENDITURE AS % OF TOTAL CURRENT EXPENDITURE			
Far East	4.5	4.0	4.3
Latin America	4.5	3.9	4.2
Africa	4.8	5.6	5.1
Near East	5.4	4.9	5.2
All regions	4.7	4.7	4.7

[a] Based on the sample of 35 developing countries.

Source: IMF, *Government Finance Statistics Yearbook*, various years; and FAO.

TABLE 3.7. **Growth in real agricultural expenditure[a] and the agricultural labour force, by region,[b] 1974-83**

(Annual average percentage rates of growth)

Region	Agricultural expenditure (development + current)	Agricultural development expenditure	Agricultural current expenditure	Agricultural labour force
Far East	7.2	8.6	5.8	1.2
Latin America	−1.1	2.7	−6.6	0.7
Africa	6.3	6.5	4.4	1.7
Near East	3.4	2.8	8.0	0.3
All regions	4.0	5.2	2.9	1.0

[a] Semi-log regressions in 1980 prices deflated by GDP deflator.
[b] Based on the sample of 35 developing countries.

Sources: IMF, *Government Finance Statistics Yearbook*, various years; World Bank, *Poverty and Hunger: Issues and Options for Food Security in Developing Countries*, 1986; and FAO, AGROSTAT.

expenditure (between a third and a fifth), reflecting the lower recurrent cost requirements of investment in agriculture compared with some other sectors, especially service sectors such as health and education (see Box 3.3). Furthermore, current expenditure on agriculture is understated in many developing countries, as data available exclude much of the spending on or by agricultural parastatals. The fiscal costs of cereal imports, food subsidies, marketing board losses, and the non-repayment of agricultural loans are often financed directly from the treasury rather than being appropriated through the agricultural ministries.

As seen from Table 3.6, agricultural expenditure had a low share of total government expenditure, of about 8%, with a regional range of about 6-10% during 1974-83. It had a corresponding low share of agricultural GDP, of between 6-12% on average, the highest in the Near East and Latin America, the share falling for Africa 8%), with the Far East the least (6%). Nevertheless, some countries devoted a large share of government resources to agriculture in relation to the sector's GDP, more than 20% in such diverse countries as Jamaica and Tunisia, and 20% in Mexico. Other countries spent through their government budget the equivalent of as little as 2% of their agricultural GDP on the sector.

Trends in public sector expenditure on agriculture

Real agricultural expenditure, measured in 1980 prices and allowing for inflation, increased in all regions except in Latin America during 1974-83 (Table 3.7). For the 35 countries as a group, it rose 4% a year during this period, and agricultural development expenditure increased more than 5% annually. There were wide regional differences, however.

For Latin American countries in the sample, real agricultural expenditure declined in eight out of the ten countries, and for the region, the decline averaged −1.1% a year during 1974-83. While real agricultural development expenditure continued to increase modestly, agricultural current expenditure fell 6.6% a year, which suggests that most Latin American governments tried to maintain agricultural investment at the expense of current consumption. However, expenditures by state governments may not have been fully captured by these data.

The opposite occurred in the Near East where there was a moderate overall increase in total agricultural expenditure, enhanced by the

sample countries of the region having a low rate of growth in their agricultural labour force. Agricultural current expenditure, however, increased at the expense of agricultural development expenditure, approximating that of investment. This disparity in development and current expenditure paths was heavily influenced by the Syrian Arab Republic and the Sudan, where agricultural development expenditure fell in real terms, although agricultural current expenditure increased rapidly by 8-14% a year during 1974-83. This situation may have been caused by increased government intervention in agriculture.

The fastest growth in real agricultural expenditure was recorded in the Far East where it rose 7.2% a year during 1974-83, and increased in all nine countries of the sample. In the Far East, development and current expenditures on agriculture grew more in line with each other during this period. Nevertheless, there were three countries in the sample whose growth rates in total expenditure on agriculture were low and not statistically significant.

For the African countries in the sample, agricultural expenditure increased substantially, rising on average 6.3% a year during 1974-83. Real agricultural expenditure rose in all twelve African countries, except Tanzania and Ghana; and development expenditure on agriculture is recorded as growing notably fast. However, these trends are based on budget appropriations, and actual expenditures may lag behind in cases where institutional weaknesses are constraining government activities.

It is widely believed that government expenditure tends to rise at a faster rate than GDP, as per caput national incomes rise. This evolution reflects the increasing tax-bearing ability of an economy as it grows, and the political demand for increasing expenditure on social services or other government interventions.[9] In brief, this implies that the observed income elasticity of public expenditure is greater than unity. It may be questioned whether government expenditure on agriculture fits this pattern in countries in a relatively early state of economic development.

Taking GNP per caput to represent stages in development, the 35 developing country sample was divided into three groups with average annual per caput incomes during 1974-83 of: (i) up to $399 (14 countries); (ii) between $400 and $1 099 (14 countries); and (iii) from $1 100 (7 countries).

Regressing agricultural expenditure on per caput GNP for the 10-year observations, 1974-1983, gave the following income elasticities:

Per caput GNP	Current[a]	Development[a]	Total[a]
Up to $399	1.042	1.174	1.200
$400-1 099	0.689	1.177	0.931
From $1 100	0.914	1.118	0.959

[a] = Significance at 1% level.

The income elasticities were not only high or even greater than unity, but also highly significant. For example, in the case of the low-income countries, a 1% increase in per caput income resulted in an increase in expenditure on agriculture by 1.1%, with a rather greater response with regard to development expenditure. The elasticities tended to be lower for medium and for higher income countries. The higher income countries were receiving less development assistance which tended to reduce the relative size of the development budget.

The results of other regressions on the shares of agricultural expenditure in relation to GDP and in relation to total government expenditure against per caput income, for the same group of countries, were also in line with expectations. As national incomes rose, agricultural expenditure's share of GDP increased, but at a declining rate and the share actually fell in the higher income group. Also, agriculture's share of total expenditure rose, but only very slowly with income in the low-income group, and was lower in the medium- and higher-income groups. Thus, while expenditure on agriculture rose with rising incomes, expenditure on other sectors rose faster. This is to be expected, given the agricultural sector's declining relative size as an economy expands.

Vulnerability of Agricultural Expenditure

Few empirical investigations have been made of agricultural expenditure's vulnerability to cutbacks or increases in total government expenditure compared with expenditures in other sectors.[10] As a measure of its

[9] See R.S. Thorn, "The Evolution of Public Finance During Economic Development", The Manchester School, vol. 35, 1967.

[10] See N. Hicks and A. Kubisch, "Cutting Government Expenditures in LDCs", *Finance and Development*, IMF, September 1984.

vulnerability, it was assumed that agriculture was relatively well protected if real expenditure on it was reduced by less than the proportionate reduction in total real expenditure, or if agricultural expenditure was increased relatively more than total expenditure. Calculations were made of the percentage rate of change in agricultural expenditure and total expenditure, measured in 1980 prices, for the 35-country sample over the 1974-83 and 1979-83 periods.

The results were inconclusive for the 35 countries as a group, with agricultural expenditure being more vulnerable than total expenditure in half of the countries, and relatively protected in the other half during 1974-83 and 1979-83. On a regional basis, the pattern of vulnerability was more distinct, however. In the Far East, Latin America and the Near East, real agricultural expenditures were more vulnerable than total expenditures in two-thirds of the countries, and in only one-third were they actually protected. This was in contrast with Africa where agricultural expenditure was more vulnerable than total expenditure in only three out of the 12 countries, and it was well protected in more than two-thirds of them. A similar regional pattern also prevailed in the latter years 1979-83.

The instability of agricultural expenditure

Did the apparent trend toward maintaining agricultural expenditure in Africa affect development and current expenditures equally? Or was there a tendency to favour one over the other? And how did the other regions compare in this respect? Relatively little is known about how changes in levels of total expenditure are allocated for development and current purposes. In an attempt to quantify the instability of agricultural expenditure, changes in development and current expenditures were measured as the absolute deviation from a log-linear trend, measured in 1980 prices, using the GDP deflator.

In the Far East, Latin America and the Near East, the instability in agricultural current expenditures was found to be greater than in agricultural development expenditures, suggesting that governments sought to protect agricultural investments (Table 3.8). The opposite pattern emerged in Africa, where the instability of agricultural development expenditure was greater than agricultural current expenditure in eight out of 12 African countries in the sample. This suggests that governments sought to raise or reduce spending on agricultural investment rather than change present consumption patterns. Overall, African countries had the highest instability in agricultural real expenditure (development plus current), with percentage deviations from the trend averaging 22%, compared with average deviations of between 13-19% in the other regions during 1974-83.

Some conclusions

Firm conclusions about domestic adjustment and agricultural expenditure should not be drawn from this non-random and small sample of 35 countries, but there seems to have been an effort toward maintaining agricultural expenditure in Africa not found in other regions.

In the early 1980s, total expenditure was reduced in all regions, but expenditure on agriculture in Africa was relatively well protected, whereas it was more vulnerable than total expenditure in the Far East, Latin America and the Near East. Other evidence shows that in Africa, agricultural expenditure did not decline in relation to GDP, or as a share of total expenditure. Moreover, agricultural current expenditure is seriously understated in many African countries where parastatal finance is not accounted for by government ministries relating to the agricultural sector, and so may not be recorded in government financial statistics. The apparent bias toward maintaining real agricultural expenditure in Africa did not affect development and current expenditures equally, and the instability of development expenditure was found to be greater than that of agricultural current expenditure through the central government budget.

Despite the level of real agricultural expenditure sustained in the early 1980s, the agricultural performance in Africa was disappointing. There was zero growth in agricultural GDP during 1980-84, admittedly adversely affected by drought, but agricultural value added grew only 2.2% a year during 1974-80, and thus significantly less than population. This warrants a closer examination of the size and composition of expenditure by agricultural ministries and parastatals, and the policy framework influencing the effectiveness of spending by the public sector.

Very few empirical studies have been made of public sector expenditure's contribution to agricultural growth. One recent study of nine countries in Latin America found that such expenditures made a significant contribution

TABLE 3.8. **Instability of real agricultural expenditure, by region,[a] 1974-83**

(Average percentage deviation from trend index[b])

Region	Agricultural expenditure (development + current)	Agricultural development expenditure	Agricultural current expenditure
Far East	13	15	20
Latin America	19	28	30
Africa	23	26	22
Near East	14	15	16
All regions	17	21	22

[a] Based on the sample of 35 developing countries.
[b] The absolute deviation from a log-linear trend index is used, and data have been deflated by the GDP deflator in 1980 prices.
Sources: IMF, *Government Finance Statistics Yearbook*, various years; and FAO.

during a 30-year period, 1950-80.[11] The contribution of government expenditure on agriculture (GEA) to agricultural output was high where GEA per hectare was also high. The average contribution was 8%, comparable to that of modern inputs such as fertilizers, and was greater the higher the share of irrigation, research and extension components of GEA.

If the public input to agriculture was more broadly defined to include expenditures on education, health and land reform, the first two being consistently the largest components of the total (in the Far East irrigation is generally the largest component), the study concluded that during a decade, agricultural output would have been more than 10% less without the public input than with it.

This Latin American study was based on an exhaustive research of expenditure data at the levels of central and state governments, and independently administered government agencies or parastatals. This degree of research was needed for accurate estimates to be made of all public sector expenditures and their components. It could not be undertaken for this chapter, however. Such a shortcoming identifies a large area for future work.

Policies on public sector expenditure on agriculture are generally expected to increase output by shifting the supply curve. Price policies affect output without shifting the supply curve, at least in the short run. The two sets of policies may be related because price policies may have implications for expenditures such as food subsidies. They will thus also have implications for the overall budget, and where this is constrained, then expenditure on one component can only be achieved by cutting back on another, even if the overall level of expenditure is maintained. The trade-offs between such allocations merit exploration with a view to *maximizing* the contribution of the public sector input to growth in agricultural output.

[11] Victor J. Elias, *Government Expenditures on Agriculture and Agricultural Growth in Latin America*, IFPRI Research Report no. 50, Washington D.C., October 1985.

External Sources of Finance to Agriculture

Overview

External sources of capital to the government provide support for both the balance of payments and the fiscal budget. The inflow of foreign exchange from the disbursement of external loans and grants or grant-like contributions, supplement export earnings, and when converted into local currency and channelled through the fiscal budget, provide an external source of revenue to finance government expenditures.

Total capital flows come from either official or private sources. Recorded private flows are normally officially guaranteed and disbursed through government or parastatal institutions. Private borrowings, if officially guaranteed, also add to external public debt, and so are considered here with the fiscal budget.

Before continuing with the analysis of the 35-country sample, a global perspective of these flows to the agricultural sector is necessary. They comprise official commitments of external assistance to agriculture (OCA), which contain grants and concessional and non-concessional loans from bilateral and multilateral sources; food aid, the greater part (70%) of which is estimated to constitute grant-like contributions, but may not be designated exclusively to agriculture; and private external borrowings consisting of loans from commercial banks and supplier credits. According to the Organization for Economic Cooperation and Development (OECD), non-government organizations are also responsible for mobilizing increasing resources to developing countries, an estimated $2 300 million in 1983, of which about one-sixth of this amount was allocated to agricultural and rural development.

Assistance to agriculture from official sources. FAO maintains data on OCA made since 1974, and therefore reflect the flows since the widespread acceptance by donors for the need to give priority to this sector. Total OCA grew 5.6% a year (in 1980 prices) between 1974-76

BOX 3.3

The recurrent cost problem

The inadequate financing of recurrent budgets, which is needed to properly operate and maintain previous investments, is increasingly recognized as a major problem.[1] Scenes of broken-down farm tractors, inadequately funded agricultural research centres and training institutions, or impassable roads because of a lack of maintenance will be easily recalled by anyone with agricultural field experience. Adequate recurrent funding is a chronic problem for low-income countries with little capacity for raising government revenues. Economic adjustment efforts are likely to worsen the effects if they focus mainly on reducing budgetary deficits by curtailing expenditures. The recurrent component of the current budget is especially vulnerable in these situations.

The problem has been caused partly by the increase in development in recent years. Public investment has risen, supported, in many cases, by flows of external assistance or funded from external borrowings. While some recurrent costs arising from these investments have been financed from user charges, such as for cattle dips or water charges on irrigation schemes, assuming such charges would only cover cost of repairs and maintenance, in most cases recurrent expenditure falls directly within the government budget.

There are three principal reasons for the emergence of the recurrent cost problem:

i) Recurrent costs are usually funded out of the current budget, generally associated with consumption, as opposed to the development budget, relating to investment. There may be curbs or ceilings placed on the growth of the current budget in attempts to reduce fiscal deficits.

ii) A different mix of investment projects will require different levels of recurrent financing in subsequent years. Agricultural investment usually is not very demanding in this respect, requiring, for example, $10 a year of recurrent expenditure per $100 of investment. But rural development projects and social investments such as schools and hospitals have a much higher requirement, of up to $70 per $100 invested.[2]

iii) The pressure of other budgetary demands pre-empts the recurrent budget. Demands for wage increases in the civil service, military and security spending, etc., often take priority in the allocation of limited funds. The cost of underfinancing existing development projects is not always immediately apparent and so receives insufficient attention.

Was there evidence of a recurrent expenditure problem provided by the pattern of current and development expenditures of the 35-country sample during 1974-84? A simple model was built linking current expenditure by country and year to past development (capital) expenditure, and the rate of inflation, another cause of underfinancing. The *regional coefficients* showing the extent to which current expenditure reflected changes in development expenditure and inflation are shown in the table below.

	1974-84	
	1% change in:	
	Development expenditure	Inflation
	% change in current expenditure	
Far East	0.633[a]	0.103[b]
Latin America	0.054	0.598[a]
Africa	0.385[a]	0.204[a]
Near East	0.172	0.301[a]

[a] Significance at the 1% level.
[b] Significance at the 5% level.

The coefficients have the correct sign. A value of *less* than 1 implies that the change in current expenditure was less than the change in development expenditure or inflation. The coefficients were not significant for development expenditures in Latin America and the Near East, and only moderately significant (5%) for inflation in the Far East. During 1974-84, there was a relative undercompensation of current expenditure compared with development expenditures in Africa and the Far East, with the latter region making relatively greater compensatory efforts. A 10% change in development expenditure was followed by a 6.3% change in current expenditure in the Far East, for example. The effect of inflation was relatively more important in Latin America and the Near East in explaining changes in current expenditure.

Without more detailed knowledge of the types of development expenditure and their impact on recurrent requirements, (i.e., "R" coefficients — see footnote), as well as the non-recurrent component of current budgets, one cannot judge whether a given level of current expenditure has been adequate or not.

[1] A recent comprehensive survey is provided in *Recurrent Costs and Agricultural Development*, J. Howell (ed.), Overseas Development Institute, London 1985.

[2] The recurrent expenditure implications of investments in different activities have been termed "R" coefficients. The figures quoted are meant to give orders of magnitudes. See P. Heller, "The Under-financing of Recurrent Development Costs", *Finance and Development*, IMF, March 1979.

and 1982-84 (Table 3.9). Within this overall growth, however, the rate slowed between the three-year intervals spanning this period, indicating a secular decline.

There was little overall difference in the average growth rates of concessional and non-concessional commitments between 1978 and 1984. Although in the late 1970s concessional flows increased 47% compared with 18% for non-concessional flows, this situation changed soon thereafter, with concessional commitments increasing by only 8%, but non-concessional by 40% in 1982-84. Multilateral assistance to agriculture grew faster than bilateral aid, 6.5% a year compared with 4.4% a year. The growth in debt-creating non-concessional commitments from the regional banks was nearly 14% a year.

Most OCA is for capital instead of current expenditure, but the share for the latter has tended to rise along with the trend for more programme and budget support. Other important changes that have taken place during the past decade have been declines in the shares of (i) local manufacture of inputs, and (ii) livestock production; and rises in the shares of (i) external supply of production inputs, (ii) research, extension and training, and (iii) regional development (Table 3.10).

Regarding the regional distribution of OCA, the Far East region received the greatest share, 46% during 1982-84. Commitments to Africa grew fastest between 1974-76 and 1982-84 (8% a year in the Far East and 10.4% a year in Africa, in 1980 prices). During 1974-84, commitments in real terms grew 6% a year in Latin America, but by very little in the Near East.

Concessional commitments grew particularly fast in Africa during 1974-84 (11.8% a year), while non-concessional commitments grew fastest in Latin America (9.6% a year). During this period, the shares of total commitments to food-deficit countries increased from 59% to 65%, and in LDCs, from 16% to 19%.

Relating these regional shares to agricultural population and per caput income, the Far East gets a less than proportional share of OCA, even when China is excluded (Table 3.11). Latin America's share has fallen, but relative to agricultural population, it receives almost three times the level of OCA in the Far East.

Disbursements of OCA. Data on disbursements of OCA are available only from 1980. Since then, disbursements have reflected the earlier trend of commitments. There has been a marked increase in World Bank disbursements reflecting the Bank's earlier increase in commitments to agriculture. Recently, World Bank disbursements to agriculture have exceeded commitments, which also reflect a slowdown in growth of the latter.

An analysis of disbursements of OCA since 1980 was undertaken in greater depth for a sample of countries. During 1980-83, there was a statistically significant, but not strong relationship between the levels of per caput agricultural GDP and disbursements as measured by (i) disbursements, as a percentage of agricultural GDP (average 3.5% with a range of 0.2% to 14%); (ii) disbursements per caput agricultural labour force in constant 1980 dollars — average $36 with a range of $4 to $206; and (iii) disbursements as a percentage of government expenditure in agriculture (average 32% with a range of less than 1% to 87%). The signs of the coefficients showed that with higher agricultural income, disbursements (as a proportion of agricultural GDP and total expenditure on agriculture) fell, as might be expected. The size of the coefficients, however, also showed that some low-income countries were receiving proportionally less disbursements, and some higher-income countries, proportionally more. The largest recipients of OCA are not necessarily those in greatest need. Further analysis also showed a positive and statistically significant correlation between the levels of OCA received by a country and its development expenditure on agriculture. As might be expected, the relationship between OCA and current expenditure was much weaker.

External private lending. The "privatization" of borrowings by developing countries was a remarkable feature of the 1970s and continued till 1981. Private-sector lending (i.e., bank sector or private financial institutions and supplier credits) grew from 15% of total long-term resource flows to all sectors in 1970, to 29% in 1973, and a later peak of 32% in 1981, before declining sharply.

For agriculture, however, external private lending has been much less important as a source of finance. Data available for 82 countries showed that during 1982-84, private commitments to agriculture averaged $1 014 million a year (in current dollars), compared with $2 083 million during 1980-82 and $1 157 million during 1974-76 (Table 3.12).

Flows of external private funds to agriculture have been highly erratic at the country and regional levels according to available data. During 1980-83, they averaged less than 1% of total disbursements to Bangladesh, but nearly 60% to Nigeria. This performance is linked to

TABLE 3.9. **Overall trends in official commitments to agriculture (OCA) [a] (including technical assistance grants), 1974-84**

(1980 US$ millions/year) [b]

Item	1974-76	1976-78	1978-80	1980-82	1982-84	Annual rate of change [c] 1974-84 (%)
CONCESSIONAL COMMITMENTS	5 341	6 581	7 854	8 476	8 500	5.5
Multilateral	2 223	2 742	3 272	3 600	3 390	5.7
IDA	968	1 287	1 681	1 721	1 666	6.3
Regional banks	604	694	804	861	698	2.9 [d]
OPEC multilateral	80	138	105	150	174	12.6
Others [e]	396	398	406	491	542	4.8
Bilateral	3 119	3 840	4 583	4 867	5 109	5.5
DAC/EEC	2 742	3 492	4 381	4 429	4 684	6.1
OPEC bilateral	377	348	201	438	425	−2.4 [d]
NON-CONCESSIONAL COMMITMENTS	2 876	3 461	3 396	3 939	4 761	5.7
Multilateral	2 384	2 994	3 075	3 775	4 509	7.2
IBRD	1 982	2 486	2 445	2 642	3 192	4.3
Regional banks	399	489	614	1 099	1 220	13.6
OPEC multilateral	4	19	8	16	75	65.5
Bilateral	492	467	322	164	252	−8.8
DAC/EEC	287	348	271	162	252	−1.1 [d]
OPEC bilateral	205	119	52	–	–	−210.1
TOTAL COMMITMENTS	8 219	10 042	11 249	12 406	13 261	5.6
Multilateral	4 608	5 736	6 346	7 375	7 900	6.5
IBRD/IDA	3 125	3 973	4 126	4 362	4 858	4.6
Regional banks	1 003	1 183	1 418	1 960	1 918	8.8
OPEC multilateral	84	158	112	166	249	15.7
Others [e]	396	398	406	492	542	4.8
Bilateral	3 611	4 306	4 904	5 031	5 361	4.4
DAC/EEC	3 029	3 840	4 652	4 591	4 935	5.6
OPEC bilateral	582	466	252	440	425	−7.1 [d]
Memorandum item: in current prices, million $	5 002	7 146	10 075	11 795	11 724	11.1

[a] Broad definition.
[b] The UN value index for manufactured exports is used as a deflator.
[c] Rate of change based on exponential trend fittings to annual data.
[d] Not statistically significant at the 10% level.
[e] Including UNDP, CGIAR, FAO/TF, FAO/TCP.

Sources: FAO and OECD.

the eligibility of countries to receive resources on concessional terms, the degree of governmental involvement in agriculture, and the overall credit-worthiness of individual countries.

At the regional level, the most notable features during 1974-84 were the relatively large amounts flowing to a few African countries, and the recent sharp increase in flows to the Far East (mainly Indonesia and the Philippines) which was more than offset by declines in commitments to Latin America and Africa. In Brazil, private flows of total commitments fell from 46% in 1980 to less than 1% in 1983; in Peru, the shares were 69% in 1981 and 13% in 1983.

When private flows to agriculture were compared with disbursements of official

TABLE 3.10. **Percentage distribution of OCA, by purpose, developing countries, mid-1970s and early 1980s**

Use of OCA	Mid-1970s	Early 1980s
Land and water development	18	17
Agricultural services	9	11
Supply of production inputs	3	6
Crop production	5	7
Livestock production	5	2
Fisheries	2	3
Research, extension, training	2	4
Rural development and infrastructure	18	22
Manufacture of inputs	14	4
Agro-industries	7	6
Forestry	3	2
Regional development	3	5
Unallocated	11	11
TOTAL	100	100

Sources: FAO and OECD.

assistance since 1980, there was a weak but positive correlation between the two sources, indicating some complementarity. In other words, countries borrowing more from private sources also received more official assistance (both concessional and non-concessional) and *vice versa*. The correlation was stronger between private and non-concessional official flows, which would be expected.

Food Aid. The value of food aid grew by about 4% a year, in terms of current dollars, during 1974-84 (Table 3.13). This overall growth reflected a rapid increase in the late 1970s, followed by a period of relative stagnation. Shipments of cereals (grain equivalent) increased again from about 1983 mainly in response to the African food emergency. Lower cereal prices meant that larger shipments were not translated into greater values, however.

Multilateral food aid through the World Food Programme (WFP) has grown by about 9% a year, almost three times faster than bilateral aid, so that its share currently approaches a quarter of the combined total. As multilateral food aid is entirely on a grant basis, together with a sudden increase in bilateral food aid as grants in most recent years, the grant component of food aid has recently increased to nearly three-quarters of the total. Another feature, has been the rapid increase of the emergency component of multilateral food aid, as reflected in the growth of shipments through the WFP's International Emergency Food Reserve (IEFR), set up in 1976.

Food aid as a resource is not necessarily designated to agricultural activities, but may be used for general budgetary support through the generation of counterpart funds. Nevertheless, two-thirds of food aid through the WFP is non-emergency aid and mostly designated to agricultural or infrastructural development projects. Much bilateral aid, however, is programme aid or for general budgetary support. It is more meaningful, therefore, to look at food aid in the context of official development assistance (ODA) to all sectors, rather than comparing it to concessional disbursements to the agricultural sector alone. The proportion of food aid in relation to ODA to all sectors, which had been about 14% in 1974-76, but then fell back with the rapid growth of ODA in the late 1970s, has recently recovered a little. In 1982-84, however, food aid was equivalent to 9.4% of ODA to all sectors, but was on a rising trend due to the African food emergency.[12]

The 35-country sample: the external sector

Having briefly surveyed the global dimensions of three sources of government finance, potentially for use in agriculture, a closer analysis is made here with regard to the 35-country sample. The flows have been divided into two types: (i) disbursements of credits or loans, whether or not on concessional terms, which are debt creating; and (ii) grants or grant-like contributions, which are not debt creating.

Disbursements of credits or loans. The current value of external gross disbursements to agriculture for the 35 countries as a group averaged $4 385 million annually during 1980-84 (Table 3.14).[13] Although it remained relatively constant each year throughout this period, it was slightly higher in 1984 than it had been during the previous four years. Similarly, in the Far East, Latin America and the Near East, in 1984 the current value of gross disbursements to agriculture was the same or slightly higher than it had been during the previous four years. But in Africa, gross disbursements to agriculture declined and net disbursements turned negative. The regional distribution was highly skewed, with the Far East receiving 45%

[12] Note that the estimated value of food aid flows is included in ODA but not in OCA. The relative proportions of food aid shown exclude aid from the Council for Mutual Economic Assistance (CMEA).

[13] Disbursements cover official loans from bilateral and multilateral sources, plus private credits officially guaranteed from financial institutions, supplier credits, nationalization and bonds. Net disbursements, alternatively known as net transfers, are defined as gross disbursements minus debt-service payments of principal and interest.

TABLE 3.11. **OCA per caput agricultural population and regional shares of agricultural population and OCA, 1974-76 and 1982-84**

Region	1974-76			1982-84		
	OCA per caput agricultural population ($)	Regional shares		OCA per caput agricultural population ($)	Regional shares	
		Agricultural population (%)	OCA (%)		Agricultural population (%)	OCA (%)
Far East [a]	3.70	62	43	6.60	61	49
Africa	5.50	21	21	11.40	23	27
Near East	7.50	8	13	6.80	8	7
Latin America	12.10	9	24	18.40	8	20

[a] Excluding China.

Note: There may be rounding errors.
Source: FAO.

TABLE 3.12. **Annual average value and shares of external private commitments to agriculture,[a] by region and type of creditor, 1974-84**

Item	1974-76	1976-78	1978-80	1980-82	1982-84	1974-76	1976-78	1978-80	1980-82	1982-84
	(millions of current $)					(%)				
Africa	356	693	920	897	426	31	46	49	43	42
Far East	131	213	121	574	422	11	14	6	27	42
Latin America	615	546[b]	776[c]	514	148	53	36	42	25	14
Near East	55	62	46	97	18	5	4	3	5	2
Total [d]	1 157	1 514	1 863	2 082	1 014	100	100	100	100	100
of which:										
Supplier credits	358	299	147	442	344	31	20	8	21	34
Financial institutions	799	1 184	1 693	1 641	670	69	80	92	79	66
Memorandum item:										
in 1980 prices [e]	1 884	2 184	2 076	2 189	1 133	–	–	–	–	–

[a] Broad definition.
[b] Includes $25 million in bonds.
[c] Includes $70 million in bonds.
[d] 82 reporting countries.
[e] The UN unit value index for manufactured exports is used as a deflator. This is to facilitate comparison with flows of OCA while noting that the data for these two sources cover different numbers of countries.

Sources: World Bank, Debtor Reporting System; and FAO.

of total gross disbursements to agriculture and 70% of the total external net transfers to agriculture throughout the five-year period.

Countries in the Far East not only received the largest amount of lending to agriculture, but also had generally more favourable terms of borrowing than did countries of the other regions. In the Far East, debt-service payments were, on average, one-third the value of gross disbursements in 1980-84, whereas in Africa, they were around three-quarters of gross disbursements, and in Latin America the ratio was even higher.

Four large countries—India, Indonesia, Nigeria and the Philippines—received most of the net disbursements of external borrowing to agriculture in the early 1980s (Table 3.15). Together they received nearly 60% of total net disbursements to all 35 countries, amounting to approximately $1 100 million a year during 1980-84.

Seen as balance of payments support, net disbursements to agriculture during 1980-84 were small and represented only 1% of the value of total merchandise exports from the 35 countries, although there were wide differences among regions and countries. For some countries such as Bangladesh and the Sudan, net disbursements to agriculture represented over 11% of merchandise export earnings, while in Senegal, Tanzania, India and Ethiopia, net transfers to agriculture were between 6-7% of export earnings during the same period.

Seen as budget support, the ratios were generally smaller for 26 out of the 35 countries in the sample, as the current value of government expenditure was greater than the current value of export earnings throughout this

TABLE 3.13. **Estimates of value in current prices of bilateral and multilateral food aid, 1974-84**

(Million $)

Item	1974-76	1976-78	1978-80	1980-82	1982-84
TOTAL FOOD AID [a] OF WHICH:	1 816	1 919	2 323	2 678	2 640
Multilateral [b]	291	355	519	630	619
Bilateral [c]	1 525	1 564	1 804	2 048	2 021
Grants	903	912	1 010	1 185	1 322
Loans	622	652	794	863	699
MEMORANDUM ITEMS:					
Total food aid in constant 1983 prices [d]	2 792	2 482	2 379	2 594	2 658
Share of grants of total food aid (%)	66	66	66	68	73
Share of emergency food aid of multilateral food aid (%) [e]	14	21	26	30	34
Shipments of cereals (million tons) [f]	8.1	9.2	9.1	9.1	10.3

[a] By members of the Development Assistance Committee (DAC) of OECD and includes their contributions to multilateral agencies, but not disbursements by the latter.
[b] Includes contributions by the EEC channelled through multilateral agencies, but excludes those channelled by member countries through the EEC to recipient countries.
[c] Includes bilateral grants by the EEC.
[d] Deflator: weighted average of GNP deflators of DAC countries using 1983 ODA as weights.
[e] Includes IEFR from 1976.
[f] July/June basis. The series shown covers July 1974 to June 1985.
Sources: FAO, *Food Aid in Figures*, 1985; and *Food Aid Bulletin*, no. 3, July 1986.

TABLE 3.14. **Average annual disbursements of external loans [a] to agriculture,[b] by region,[c] 1980-84**

Item	Far East	Latin America	Africa	Near East	All regions [c]
VALUE *Million $*					
Gross disbursements	1 985	1 112	998	289	4 385
Debt-service payments	638	953	718	160	2 469
Net disbursements	1 341	165	280[d]	128	1 915
AS % OF TOTAL MERCHANDISE EXPORTS *(%)*					
Gross disbursements	2.3	1.8	3.7	2.7	2.3
Debt-service payments	0.7	1.5	2.7	1.5	1.3
Net disbursements	1.6	0.3	1.0[d]	1.2	1.0
AS % OF TOTAL CENTRAL GOVERNMENT EXPENDITURE					
Gross disbursements	2.0	1.4	2.6	0.8	1.7
Debt-service payments	0.6	1.1	1.9	0.4	1.0
Net disbursements	1.4	0.2	0.7[d]	0.4	0.7
Memo item: gross disbursements as % of total government agricultural expenditure	20.8	23.3	28.3	11.1	20.5

[a] Official credits (bilateral and multilateral) and private credits officially guaranteed (financial institutions, supplier credits, nationalization, bonds).
[b] "Broad" definition (see Explanatory Note).
[c] Based on the sample of 35 developing countries.
[d] Negative net disbursements in 1984.
Sources: World Bank, External Debt Division; FAO; IMF, *Government Finance Statistics Yearbook* and *International Financial Statistics Yearbook*.

TABLE 3.15. **Major recipients of disbursements [a] to agriculture,[b] selected countries, 1980-84**

21 selected countries from 35-country sample [c]	Average annual net disbursements to: Agriculture (Million $)	Agriculture as % of total merchandise exports	Agriculture as % of total central government expenditure
Bangladesh	87	12.1	4.3
Sudan	64	11.4	3.1
Senegal	35	6.8	6.9
Tanzania	32	6.7	1.9
India	550	6.4	2.0
Ethiopia	23	5.6	1.8
Egypt	70	4.4	1.0
Niger	16	4.0	5.6
Sierra Leone	5	4.0	2.2
Pakistan	76	2.9	1.2
Nigeria	158	2.7	2.3
Dominican Republic	24	2.6	2.0
Sri Lanka	30	2.6	1.4
Philippines	103	2.0	2.6
Jamaica	16	2.0	1.5
Mexico	18	1.8	0.9
Peru	46	1.6	1.1
Kenya	21	1.5	1.0
Indonesia	325	1.4	1.6
Malawi	3	1.4	1.0
Thailand	81	1.2	0.9

[a] Official credits (bilateral and multilateral) and private credits officially guaranteed (financial institutions, supplier credits, nationalization, bonds).
[b] Broad definition.
[c] Selected on the basis that in each country the net disbursements to agriculture amounted to more than 1% of total merchandise export earnings during 1980-84.
Sources: World Bank, External Debt Division; FAO; IMF, *Government Finance Statistics Yearbook* and *International Financial Statistics Yearbook.*

period. Therefore, when external net disbursements to agriculture are expressed as a percentage of central government expenditure, as opposed to merchandise export earnings, the ratio is smaller. External net disbursements to agriculture (broad definition) represented less than 1% of total central government spending in the 35 countries as a group. The Far East was the only region where external net disbursements to agriculture were more than 1% of total government expenditure during 1980-84. However, net disbursements to agriculture constituted relatively large shares of total expenditure in Senegal (6.9%) and the Niger (5.6%).

Disbursements of external loans to all sectors were naturally much larger, although external loans were generally not available on such favourable terms to non-agricultural sectors. An extremely high ratio of debt-service payments to gross disbursements were experienced by the 35 countries. Gross disbursements to all sectors averaged $65 700 million a year during 1980-84, but almost offsetting this sum was the cost of debt-service payments that totalled $56 200 million, leaving only $9 500 million a year in net disbursements to all sectors during 1980-84 (Table 3.16).

Looking at the regional distribution of external net transfers to all sectors, as with agriculture, funds were heavily concentrated in the Far East, which received $7 400 million net a year during 1980-84 compared with $2 700 million to Africa. After averaging $3 500 million a year between 1980 and 1983, net transfers to all sectors in Africa suddenly turned negative in 1984 (−$300 million). Moreover, in Latin America disbursements to all sectors were negative (on average, −$2 100 million a year over the five-year period). The inflows of external net disbursements to all sectors in Latin America, which reached $8 100 million in 1981, were followed by net outflows in 1982-83. By 1984, external net disbursements to all sectors had plummeted to −$11 800 million.

As balance of payments support, external net disbursements to all sectors for the 35 countries as a group amounted to 5.2% of total merchandise exports during 1980-82. Net disbursements to Latin America were negative and hence a drain on the balance of payments. The largest support for the balance of payments was provided to the Near East, where external net disbursements to all sectors represented 14.2% of total merchandise exports, compared with 10.1% in Africa, and 8.9% in the Far East.

As budget support, external net disbursements to all sectors averaged 3.8% of total government expenditure during 1980-84 in the 35 countries as a group. In Latin America, net outflows were equivalent to −2.1% of total central government expenditure, while there were external net inflows, which provided budget support equivalent to 4.2% of total central government expenditure in the Near East and exceeded 7% of totah central government expendidure in the Far East and Africa.

In summary, while gross disbursement to agriculture were by far the largest in the Far East among the four regions (in current US dollars and in terms of budget support and balance of payments support), their *net* contribution to domestic and external adjustment must not be exaggerated. During 1980-84, in the nine Far Eastern countries of the sample, net disbursements to agriculture amounted to only 1.6% of their total merchandise export earnings and 1.4% of their total government expenditures.

Relating the disbursements of external loans

TABLE 3.16. **Annual average external disbursements [a] to all sectors, by region,[b] 1980-84**

Item	Far East	Latin America	Africa	Near East	All regions [b]
VALUE *(Millions of current $)*					
Gross disbursements	21 762	30 262	8 086	5 660	65 721
Debt-service payments	14 317	32 360	5 291	4 240	56 199
Net disbursements	7 454	−2 097	2 745	1 419	9 522
AS % OF TOTAL MERCHANDISE EXPORTS					
Gross disbursements	25.7	48.3	30.2	52.6	35.4
Debt-service payments	16.8	51.1	20.1	38.4	30.1
Net disbursements	8.9	−2.8[c]	10.1[d]	14.2	5.2[d]
AS % OF TOTAL CENTRAL GOVERNMENT EXPENDITURE					
Gross disbursements	22.6	36.9	21.6	15.5	25.6
Debt-service payments	14.8	39.0	14.4	11.3	21.8
Net disbursements	7.8	−2.1[c]	7.2[d]	4.2	3.8[d]

[a] Official credits (bilateral and multilateral) and private credits officially guaranteed (financial institutions, supplier credits, nationalization, bonds).
[b] Based on the 35-developing-country sample.
[c] Negative net disbursements during 1982-84.
[d] Negative net disbursements in 1984.
Source: World Bank, *World Debt Tables 1984-85.*

TABLE 3.17. **Cereal food aid, by region,[a] 1980-84 average**

Item	Far East	Latin America	Africa	Near East	All regions
Shipments of cereal food aid ('000 tons) [c]	2 712	603	1 503	2 298	7 117
Volume of cereal food aid as % volume of cereal imports	16.0	4.0	23.8	26.6	14.3[b]
Value of cereal imports as % value of total merchandise exports	3.9	4.7	7.1	16.9	5.4[b]
Estimated value of cereal food aid as % value of total merchandise exports	0.6	0.2	1.7	4.5	0.8[b]
Estimated value of cereal food aid as % value of total government expenditure	0.5	0.2	1.2	1.3	0.5[b]

[a] Based on the 35-developing-country sample.
[b] Weighted by metric tons of cereals and value of trade for each country.
[c] Financial years 1980/81 - 1984/85.
Source: FAO, *Food Aid in Figures*, 1985, and AGROSTAT.

to annual government expenditure on agriculture, gross rather than net disbursements appear to be the more realistic measure of such contributions to government sectoral financing, because the sector itself does not have to service external debts incurred but the economy as a whole, if these debts are publicly guaranteed. As government agricultural expenditures are a relatively small proportion of total government expenditures, typically less than 10%, as seen from Table 3.6, (p. 94) gross disbursements of loans made a correspondingly larger contribution to government agricultural expenditure. During 1980-84, the average figure was 20-21% for all regions, but it exceeded 28% for Africa (see Table 3.14).

During the same period, net disbursements to all sectors were eight to ten times greater than those to agriculture in Africa and the Near East; while in Latin America, the current value of net disbursements to all sectors was negative, there was a net outflow of resources. The Far East

received the largest net disbursements both to agriculture and to all sectors.

Grant or grant-like contributions. Annual average disbursements of grants or grant-like contributions to agriculture ("broad" definition) during 1980-84 to the 35-country sample are estimated as follows:

	Far East	Latin America	Africa	Near East	All regions
million $	485	47	292	148	972

These flows, therefore, were equivalent to less than a quarter of gross disbursements of external loans to agriculture, but a half of net disbursements (see Table 3.14). The Far East region received by far the greatest amount, a half of the total.

The regional ranking changed completely when grants are compared to net disbursements of loans, however. Grants during 1980-84 exceeded net disbursements of loans to African countries in the sample which had faced actual net outflows of agricultural loans in 1984. Grants also constituted 73% of net disbursements in the small sample of Near Eastern countries, which received small disbursements of loans to agriculture during 1980-84.

Grants in relation to disbursements mf loans during 1980-84 were 36% and 28% for the Far East and Latin American countries respectively. They had a correspondingly small relationship to either total exports or total central government expenditure. Relating the flows of grants to agriculture to either sectoral exports or government expenditure gave figures of 1.5% and 4.3% respectively for the four regions together. With respect to the individual regions, grants were more significant in relation to the agricultural exports of the Near East (3.8%) and Africa (2.7%). Grants were equivalent to almost 8% of annual government expenditures on the sector for Africa during this period, but were less important for the Near East and Far East regions, 6.4% and 5.3% respectively. For Latin America, grants to agriculture on average constituted less than 1% of the region's annual agricultural exports and government agricultural expenditures.

Food aid. As discussed previously, food aid to developing countries, though financed partly through bilateral concessional loans, is more typically in the form of grants. During 1980-84, it was estimated that 30% of the total value of food aid shipped to all developing countries was financed through bilateral loans, and the remaining 70% was provided as bilateral and multilateral grants.

The loan element of food aid has already been counted as part of external disbursements of official borrowing to all sectors, discussed above. This section focuses on the size of the grant element of cereal food aid and its contribution to balance of payments and budget support as regards the 35-country sample. While the emphasis is on food aid as a source of finance, it has not been possible to calculate the proportion of proceeds derived from it and used directly by the agricultural sector.

During 1980-84 cereal food aid shipments to the 35 countries as a group averaged 7.1 million tons, or more than two-thirds of 9.9 million tons shipped annually to all developing countries (Table 3.17).

Shipments of food aid to the Far East countries in the sample were, in volume, about the same in 1984-85 as they had been in 1980-81, and averaged 2.7 million tons annually during the 1980-84, of which two-fifths went to Bangladesh. In the Near East, total shipments averaged 2.3 million tons annually during the five-year period and were dominated by deliveries to Egypt. Cereal food aid to Africa fluctuated around 1.2 million tons from 1980-81 until 1983-84, but then more than doubled in 1984-85 in response to the widespread food shortages, particularly in Ethiopia. Latin American countries were minor recipients of food aid during 1980-84, receiving less than 10% of the total shipped to the 35 countries as a group during this period.

The contribution of cereal food aid to balance of payments support was largest in the Near East where it represented 4.5% of merchandise exports, compared with 1.7% in Africa during 1980-84.

Statistics on the value of food aid received by individual countries are not readily available, and thus have to be estimated from volume of cereal food aid as a proportion of the total volume of cereal imports. For all 35 countries as a group, the volume of cereal food aid shipments represented 14.3% of the total volume of cereal imports between 1980-81 and 1984-85; and total cereal imports on commercial and concessional terms represented 5.4% of the total value of merchandise export earnings over this period. Therefore, by combining the two ratios, it is estimated that cereal food aid represented about 0.8% of total merchandise exports during 1980-84. This simple

method of estimation assumes that the value of food aid as a share of the total cereal import bill is proportional to its share of the total volume of imported cereals. This is only an approximation. For more exact estimates to be made, further information would be required about the composition of food aid and how food aid commodities are valued.

The contribution of food aid as part of external and domestic adjustment efforts undertaken by developing countries in the 1980s was small in most countries. In the Far East and Latin America, it amounted to about 1% of average export earnings during 1980-84. Nevertheless, the contributions were significantly greater for the major recipient regions. For the Near East countries in the sample, including Egypt and the Sudan, the value of food aid was almost four times net disbursements of external loans. In Africa, it was almost double.

The importance of cereal food aid was smaller when expressed as a percentage of total central government expenditure. As budget support, the grant element represented less than half of one percent of total central government expenditure for the sample of 35 countries during 1980-84, but exceeded 1% of expenditure in Africa and the Near East.

During the same period, the largest quantities of cereal food aid were delivered to Bangladesh and Egypt and represented quite significant levels of budget support to these countries (Table 3.18). In Bangladesh, it represented 8.4% of total central government expenditure. For the second largest recipient, Egypt, the imputed value of total cereal food aid provided as grants and concessional loans was 2.5% of total government expenditure.

In summary, for a few major recipients, the grant element of cereal food aid was an important source of balance of payments and budget support during 1980-84, but for the 35 countries as a group, the estimated value of cereal food aid (provided in the form of grants) represented around less than 1% of export earnings and 0.5% of total central government expenditure during this period. The contribution increased to 6% when food aid grants were compared to annual average government expenditure on agriculture.

Government Revenue and Agricultural Taxation

Although data on government revenue are unavailable for some countries, and data covering parastatal agencies that may generate revenue are extremely limited, IMF statistics indicate that in 1983, central government current and capital revenues were equivalent to 21% of GDP for the developing countries. The World Bank estimates that in 1983, central government current revenue was equivalent to 14%, 23% and 24% of GNP for low-, middle- and upper middle-income developing countries, respectively.[14]

For the 35-country sample used throughout this chapter, during 1980-84, external net disbursements to all sectors, including food aid, were equivalent to less than 5% of central government expenditure, which was equivalent to 27% of GDP. Hence, the bulk of fiscal spending was funded from domestic sources, and government revenue was equivalent to about 20% of GDP.

Taxation is clearly the major source of domestic revenue, even in developing countries. According to IMF data, during 1977-83, taxes on goods and services provided 27% of government revenue. Other main revenue sources were: taxes on income, profits and capital gains (24%); non-tax revenue, mainly receipts from governmental activities (21%); and taxes on international trade and transactions (16%). All other taxes (social security, payroll, property, poll, etc.) accounted for the remaining 12%. There were substantial variations among the developing regions. Countries in the Near East obtained 70% of their revenue from non-tax sources and African countries relied mainly on taxes on income (41%) and goods and services (20%). In general, less developed countries tended to rely more on taxes on goods, services and international trade. As development proceeded, income and social security taxes accounted for a rising share.

The typically large share of agricultural GDP of total GDP in developing countries (an average 25% in the 35-country sample) suggests that agricultural taxation could be a major source of tax revenue, and hence, an important instrument for development policy. Governments may resort to taxing agriculture as a form of involuntary savings where rural financial markets are not fully developed. Nevertheless, applying a tax also affects income, savings, investment and productivity, and thus future income and taxes, demonstrating the circularity of the effects of most financial instruments.

Available data suggest that explicit taxation of agriculture is not a major source of government revenue. Many developing

[14] World Bank, *World Development Report*, 1986.

TABLE 3.18. **Major recipients of cereal food aid, 1980-84 annual average**

17 major recipients selected from 35-country sample	Cereal food aid: Volume, 1980-84 annual average ('000 tons)	Estimated value as % of total merchandise exports, 1980-84 (%)	Estimated value as % of total central government expenditure, 1980-84 (%)
Bangladesh	1 131	22.5	8.4
Egypt	1 874	11.2	2.5
Morocco	341	11.2	4.4
Ethiopia	360	7.5	2.4
Sri Lanka	293	5.1	3.7
Tanzania	195	3.5	1.0
Jamaica	105	3.2	2.4
Bolivia	134	2.8	2.4
Pakistan	360	2.6	1.0
Senegal	121	2.6	2.6
Dominican Republic	110	2.3	1.9
Costa Rica	89	2.2	3.3
India	346	1.9	0.6
Sierra Leone	21	1.8	1.0
Niger	65	1.5	0.2
Peru	145	1.1	0.7
Sudan	396	1.0	0.3

Sources: FAO, *Food Aid Bulletin,* and FAO data base, IMF, *International Financial Statistics Yearbook.*

countries impose income taxes, but taxes on agricultural incomes are rare. While taxes on goods and services are nearly universal, only a relatively small share is collected on agricultural products. Taxes on international trade are mainly import duties, but export duties are important in some countries. Non-tax revenue includes rental fees for government-owned land, and is also important in some countries. Fees for government services are also collected from producers, but the amount is small. Poll and personal property taxes, including taxes on owned land, account for a very small share of government revenue.

In sub-Saharan Africa, land is largely exempt from taxation because customary rights to land use are still widely found, even where land ownership has been vested in the state; however, rental fees may be charged by the government. One study found that during the 1960s, out of a sample of 37 countries in both the Far East and Latin America where land taxes were more commonly found, land taxes contributed less than 5% of total tax revenues in 20 countries and between 5% and 10% in another 14 countries. In only 3 countries was the contribution more than 10%. More recent country data show that the contribution of land tax to government revenue has steadily and significantly declined. An extreme example is India, where land tax contributed 17% to total tax revenue in 1951-52, but only 2% to 3% in 1978-79.

Information on direct taxation of agriculture (land taxes, personal income taxes and company taxes) was not available for a reasonably large number of countries in the sample, but data from Malaysia, Morocco, Pakistan and Tunisia suggest that direct taxation on agriculture was unlikely to have raised more than 2% of total tax revenue during 1981-83.

Export taxes

Export taxes on agricultural products have been and continue to be a more important revenue source than land taxes. For example, out of 68 developing countries, 58 used export taxes and 48 used land taxes in the 1960s, and export taxes generated about twice as much revenue as land taxes. In a sample of 21 countries drawn from the 35-country sample, however, agricultural export taxes provided generally less than 10% of total tax revenue in 1975-77 and 1981-83 (Table 3.19).

Between the two periods, the share of total tax revenue coming from agricultural export taxes declined in most of these 21 selected countries. Agricultural export taxes averaged between 8.6% of total tax revenue in 1975-77, but by 1981-83 this proportion had fallen to less than 5.9%. Only Costa Rica, Sri Lanka, Ethiopia and Ghana raised more than one-tenth of their total tax revenues from agricultural export taxes in the early 1980s; and only in the first two countries was there an increase in the share of total tax revenue raised from agricultural exports. In part, this general pattern was a result of the 1980-82 world recession, which hampered developing country exports,

TABLE 3.19. **Agricultural export taxation and expenditure, selected countries, 1975-77 and 1981-83**

(Percentages)

21 selected countries from 35-country sample	Agricultural export taxation: as % of total tax revenue		Agricultural export taxation: as % of total central government expenditure		Agriculture expenditure: as % of total central government expenditure	
	1975-77	1981-83	1975-77	1981-83	1975-77	1981-83
FAR EAST						
India	0.3	0.1	0.3	0.1	10.6	12.9
Malaysia	17.2	4.3	12.8	2.2	9.1	7.4
Pakistan	3.8	0.8	1.6	0.5	5.5	6.0
Philippines	6.2	1.9	5.0	1.6	11.2	11.4
Sri Lanka	8.4	15.5	6.0	8.6	8.3	5.4
LATIN AMERICA						
Argentina	8.1	5.7	5.2	3.5	1.1	4.1
Brazil	1.1	1.7	1.1	1.5	5.3	7.0
Colombia	6.0	2.7	4.7	1.9	...	...
Costa Rica	19.0	34.1	14.2	23.9	4.6	4.7
Dominican Republic	18.0	4.7	16.0	3.0	11.5	13.2
Ecuador	8.9	0.3	4.4	2.2	6.2	6.7
AFRICA						
Ethiopia	22.9	13.8	13.6	7.3	8.7	9.5
Ghana	30.0	19.9	16.4	9.4	7.6	9.9
Kenya	...	0.7	...	0.5	10.3	9.9
Niger	1.1	...	1.0	...	4.5	10.2
Nigeria	0.1	–	0.6	–	2.6	4.4
Senegal	2.0	0.9	1.7	0.9	4.4	9.2
Sierra Leone	11.5	6.0	6.6	2.8	7.6	10.9
Tanzania	9.5	1.1	5.5	0.6	13.8	8.0
NEAR EAST						
Sudan	3.7	2.8	2.4	1.6	10.5	10.3
Syria	2.5	0.7	0.6	0.2	6.8	4.6
Total 21 selected countries	8.6	5.9	5.7	3.6	7.5	8.3

Source: IMF, *Government Finance Statistics Yearbook*; World Bank; FAO.

but was also the result of domestic policies that reduced the level of explicit taxation on exports to encourage the production of export products and foreign exchange earnings.

As a source of financing government expenditure, therefore, agricultural export taxation is relatively small, covering only 3.6% of total central government expenditure in the 21 selected countries in 1981-83. Nevertheless, in comparison with external sources of finance, such as disbursements of external assistance to agriculture, agricultural export taxation appears to be a far larger source of revenue. Furthermore, as governments generally allocate only a small share of their total expenditure to agriculture, export taxes on agriculture typically cover 40-50% of central government expenditure on the sector.

Nevertheless, for the 21 countries as a group, this conclusion implies that there was a net inflow of fiscal finance to the agricultural sector, as central government expenditure on agriculture was significantly larger than the revenue raised from explicit taxes on agriculture. Agricultural expenditure in these countries accounted for 8.3% of central government expenditure during 1981-83, which was more than twice the value of revenue raised from agricultural export taxes (3.6% of total central government expenditure in

1981-83) and assuming that few other taxes were explicitly levied. Only in Costa Rica and Sri Lanka were central government expenditures on agriculture less than the revenues collected from agricultural export taxes alone, although Argentina, Ghana and Ethiopia were close to a balance.

Rather than taxing agriculture as part of a conscious development policy, *implicit taxes* commonly are imposed by governments through the manipulation of producer prices, marketing margins and costs, exchange rates and trade policies. FAO's recent study on agricultural price policies concludes that in developing countries, agriculture has been penalized often by negative protection arising from national policies, including trade restrictions and macro-economic policies such as exchange rate controls.[15] The study found that African farmers have fared worse than farmers elsewhere in the world in this respect. The frequency and magnitude of movements in price bias adverse to agriculture meant that by the early 1980s, there was a pressing need to improve price incentives for producers.

The widespread devaluations in the early 1980s, often accompanying structural adjustment programmes, point to a reduction in this adverse price bias. Nevertheless, it seems that subsequently the real value of producer prices have not been maintained. However, as world prices for many agricultural commodities in the mid-1980s have continued to decline, government interventions may have served to have maintained producer prices above world price levels.

A related consideration, also given weight in current structural adjustment efforts, concerns the efficiency of government or parastatal intervention in agricultural marketing, input supply and the provision of subsidies. The aim

[15] FAO, *Agricultural Price Policies*, Rome, 1987.

BOX 3.4

External assistance to fisheries

External assistance on concessionary terms, including technical assistance to the fisheries sector of developing countries from the mid-1970s to the early 1980s, increased from $138 million in 1974-75 to $496 million in 1983-84, an annual growth rate of more than 15%. Since 1983, however, this trend has been reversed and, according to preliminary data, assistance to the sector may have declined by up to 15% in 1985.

The number of fishery projects begun annually also has declined, from about 260 a year in the late 1970s to 150 a year in the mid-1980s. Excluding technical assistance for which information on all sectors is lacking, and non-concessional lending, about 2-3% of OCA ("broad" definition) has been committed to the fishery sector in recent years.

Within these totals, there have been some significant shifts in the allocation of this assistance. The construction of infrastructure such as fishing ports and vessels, has received consistently up to a third of external assistance, with the former receiving the larger share. More recently, however, the allocations for these purposes have declined. Areas of fisheries development receiving increasing shares of external assistance are aquaculture and what is known as the "post-harvest" sector (processing and marketing). Aid to aquaculture quadrupled between 1978 and 1984, increasing its share from 9% to 16%. Post harvest activities now account for about 7% of total assistance to the sector, compared to about 3% in 1978.

Although interest in small-scale fisheries has expanded considerably, its share of total fishery assistance has remained at about 17%. In recent years, however, donors such as the World Bank have increasingly included a fishery component in rural development projects. Several integrated small-scale fisheries projects also have been launched in recent years, for example in West Africa, Zanzibar and the Bay of Bengal.

is to lower government expenditures, and by so doing, restore producer incentives in order to promote agricultural output and, hence, savings and investment.

The move away from this still widespread implicit taxation of agriculture provides the opportunity for a reformulation of explicit taxation policies to provide the government the revenue for development needs. Increases in agricultural production and productivity will create larger net producer returns and rural savings. An important task of government will be to help channel the generated savings into agriculture.

Some Conclusions and Policy Issues

This review that so far has placed agriculture in the macro-economy and explored some aspects of the fiscal budget relating to agricultural finance, raises a very wide range of issues with implications for policy. Some major issues—or rather clusters of issues—are set down under three main headings: the current account balance, the investment-savings gap and the fiscal budget.

The current account balance

Agriculture is a highly tradable sector and remains a sector of significant importance in the majority of developing countries: a 25% share of total GDP and a 33% share of total merchandise exports are typical figures. The sector characteristically generates a net surplus both through export earnings and substituting for agricultural imports that covers a relatively large share of the current account deficit of the non-agricultural sectors of a developing economy. Again, typical figures are an agricultural trade surplus equivalent to 5% of total GDP compared with a total deficit of about the same size. From the earlier analysis, it was shown that an overall current account deficit much larger than 5% of GDP cannot be sustained for very long and generally leads to structural adjustment measures having to be adopted. A disturbing sign of this analysis, therefore, is the observed decline in the net surplus of agriculture even though agricultural imports have tended to decline. This, coupled with an observed decline in the overall deficit, means that in the absence of a major expansion in non-agricultural exports, which has not occurred in most recent years, the overall deficit has been reduced by a major compression of non-agricultural imports. Where these are investment goods, such cutbacks must have a long-term negative impact on the future productive capacity of the economy. This impact may be felt on agriculture itself, if it leads to reductions in investment in economic infrastructure such as transport and port facilities.

Some of the observed declines in agricultural exports may be due to developing countries shifting away from exporting primary commodities to semi-manufactured or manufactured products. This is taking place but, in most cases, only gradually.

The current low prices for agricultural export commodities and their generally poor prospects, point to low rates of return on past investments made in agricultural projects aimed for export markets, as well as cutbacks in foreign savings for investment in other sectors of the economy. This very broad conclusion not only underlines the importance of moves to eliminate unfair trade practices and supplies in excess of food security needs, but also those macro-economic policy measures that will sustain world economic growth and so lead to better market opportunities, particularly in developing countries themselves. Unless these positive steps are taken, the second best alternative is to rely less on agricultural exports and more on production for domestic consumption.

The investment-savings gap

How does agriculture fit into a "typical" situation where external savings are falling because imports are being compressed, interest payments on debt are rising and remittances from residents working overseas may also be falling? In this case, with external savings declining, domestic savings must rise if investment levels are to be maintained. This is often difficult because the government is likely to be struggling to reduce the public fiscal deficit, and the private sector may be facing falling real incomes and hence, dissaving to maintain consumption levels.

On the side of investment, in developing countries agriculture is normally less capital-intensive than other sectors, and investment is typically achieved more through non-monetized labour time, particularly in land improvement and simple farm buildings. It has been seen that an investment rate of 10-13% of agricultural GDP is a fairly typical figure which, if total investment is in the also typical range of 22-25% of total GDP, implies that non-agricultural investment is usually a much larger proportion of non-agricultural GDP,

BOX 3.5

Financing forestry development

The current increased concern over the financing of forestry investment stems from increased international recognition of the consequences of deforestation and forest resource mismanagement, and appreciation of the sheer magnitude of the problem. At the same time, it is increasingly recognized that many people (FAO estimates more than 1 000 million) depend on a rapidly dwindling or virtually non-existent supply of wood for their energy needs. On the more commercial side, increased investment is needed to sustain the dynamic expansion of industrial products based on wood, such as paper.

Why is it necessary to demonstrate that investment in forestry compares favourably with that in other sectors? Why is it that in forestry, investments are not made "spontaneously"? Along with the possible diversity of forestry projects from, at one extreme, "capital intensive" industrial projects to, at the other extreme, "human intensive" projects aimed to improve wood supplies for the poor, *forestry investments* also have special properties that tend to discourage investment, for example:

— They have long "gestation" periods, difficult to justify when interest rates are high and people have a short planning horizon;

— They may generate high economic rates of return when including externalities such as river basin protection or broad socio-economic benefits, but their direct financial return may be low, making them unattractive to commercial investors;

— Forest resources are often regarded as common property that discourages investment while providing an incentive to deplete resources; and

— The typical disbursement and financing profiles of international loans simply do not match the financial flows of most forestry projects.

Forest planners therefore are forced to adopt innovative measures to try to attract investment into the sector. Such measures may include the following:

— Investment in forestry resources with a long pay-off period can be linked to industrial activities that have high financial returns;

— In some cases, the existing natural forest wealth can generate financial resources to support afforestation programmes;

— The externalities of forestry such as indirect economic and environmental benefits, can be internalized by integrating forestry with large-scale watershed management and irrigation projects; and

— Transactional costs can be high in the case of participatory or community development projects involving large numbers of people, but these can be minimized by financing cooperatives or communities undertaking forestry activities, rather than individuals.

The elimination of obstacles to increased forestry development requires deliberate and forceful action. The FAO Tropical Forestry Action Plan, prepared in 1985, is an example of this. Its basic purpose is to promote and harmonize multilateral and bilateral cooperation for mobilizing increased financial resources for investment in the forestry sector of tropical countries. The Plan has received broad international support and, in addition, some banking institutions such as the Inter-American Development Bank are changing their regulations so that their lending programme can be adapted to the particular financial needs of forestry development.

Increased forestry financing also depends crucially on the policies of national authorities. These policies may have to bring the multiple socio-economic benefits generated by forestry activities into line with financial returns. Examples of such policies are Chile's direct subsidies on afforestation that have been highly successful, Brazil's tax holidays that have generated large afforestation programmes, and a subsidized credit programme in the Republic of Korea that has worked effectively. Measures have to be tailored to the level of development of rural financial markets and the types of forestry activities needed. Also, there will have to be massive investments made to have an impact on the scale of problems faced.

25-30%.[16] What this means though is that the agricultural sector itself can be less demanding on investment requirements, particularly if a development strategy is followed that avoids capital-intensive projects such as large-scale irrigation and land development schemes.

It has been shown that by and large the agricultural investment rate was broadly maintained during 1974-84, except in those countries whose government budgets were sustained by earnings from oil, and the like, and which were heavily investing in non-agricultural sectors. Nevertheless, there were some signs of cutbacks in agricultural investment rates in the early 1980s compared with the mid-1970s. In these situations, it becomes even more important that relative prices of inputs and outputs, agricultural and non-agricultural, enable producers to realize positive returns on investments. At the same time, subsidies and taxes should be as transparent as possible. To maintain investment rates in certain key sectors, careful attention must be given to the appropriate roles of public and private investment so as to promote a more efficient allocation of limited investment funds, among sectors and among activities within sectors. Private investment is invevitably more profit conscious, and oriented more to short-term instead of long-term returns.

On the side of savings, the savings potential of rural areas appears to be largely untapped. While the very poor cannot save, there will be many low-income people in rural areas, small-scale farmers, labourers, and those employed in informal rural services, who have a high propensity to save, but entirely lack the facilities to save in monetary terms. Individually, they may not be able to save much, collectively they can. The mobilization of such savings is a vitally important area of development of rural financial markets, which is difficult to achieve in practice. Financial intermediaries, in early stages of development typically focus more on the asset side of their balance sheets, their loan portfolios, than the liability side, their savings deposits. This tendency is sustained by the current widespread practice of channelling targeted credit funds from the central bank, often at subsidized interest rates, and from external sources to target rural groups. The important issue of the development of rural financial markets is discussed at greater length in a following section.

The fiscal budget

On the side of government expenditure on agriculture, there are two key issues. The first is the need for less concern on the quantity of resources expended and more on the quality and efficiency of their use.

This involves the allocation of such expenditures to be more toward those activities that governments have a comparative advantage in performing. This may be in agricultural research, extension and education activities and less in marketing, for example. Moves to privatize government operations in such areas as marketing are steps in this direction, but they are likely to be resisted politically and may entail initial expenditure on some institutional development to ensure that the private sector is capable of taking on its new roles. Expenditure on research on export crops such as coffee and tea traditionally has been funded by growers themselves in many countries, and extension services as well, in some cases.

The second issue concerns recurrent costs. Here "recurrent" is carefully defined to cover the costs of maintaining and operating projects and programmes as part of the current budget. So there not only has to be a rational allocation of the government budget between development and current expenditures (the first typically is what is externally funded plus the residual of the budget—if any—after covering current needs), but attention has to be given to the recurrent demands placed on the current budget of past and ongoing development expenditures. There is usually a conflict here. Donors may regard current expenditures as "consumption", but the true recurrent part is an important corollary of development (capital) expenditures. On the other hand, governments may regard the non-recurrent part of their current budgets as politically inviolable.

With regard to the sources side of the fiscal budget, the latter years of the 1974-84 period have witnessed a slowing in the growth of development assistance to agriculture, even after allowing for the appreciation of the dollar and a slowing in inflation rates. It is unlikely that development assistance will obtain a significantly larger share of OECD's national income; although some increase is likely, as

[16] Of course, the non-agricultural sector is also typically growing faster than agriculture, which leads to a discussion of incremental capital-output ratios (ICOR), discussed in Box 3.2.

donor countries attempt to respond to international calls for greater aid allocations and so move from a typical share of 0.35% or less of GDP up towards the UN target of 0.7% (and even 1% of GDP in some cases). It is also unlikely that agriculture will capture an increasing share of development assistance to all sectors; the gains achieved from the late 1970s appear to have drifted back again since 1982. Therefore, growth rates in OCA may be only 3-4% a year compared with 5-6% a year during 1974-84, and a higher rate of growth in the earlier years of that period. Some may argue that the absorptive capacity of developing countries inhibits a return to the more rapid growth rate of earlier years.

OCA has to be seen in a proper perspective. Gross disbursements may contribute a sizeable share of government expenditure on agriculture: a typical figure is about 30%. The range, however, is very wide and the average is raised by the relatively large amounts of aid received by a few countries, mainly on political grounds, although aid, in general, is more evenly spread than hitherto. But gross OCA was less than 15% of developing countries' export earnings from crops, livestock, fishery and forest products in 1983-84. An immense number of trained human resources, scarce in developing countries, was required to administer this transfer of resources. A greater emphasis on programme or sector funding and budgetary support for approved activities could result in a greater capacity to absorb funds, their more effective utilization and a lesser demand on skilled manpower.

If all external borrowings are included (official and private government guaranteed credits), *net* disbursements may be very much less than gross. To recapitulate an example shown, Latin America's agricultural sector received $1 100 million gross a year during 1980-84, but the economy as a whole received only $165 million net of interest and repayments. Unless borrowed funds are wisely invested, they may prove to be a drain on the rest of the economy. Information is generally lacking to investigate this issue further, but the World Bank reports that while the rates of return on agricultural projects it has funded have achieved target levels, these are generally lower than investments in other productive sectors, and the project failure rate is rather high.

Domestic sources of government revenue focus on taxes. While agriculture is, in general, rather lightly explicitly taxed, and the sector's

BOX 3.6

Agricultural export taxes

Some recent empirical evidence of the significance of export tax revenue also is provided in a study covering 31 developing countries that collected more than 5% of total revenue from this source during 1973-79.[1] Export taxes contributed more than 20% in four countries and more than 10% in 15; the overall share, however, tended to decline. It also was unstable because of changes in tax rates, exchange rates, international prices and export volumes.

In the past, some countries have used the export tax as an important policy tool to shape economic development. For example, between 1940 and 1972, export taxes in Argentina extracted, on average, about 50% of agricultural income at factor cost. The direct effect of the tax itself, at 15%, was considerably less than the indirect effect, 34%, arising from the reduction in domestic prices caused by the tax. The size of these effects, however, fluctuated widely during the period reviewed.[2]

[1] Richard Goode, "Government Finance in Developing Countries", *Studies of Government Finance*, The Brookings Institution, Washington D.C., 1984.

[2] D. Cavallo and Y. Mundlak, "Agriculture and Economic Growth in an Open Economy: the Case of Argentina", IFPRI, Research Report no. 36, Washington D.C., 1982.

implicit tax burden is difficult to document, it is likely to be heavy. Implicit taxation includes market interventions, excessive margins of monopsonistic marketing boards and equivalent taxes represented by overvalued exchange rates. The latter may result in saving government expenditure on funding crop or livestock purchases rather than generating revenue, but it nevertheless results in a transfer of resources out of the sector. The forced procurement of food products may be another means. To these may be added the resource transfer effect of the whole panoply of measures designed to protect domestic industries, including those producing agricultural inputs. As a matter of policy, it would be better to remove such hidden distortions that affect agricultural profitability in mostly adverse ways, and substitute fully transparent and progressive direct and indirect taxes on the sector.

THE PRIVATE SECTOR

Data limitations, as mentioned earlier, prevent a comprehensive and consistent review of the government fiscal budget as it relates to agriculture in developing countries. The situation, however, becomes even worse with respect to the private sector. Little is known about private investment in agriculture in developing countries, and information on savings capacity in rural areas is also incomplete, as are data on the workings of rural financial markets. With regard to the external private sector, the flows of foreign direct investment (FDI) to agriculture in developing countries are not easily traced. Greater recourse in developing rural financial markets and exploiting the potential for greater FDI have been put forward as possible solutions to overcoming agricultural financing constraints.

The first part of this section provides an overview of private sector financing, again attempting to link agriculture to the macro-economy. The second part discusses the important issue of rural financial markets. Frequently they have been distorted to channel credit funds to select target groups of the agricultural population, while institutional development has been ignored or neglected. Third, there is a brief survey on FDI and its impact on agriculture.

Overview

An overview of private sector borrowing to finance agricultural development, other investment activities and consumption, can be gained by examining the size and pattern of domestic credit expansion. By definition, total domestic credit is equivalent to the money supply (money plus quasi-money plus other items) minus net foreign assets:[17]

Money supply	=	Net foreign assets	+	Domestic credit to the private sector	+	Domestic credit to government (including parastatal sector)

For the 35-country sample, domestic credit to the private sector, as a share of GDP, increased

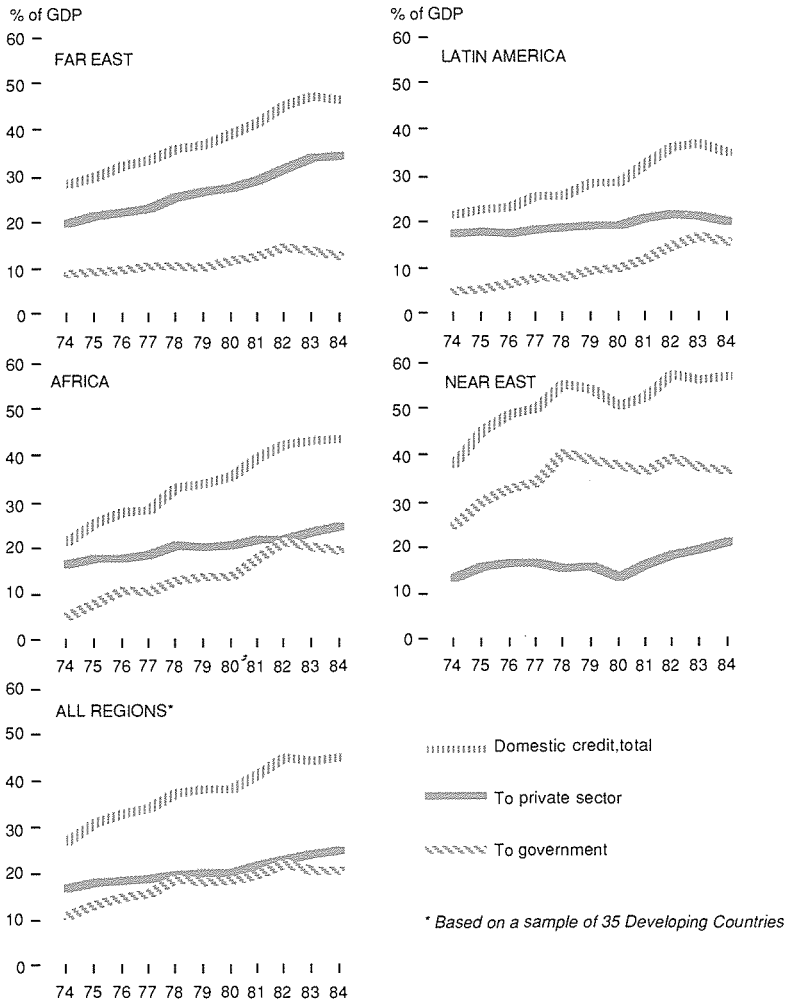
[17] For further details see IMF, "Monetary Survey" section, *International Financial Statistics Yearbook.*

9 percentage points between 1974 and 1984, rising from 16% to 25% of GDP (Fig. 3.4). Domestic credit to government was persistently smaller in size, but rose by the same amount over the same period, from 11% to 20% of GDP. Regional differences in the ratio of domestic credit to GDP are the outcome of a number of factors, including banking institutions, the degree of financial intermediation, levels and changes in real income, fiscal and monetary policies, and the relative size of the public and private sectors.

The biggest rise in domestic credit to the private sector occurred in the Far East in 1974, where private sector credit as a percentage of GDP was substantially higher than in other regions, and this disparity increased over the following decade. In 1974, the ratio of private sector credit to GDP was already 20% in the Far East, whereas it ranged from 13-17% in the Near East, Africa and Latin America. By 1984, domestic credit to the private sector had risen to 34% of GDP in the Far East compared with ratios of 21-25% in other regions. The following discussion of rural financial markets gives some reasons why this may have occurred.

Also in the Far East, domestic credit to the private sector increased relative to domestic credit to government throughout the period 1974-84. In the Near East, credit to the private sector was persistently smaller in size than credit to government; but in the 1980s, the difference narrowed and private sector credit increased relative to domestic credit to government. In Africa and Latin America, domestic credit to government rose faster than

Figure 3.4 **MONETARY SURVEY: DOMESTIC CREDIT TO PRIVATE SECTOR AND GOVERNMENT, BY REGION*, 1974-84**



Sources: IMF. International Financial Statistics: FAO. Policy Analysis Division

TABLE 3.20. **Financing of the fiscal deficit in selected countries, 1983**

(Percentages)

21 selected countries from 35-country sample	Overall fiscal deficit	Financing of the fiscal deficit		Interest payments
		External financing	Domestic financing	
	As % of total central government expenditure			
FAR EAST				
India	3.4	3.6	30.6	11.3
Indonesia	10.9	6.4	4.5	6.9
Korea Rep.	5.4	3.3	2.1	5.6
Pakistan	29.3	4.9	24.3	12.5
Philippines	14.1	10.2	3.9	9.4
Sri Lanka	32.3	15.5	16.7	16.3
Thailand	21.5	4.6	16.8	12.5
LATIN AMERICA				
Argentina	45.0	3.2	41.8	8.8
Bolivia	60.0	0.0	60.0	5.8
Brazil	11.7	−1.4	13,1	12.4
Costa Rica	8.4	6.4	2.0	8.0
Dominican Rep.	1V.8	3.6	14.2	8.0
Mexico	29.7	12.2	17.5	35.0
Peru	38.6	19.3	19.3	20.0
AFRICA				
Kenya	18.8	8.9	9.8	14.3
Malawi	24.1	23.0	1.1	13.6
Morocco	23.9	10.2	13.6	11.0
Senegal	22.0	16.6	5.4	6.4
Sierra Leone	61.4	9.6	51.8	8.6
NEAR EAST				
Egypt	17.6	2.5	15.1	6.7
Turkey	17.3	...	...	6.7
Average 21 selected countries	25.9	8.1[a]	18.2[a]	11.4

[a] Average, excluding Turkey.

Source: IMF, *Government Finance Statistics Yearbook.*

credit to the private sector from 1974 until 1982, when the pattern changed as a result of domestic adjustment measures to curb the size of the fiscal deficits.

Most domestic credit to government is used to finance the fiscal deficit, either from money creation or local borrowing. In 1983, on average, two-thirds of the fiscal deficit for 21 out of the 35 countries in the sample, was financed domestically and one-third was financed externally by foreign loans and grants. Interest payments on domestic and external borrowing absorbed 11.4% of total government expenditures in these countries (Table 3.20). The range, however, was large: from less than 6% of total government expenditure (Korea Republic) to 35% (Mexico).

The general reduction in the size of the fiscal deficit after 1982 meant that a smaller amount of the money supply was required to finance it and consequently, a larger share of domestic credit could be directed to the private sector where it could be used for financing agricultural development or other activities. For the 35 countries as a group, domestic credit to government decreased by nearly 2% of GDP between 1982 and 1984, whereas domestic credit to the private sector rose by just over 2 percentage points, so that there was a slight increase in total domestic credit. Similarly, in all regions except Latin America, the reduction in domestic credit to government was accompanied by an increase in private sector credit of around 2% of GDP, and a small rise in total domestic credit. However, in Latin America, domestic credit to the private sector declined by nearly 2% of GDP between 1982 and 1984, and there was a small reduction in

total domestic credit in relation to GDP. Domestic credit to government continued to rise until 1983, and although it fell in 1984, the ratio was still higher than in 1982.

In summary, it was only in the Far East that a significant expansion in domestic credit was recorded during 1974-84, and from about 1979 in the Near East. However, from data currently available, it is impossible to partition these flows between agricultural and non-agricultural investment and consumption. A survey of financial markets in rural areas could show their level of development and how well they may be mobilizing domestic resources for investment in agriculture and other rural activities.

Rural Financial Markets (RFMs)

RFMs include all the man-made rules and regulations that guide the behaviour of rural people relating to the accumulation of savings and their use, the flow and holding of funds in the rural sector, the allocation of private and public investible funds and the integration of rural financial activities with national and international institutions. Therefore, RFMs cover the activities of formal or institutional sources of credit (public and private institutions like state banks, agricultural development banks, commercial banks, credit unions and cooperatives, postal savings and loans banks) as well as informal or non-institutional credit sources, such as private money-lenders (traders, friends and relatives) landlord-tenant share relationships and local rotating credit associations.

RFMs also embrace the institutions relating to the customs, practices and attitudes toward rural savings and the decisions on institutional savings as hoarding and forms of non-monetized savings, together with the formal institutions designed to mobilize rural savings. RFMs therefore play an important role in financial intermediation, the process that facilitates the transfer of claims on resources from people and economic areas with a "saveable" surplus, to those people or areas with a need for credit or investment. Financial intermediation is a key process promoting economic development and how well it operates will strongly influence the pace of economic growth.[18]

[18] For a discussion of RFMs and financial intermediation, see R.L. Tinnermeier, "Agricultural Finance and Rural Development", in K.C. Nobe and R.K. Sampath (eds.), *Issues in Third World Development*, 1983.

A regional comparison of progress in institution building

There are quite wide regional differences with respect to the type of institutions that dominate RFMs and their degree of development (see Annex 3.1). In the Far East, an extensive network of cooperative, private or state-owned banks has been established. Despite the great progress made in building up rural banking institutions, and the priority given to the servicing of small farmers, a large number of small-scale farmers in many Asian countries do not yet have access to banking services. Nevertheless, the relatively advanced state of rural financial institutions and markets, do raise the question of the role of these institutions in being able to respond rapidly and flexibly to changes in domestic credit expansion, as shown in an earlier section.

A comprehensive overview of rural financial institutions in Latin America is currently not available. However, networks of development banks covering agricultural credit and rural cooperative banks have expanded considerably during the last two decades. Yet, rural financial services are largely confined to large-scale farmers, while smaller farmers lack adequate access to financial services.[19]

In the Near East, agricultural credit services are provided through specialized government financial institutions or through cooperative organizations that are both supervised and backed by their governments. Some agricultural credit institutions also extend savings services, but the amount collected remains low in comparison with loans extended.

Generally, African governments have established parastatal agricultural credit institutions—often linked to development projects—which supply credit, but have not operated deposit accounts. Rural cooperative banks have been promoted in some countries such as Mauritius, Cameroon, Ghana, Kenya and Rwanda, but are comparatively less widespread than in the Far East. Despite the many rural development projects in Africa, which have included agricultural credit as a major instrument for development, the majority of farmers still have no access to financing institutions because of poorly developed branch networks. This results in very large ratios of rural people per branch, typically 150 000-300 000 to 1 compared with ratios of

[19] See also C. Gonzales-Vega, *Strengthening Agricultural Banking and Credit Systems in Latin America and the Caribbean*, FAO, Rome, April 1986.

BOX 3.7

Mobilizing rural savings: Indonesia and the Dominican Republic

Indonesia. The Bank Rakyat Indonesia (BRI) has recently instituted a new general rural credit programme (KUPEDES) that has made important changes in the way financial services are provided in rural areas. KUPEDES grew out of an earlier credit programme, BIMAS, that provided large amounts of subsidized and target loans for rice production.

Under BIMAS, 3 600 village banks were formed as retail outlets for rice loans. By the mid-1970s, BIMAS's coverage peaked when 3.4 million farmers received loans. Soon after, loan recovery problems emerged and the number of loans made began to shrink, as more and more borrowers failed to repay. By 1983, loan recoveries, in a much smaller BIMAS programme, were 80% or less. Also, village banks were covering less than 40% on average of their operating costs, and BIMAS was threatened by closure.

The Government of Indonesia in June 1983 instituted major monetary reforms. These included eliminating many quantitative lending requirements for banks, freeing interest rates and stressing savings mobilization. These reforms encouraged BRI to retain its village banking system and to institute major changes, including increasing interest rates charged on loans to cover its operating costs, and giving bank managers authority to extend and collect loans made for any purpose. Savings mobilization was stressed through offering higher interest rates on savings accounts. As a further stimulus, BRI began to tie the bank's access to its funds to savings mobilization performance. For every unit of money mobilized by village banks, two units of money could be borrowed from BRI at interest rates equal to the top rate paid to savers (15% in 1986). Some village banks also were allowed to merge or to convert to village service posts, which are open one or two days a week, depending on their volume of business. In late 1986, many of these village banks were generating sufficient incomes to cover their operating costs, loan defaults were less than 3%, and savings deposits, as a percentage of loans, were increasing.

Dominican Republic. The Agricultural Bank (Banco Agrícola) of the Dominican Republic began a major restructuring of its activities in 1983. Founded in the 1940s, the bank was the primary provider of agricultural loans, handling 25-30 targeted lines of credit, largely from the Central Bank. The bank did not accept private deposits in any of its 30 branches, and was entirely dependent on government or donor funds for its loans. Loan recovery was a chronic problem.

Tight government budgets and less donor willingness to fund traditional agricultural credit programmes began to limit sharply the bank's access to outside funds in the early 1980s. As a result, it was decided that savings deposits had to be mobilized if the bank was to sustain lending. The bank first received permission to accept deposits, got the government to reduce reserve requirements on the bank's deposits, and then opened up savings deposit services in a small number of pilot branches. In addition to interest rate incentives, savers were offered prizes as added inducement.

Special incentives were also provided to branch employees based on savings mobilization performance. Over a period of several years, the bank has opened about 35 000 savings accounts and has mobilized the equivalent of $8 million in an economy that has been under severe financial stress.

Furthermore, the bank is now less dependent on the government and donors for funds, is providing a broader range of financial services to rural clients, is more careful in granting loans and is projecting an image of a "serious bank" that has staying power.

5 000-20 000 to 1 in the more densely populated countries of the Far East.

Despite the efforts made to build rural financing institutions, large proportions of rural populations in developing countries, particularly small farmers, depend mainly on informal markets for their limited financial needs. These markets include relatives, friends, money-lenders, traders and informal savings clubs. It has been estimated that in some countries in the Far East, less than a half of farmers are served by banks despite the progress that has been achieved, while in Africa, the proportion may be only 10-20%.

Because most formal rural credit is targeted at farmers, most non-farm rural enterprises cannot be financed directly with formal loans. Hence, these too have to rely on informal markets and are financed from redirected agricultural loans or remain underfunded. In Bangladesh, for example, the Grameen Bank has found widespread demand for loans to fund a wide range of non-farm activities in rural areas, activities that provide important services to farmers and generate employment and income for the rural poor.

The role of credit in promoting agricultural development and influencing the evolution of RFMs

The provision of subsidized agricultural credit has become an important policy instrument to channel funds to poor farmers and to stimulate development through the introduction of modern technologies. The Programme of Action of the World Conference on Agrarian Reform and Rural Development (WCARRD) of 1979, specifically referred to the need for governments to consider action to design institutional credit schemes which increase the volume of credit to peasant producers through public and private lending institutions. There was also a call for a reorientation of the practices of such institutions toward the needs of small farmers for housing, consumption and production credit.

Many agricultural credit programmes have been financially supported by external funds provided by aid agencies and by government subsidies. Between 1974 and 1982, funds from multilateral sources for agricultural credit grew by 22% a year in real terms and their share of total multilateral resource flows to agriculture

BOX 3.8

Innovative financial intermediaries in Zimbabwe

Over the past 20 years in Zimbabwe approximately 5 500 savings clubs have been formed of which about two-thirds are still active. The total membership is 140 000, mainly women, with about 20-30 members in each club. By 1984, the movement had a total equivalent of more than $2.7 million in savings.

Although the deposited funds of an individual member are his or hers to withdraw, there is a strong tendency toward the collective use of savings, organized by the leader of the individual savings club. These collective savings are frequently used for farm investment purposes, usually for inputs such as fertilizer. These inputs are then distributed to members according to their respective contribution to the pooled savings.

The savings club movement has been instrumental in enabling many farmers to significantly increase their crop production through investment in improved inputs. Notably, the pooled savings and bulk purchase of fertilizer make it possible for the small farm sector to be commercially attractive to private-sector farm servicing companies.

doubled to nearly 16%.[20] FAO's data bank on external assistance to agriculture generally confirms this picture. Commitments identified as being allocated to the agricultural credit sector rose from 6.5% of total OCA ("broad" definition) in 1975-77 to nearly 9% in 1982-84, an average annual rate of growth of 15%. Multilateral commitments dominated, with over 90% of total commitments for this purpose, but bilateral commitments have risen fast.

Considerable efforts also have been made to build up rural financial institutions to facilitate agricultural financing, often as part of formal credit programmes funded from external sources. As has been noted, however, the institutions established and their viability have been regionally different, because frequently formal credit programmes have not emphasized institutional development sufficiently, and the required management skills and experience have been lacking in many developing countries, particularly in Africa. Sometimes the very existence of a credit programme using funds at subsidized interest rates loaned through a parastatal organization—often from external sources of funds—has led to the atrophy of local financial institutions. These credit schemes may result in poor farmers not receiving adequate resources; in addition, private savings are not mobilized or may even be repressed by low interest rates on deposits.

Credit is often wrongly seen by agricultural development planners as an input rather than as a claim on resources and services. Yet credit will not promote development if other constraints are not relieved, such as low producer prices, lack of inputs and appropriate technologies, lack of markets because of inadequate roads and low and unstable yields.

Despite such limitations, low rates of interest on credit targeted to low-income farmers have been justified on the grounds that they offset other price distortions and can transfer incomes to the rural poor. However, credit is highly fungible and can be diverted to other uses and users. If credit is offered at rates significantly below the market level set by the informal sector, it will be rationed because demand will greatly exceed the supply of funds available. It will therefore tend to end up in the hands of the relatively wealthier members of rural communities or those with patronage or other advantages, and not necessarily used for agricultural purposes. Providing credit for *any* worthwhile rural enterprise, and not limiting it to agricultural activities alone, is a first step that an innovative rural financing institution should adopt.

Viability of rural banking institutions

A major shortcoming of conventional agricultural credit programmes in developing countries has been the neglect of the often rudimentary financial systems such programmes are imposed upon. The resulting systems typically depend, to a large extent, on government-controlled sources of finance, often externally funded to some degree. The institutions involved, also typically parastatal, are generally heavily subsidized to cover their transaction costs and the credit funds have to be supplemented to cover defaults or non-repayment of loans. This situation is difficult to sustain in times of domestic budgetary stringency and the need to curtail external borrowings.

A major theme of this chapter is that the financing of agriculture in developing countries will have to increasingly shift to exploiting more the domestic savings that are available. This approach involves creating or nurturing viable financial systems and their component institutions in rural areas. The Central Bank has a key role to play in this development by shifting from its traditional regulatory function, toward a role that also promotes the creation of a sound financial structure and, more specifically, the setting up of rural financial markets that function. The following are some of the major issues involved.

Mobilizing savings. Conventional approaches to agricultural credit often have overlooked the importance of savings mobilization. Many government-sponsored agricultural credit institutions do not provide deposit services. One of the main effects of credit programmes funded by concessionary discount lines of central banks is that the credit agencies have strong disincentives to mobilize voluntary savings. In other words, the banking system finds it easier and cheaper to accept large public loans at concessionary rates than to undertake the difficult task of mobilizing funds through large numbers of small private deposits. There also remains the widely held belief that the rural poor are "too poor" to save, will not use a banking system for savings, and their

[20] See Maurice J. Williams and Thomas W. Stephens, "Resource Flows Through the Multilateral System for Food and Agriculture: Trends of the Decade", *Food Policy*, vol. 9 no. 4, November 1984.

savings are not responsive to changes in interest rates.

Only in a few cases, however, have rural people been provided with positive incentives to save in a financial form and in attractive ways of doing so. Yet evidence is mounting that significant levels of rural savings can be achieved in a wide variety of situations. Successful examples are shown by the agricultural cooperatives or farmer associations in China and the Republic of Korea where, in 1979, loans were 73% and 50%, respectively of assets (deposits plus capital paid and reserves). In the Republic of Korea, the average propensity of farm households to save in 1974 ranged from about 0.22 in households with less than 0.5 ha of land, to 0.40 in those with 2 ha or more.[21] The overall average for the survey of some 2 500 households was 0.33 and had more than doubled during the previous 12 years. Other examples of rural savings schemes in developing countries are shown in Annex 3.1.

Rural savings mobilization also contributes to developing a functioning RFM because it facilitates credit appraisal and loan recovery. Borrowers may have a history of making deposits and become better known to the lenders who, in turn, are likely to make more careful appraisal of borrowers if they were loaning the savings of neighbours and friends, as well as their own.

That rural people want to save is demonstrated by the widespread informal saving clubs or rotating savings and credit associations (ROSCAs) found in Africa, the Far East and the Caribbean. There remains the need to develop links between these informal institutions and the banking system, to promote financial savings.

Another incentive for savings mobilization is to adjust upwards the rate of interest on central bank discount lines so that funds from this source are not cheaper than those mobilized through deposits. Alternatively, access to concessionary rediscount lines can be contingent on savings mobilization performance.

Loan recovery. Low repayment rates have been a major problem of many agricultural credit projects. Arrears often amount to 20-50% and maybe more. Table 3.21 shows examples of the experience in Asia, and the situation in other regions is likely to be worse. In extreme cases, the amount recovered is smaller than the transaction costs incurred in making the loans.

Loan defaults jeopardize the viability of the lending institutions, draw off scarce management time to handle recovery problems, increase the cost of maintaining credit programmes and destroy the working relations between borrowers and lenders.

Poor loan recovery is due to weak lending decisions, poor quality of loan services that raise the cost of borrowing, lack of incentives to recover loans, unfavourable weather conditions or wilful default. Lack of well-defined agricultural technical packages, inadequate links among credit, input supply, marketing and extension services, and lack of managerial skills have contributed also to loan recovery problems.

As a general rule, lenders try to limit their default risks by requiring collateral on loans. However, faulty legal systems, deficient conditions regarding land titles, the cost of taking over collateral in the event of a default and the difficulty of taking assets from low-income farmers, severely limit a bank's ability to use mortgaged items effectively.

Transaction costs. These costs for rural banks are for making, servicing and recovering loans and, in some cases, for mobilizing savings. Such costs may be surprisingly high in rural areas for formal lenders because the size of transactions are typically small and short term, and borrowers may not be accessible (Table 3.22). The administrative costs of lending to small farmers (excluding the cost of capital) may be 10-30% of the value of the loan or more. For example, in 1985 the lender transaction costs of a fertilizer credit project in Africa were estimated to be 62%, while the interest rate charged to borrowers was 10%. Examples of relatively efficient programmes in Honduras and the Dominican Republic in 1984-85 give costs of 3-10%.

In many cases, transaction costs are raised because of extensive reporting requirements of targeted loan programmes. It is not unusual for an agricultural bank to be administering 20-30 (in an extreme case up to 200) lines of credit.

Lenders are required to develop costly accounting systems that differentiate between loans under each programme. With such a system, it is relatively easy, for example, to determine the number of small-farmer loans made, how many fertilizer loans were issued, or how many maize loans were made by a bank. It is more difficult, however, to get information that is useful for efficient management of the financial intermediary.

[21] See Dale W. Adams, "Mobilizing Household Savings Through Rural Financial Markets", *Economic Development and Cultural Change*, vol. 20, 3 April 1978.

TABLE 3.21. **Percentage of overdue agricultural loans to farmers in Asian countries in recent years**

Country	Institution/Programme	Overdue loans as % of loans disbursed	Inclusive years
Bangladesh	Total agricultural loans	à?	1980-84
China	Total agricultural loans	12	1983
India	Primary agr. credit societies	43	1978-83
	Primary land dev. banks	46	1978-83
	Commercial banks	47	1978-83
	Regional rural banks	18	1978-83
Indonesia	Mass permanent working capital credit (KMKP)	42	as of Sept. 84
Korea, Rep.	NACF loans	9	1973-83
Malaysia	Bank Pertanian Malaysia	26	1977-83
Nepal	Agricultural dev. bank	36	1979-84
Pakistan	Supervised credit system	5-10	1983-84
	Other agricultural loans		
	short term	40	1983-84
	long term	38	1983-84
Philippines	Masagana 99 Credit Programme		
	Rural banks	48	1973-83
	Government banks	62	1973-83
Sri Lanka	Total agricultural loans	46	1967-83
Thailand	BAAC: Individual farmers	20-24	1979-83
	Cooperatives	55-63	1979-83
	Darmers' associations	65-71	1979-83

Source: B.R. Quinones, Jr. "An Overview of Agricultural Credit Systems in Selected Asian Countries", Asian and Pacific Regional Agricultural Credit Association (APRACA), Bangkok, Thailand 1985.

Borrowers also may incur substantial transaction costs: cumbersome procedures necessitating frequent trips to the bank, and late delivery of the loan itself, particularly those paid-in-kind as inputs, may significantly raise the cost of borrowing from formal lenders, particularly for small-scale borrowers.

Interest rates. The setting of interest rates has become a major issue in many developing countries. Although it is understandable that borrowers argue for low interest rates, the result is often excess demand for loans that consequently have to be rationed, distortions in the rural financial system and dissension in the community when some have access to below-market rates and others do not.

Low interest rates also discourage savings, which again leads to making banks dependent upon government or donor funds. Furthermore, low spreads between interest rates on deposits and loans, which have to cover the transaction cost of the bank and bad debts, have undermined the viability of banking institutions. Many rural banking institutions, particularly parastatals, cannot cover the expenditures of operation within the interest rate spreads provided. This situation has prevented these institutions from competing more actively with the informal lenders upon whom the majority of small farmers still depends for their credit needs, and hence has inhibited the evolution of RFMs.

In many instances, large differences between nominal interest rates and the rates of inflation have often led to negative and erratic real interest rates (Table 3.23). Highly negative real interest rates greatly inhibit financial savings yet confer correspondingly large benefits on those who can obtain loans. Erratic rates also inhibit savings and investment. Subsidizing interest rates for specific purposes, as often occurs with targeted agricultural loans, do not necessarily increase agricultural investment. It may be better to promote rural development directly

TABLE 3.22. **Borrowing transaction costs at the farm level in selected countries, by loan size**

(Percentages)

Transaction costs by loan size	Bangladesh	Ecuador	Honduras	Panama	Peru
A. TRANSACTION COSTS AS % OF LOAN AMOUNT					
Sample average	21.7	2.8	3.0	5.2	1.2
Small loan	29.4	5.3	5.9	5.7	3.9
Medium loan	17.5	2.0	1.6	3.0	1.3
Large loan	7.0	0.6	0.2	2.0	1.0
B. TRANSACTION COSTS AS % OF EXPLICIT-INTEREST CHARGES					
Sample average	180.8	22.9	23.1	46.4	4.0
Small loan	245.0	47.7	45.4	50.9	13.0
Medium loan	145.8	17.3	12.3	26.8	4.3
Large loan	58.1	4.1	1.5	17.9	3.3

Source: Carlos E. Cuevas and Douglas H. Graham, "Rationing Agricultural Credit in LDCs: The Role and Determinants of Transaction Costs for Borrowers", Economics and Sociology Occasional Paper No. 1178, Department of Agricultural Economics and Rural Sociology, Ohio State University, December 1984.

such as through investment in roads and other infrastructure, than by such indirect means as interest rate subsidies for credit to particular agricultural activities.

An adjustment of interest rate policies is needed in many developing countries to allow domestic savings to be mobilized and financially sound banking institutions developed. Where interest rates are seriously distorted, however, as with exchange rates, bringing them closer to a more normal rate may lead to problems of adjustment and the process may have to be undertaken relatively slowly.[22] If the government has a large budget deficit, however, raising interest rates will raise the interest cost component in the budget and may make the deficit even worse. It was shown above that interest rate costs constitute a relatively large part of government expenditures in developing countries (11% in 21 selected countries from the 35-country sample).

Field-level delivery systems. Attempts to build viable rural financial institutions face a basic dilemma: the need to handle financial transactions at minimum cost, yet the parallel need to improve farmers' access to financial services, involving the extension of the network of rural branches. Various methods have been tried to overcome such difficulties:

— Mini-branches, occupied by one officer on a part-time basis;

— Mobile credit and savings officers who visit rural centres according to a roster, such as on market days (popular in the Far East with its dense populations, but entails high transport costs in Africa);

— Establishing non-banking intermediaries such as savings and credit cooperatives, voluntary small groups of farmers such as in China, the Republic of Korea and Thailand, but also in Africa (Malawi and Ghana), and informal savings clubs (see Box 3.8); and

— Using input or produce marketing systems to extend and recover agricultural credit such as through traders, or as in the Philippines, rice millers.

The success of these approaches depends, however, on skills and institutional development which are most lacking in those areas with the greatest need for financial services. Furthermore, using the trading system as an intermediary offers opportunities to lower transaction costs, but may meet with opposition because of the prejudice against the trading sector in some countries. Cooperatives may be subject to political manipulation and, as previously discussed, the existence of parastatal rural lending agencies offering credit at subsidized rates, even if supposedly targeted, removes much of the incentive for establishing formal banking intermediaries.

[22] A real rate of interest of 2-3% has been a long-term norm, although it has risen in recent years along with inflationary expectations.

TABLE 3.23. **Difference between rate of interest on deposits [a] and rate of inflation, selected developing countries, 1976-84**

(Percentages)

Region/country	1976	1977	1978	1979	1980	1981	1982	1983	1984
Africa									
Cameroon	10	−7	−1	−5	−4	−6	−11	−12	7
Côte d'Ivoire	−6	−22	−8	−11	−7	1	2	1[b]	3
Ghana	−49	−109	−64	−42	38	−103	−14[b]	−114	−27
Kenya	−6	−10	−8	−3	−7	−4	−11	2	2
Nigeria	−19	−18	−16	−6	−14	−15	0	−16[b]	−31
Senegal	5	−5	2	−4	−3	0	−9	−5	−5
Sierra Leone	−10	−1[b]	−4	−14	−2	−13	−21	−59	−55
Tanzania	−3	−8	−7	−10	−24	−20	−23	−21	−32
Far East									
Bangladesh	−4	0	3	−7	−5	−2	−1	3[b]	1
India	16	−2	3	1	−4	−5	−1	...	...
Indonesia	−5	1	1	−12	−10	−3	−1	−6[b]	6
Pakistan	4	0	4	2	−2	−1	5	...	...
Philippines	6	4	4	−6	−5	0	...	...	...
Thailand	4	0	0	−2	−8	−1	10	14[b]	...
Near East									
Egypt	−5	−7	−5	−2	−12	0	...	...	...
Turkey	−11	−21	−36	−47	−78	...	...	...	...
Latin America									
Argentina	−253	−25	−35	−22	−8	27	...	...	...
Bolivia	5	2	0	−4[b]	−29	1	−101	−224	−1 142
Brazil	7	−5	20	3	15	4	21	...	...
Colombia	5	−8	7	1	7	10	5	8[b]	13
Costa Rica	10	9	12	9	0	...	−72[b]	−13	3
Mexico	...	−18	−6	−1	0	2	−7	−47	−17
Peru	−22	−24	−26	−35	−28	−12	7	−101[b]	−102

[a] Interest rate on one-year term deposit.
[b] Denotes a break in the available times series.

Sources: Adapted from Bernhard Fischer *et al., Sparkapitalbildung in Entwicklungsländern: Engpässe und Reformansätze*, München: Weltforum Verlag, 1986. Sources of Data for 1983-84: – *(i)* Khatkhate, Deena R., "Assessing the Level and Impact of Interest Rates in Less Developed Countries", IMF, Internal Document, 1985; and *(ii)* IMF, *International Financial Statistics Yearbook*, 1986.

TABLE 3.24. **Foreign direct investment (FDI) in developing countries, 1974-84**

(US$ '000 million)

Item	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984
Net FDI in 7 major developing countries [a]	1.7	2.8	1.6	2.5	3.7	4.3	4.2	6.3	4.6	2.5	2.7
Net FDI in all developing countries	6.6	10.5	7.9	9.4	10.8	12.4	10.5	15.7	9.9	6.3	10.0
Gross FDI in non-oil developing countries	5.1	5.3	5.3	5.3	7.1	9.6	9.1	13.6	12.2	8.9	9.4

[a] Argentina, Brazil, Indonesia, Republic of Korea, Mexico, the Philippines and Venezuela.

Sources: IMF, "Foreign Private Investment in Developing Countries", Occasional Paper, no. 33, January 1985; and Sheila Page, *op. cit.*

Links between formal and informal financial markets

Most farmers, especially low-income farmers, in the majority of developing countries, still depend upon informal financial markets for their credit needs. These markets are often criticized for their poor performance and exploitation, particularly the activities of traders-cum-moneylenders. Yet these markets continue to operate by providing fast and effective services at usually low cost, with the minimum of documentation, if any. While cases of exploitation clearly exist, interest charges generally reflect market rates and the risks involved. Improving the links between the informal and formal financial sectors could make an important contribution to financial performance. Informal lenders may be borrowers from the formal market.

What is needed are better and regular assessments of the performance of the informal sector: responsiveness to customers' needs, economic efficiency, including transaction costs and use of market power in setting interest rates and allocating funds. Here, further applied field research is called for.

Three other steps are needed:

i) The relaxation of restrictions on formal financing institutions to enable them to compete with the informal sector, particularly with respect to interest rates;

ii) Greater market transparency of informal financial markets through the provision of information on savings and credit terms and interest rates; and

iii) Strengthening the bargaining or countervailing power of weak borrowers through the formation of such groups.

Attempts, however, to "formalize" informal groups through the imposition of rules and regulations, may jeopardize their existence.

Foreign Direct Investment (FDI) in Developing Countries

FDI is a private external resource flow to developing countries that has traditionally been dominated by transnational corporations (TNCs) from industrialized countries. FDI differs from other external sources of investment funds in that it is not normally debt creating and involves the ownership of assets created by the investment. As a source of investment funds, what characterizes FDI in almost all cases in developing countries is its "concentration": it is concentrated in a few countries in one sector or a few subsectors by a few firms from a few countries. This is the result of the dominance of FDI by TNCs that specialize in certain lines of production processes.

Generally, FDI has been concentrated in a few developing countries such as Brazil, Mexico, Singapore, the Philippines, Malaysia, the Republic of Korea, Indonesia, Thailand and Hong Kong (Table 3.24). Not only does FDI flow mostly to a few developing countries, it also tends to be concentrated in countries with relatively high income. For example, in 1981, 70% of FDI to non-oil developing countries went to countries with GDP greater than $1 500 per caput, while only 20% went to countries with GDP per caput of less than $500 (Brazil alone accounted for 20% of FDI in that year).[23]

The stock of FDI in developing countries, according to IMF estimates, reached $141 000 million in 1982, while profit outflows reached $21 000 million. However, this is probably underestimated because profits can be transferred to parent companies of TNCs in a number of ways such as transfer pricing, royalties and management fees. Developing countries account for around one-fourth of the stock and flows of FDI.[24]

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[23] UNCTAD, "Flow of Financial Resources to, from, and among Developing Countries", Trade and Development Board Committee on Invisibles and Financing Related to Trade, Geneva, February 25, 1985.

[24] UN Centre for Transnational Corporations (UNCTC), "Trends and Issues in Foreign Direct Investment and Related Flows", ST/CTC/59, New York 1985.

The principal investing countries are the United States, France, the United Kingdom, the Federal Republic of Germany and Japan. The U.S. share was 44% of total FDI of OECD countries during 1982-84, while the shares of the United Kingdom, the Federal Republic of Germany, France and Japan were 8-10% each. The EEC as a whole had the same share as the United States in this period. The United States dominates FDI in Latin America and its share in the Far East is rising, while the other countries have spread their investments geographically.[25]

The flows of FDI to all sectors in developing countries have been influenced by host country restrictions and regulations, changes in the national and international economic climate, trends in borrowing from private external sources and changes in corporate strategies of TNCs. As borrowings became more attractive in the 1970s, debt-creating loans (especially from private banks) gained in share relative to equity financing (FDI). Although FDI also continued to rise into the early 1980s and tended to maintain its share (14%) of total resource flows to developing countries, the annual share ranged from 5% to 20%.

There has been a recent change in the size and regional composition of FDI, the flows of which began to fall drastically in 1983. The regional shift in FDI has been from Latin America to the Far East and Africa. Latin America's share of total FDI in non-oil LDCs was 68% during 1969-73 compared with 52% during 1979-83; the shares of the Far East (30% to 37%) and Africa (2% to 11%) correspondingly rose in these periods.

It is estimated that gross FDI in Latin America totalled $6 500 million in 1982 and $3 800 million in 1983, a decline of $2 700 million compared with a decline of $2 500 million for all developing countries (including Latin America), from $14 900 million to $12 400 million. The decline continued into 1984 for Latin America ($400 million) compared with an increase of $1 400 million for the other developing countries.[26]

Although both FDI and private lending have declined sharply since 1981, the relative decline in FDI has been smaller. The decline in FDI was primarily the result of growing uncertainties in the world economic environment, recession in most developing countries and high real interest rates that raised the opportunity cost of capital.

FDI in agriculture

FDI in agriculture, compared with other external flows such as OCA and private loans from commercial banks, is difficult to quantify, but is generally agreed to be relatively small. For example, net FDI averaged around $10 000 million from 1980 to 1984, of which probably less than 5% or $500 million was accounted for by agriculture.[27] Nevertheless, FDI in agriculture can be important in some countries such as Thailand where it accounted for 14% of total FDI during 1979-82.

While these figures are relatively low, the proportion of FDI in total investment in a given activity in developing countries can be quite significant and even dominant, as in the export of some commodities in Latin America. For example, 80-90% of developing countries' exports of wheat, maize, coffee, tea and cocoa were controlled by TNCs in 1980.[28] This was largely due to the facilities owned or controlled by TNCs, such as grain handling and grading, warehousing, port facilities, shipping, as well as their access to markets and foreign exchange. In Latin America, 93% of investment in pulp and paper production was accounted for by FDI, while in nine African countries, it accounted for two-thirds of their total forestry investment. On occasion it is only a TNC that is large enough to command the required resources to successfully handle a major venture. It is in such cases that the bargaining power of a TNC can become a major political issue.

The nature of FDI in agriculture seems to be evolving from food production to input supplies, estate management, contract farming, consultations and food processing, marketing and distribution. A parallel and complementary development is more business cooperation between the investors and the host country. This cooperation often takes the form of a joint venture, which shifts more risk onto the host country, but also allows the latter more control of the operations.

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[25] Sheila Page, "The Structure of Foreign Investment: Implications of Recent Changes for Europe and the Third World", in *EEC and the Third World: A Survey 6*, C. Stevens and J. Verloren van Themaat (eds.), London: Hodder and Stoughton, 1987.

[26] UNCTC, op. cit., 1985.

[27] IMF, "Foreign Private Investment in Developing Countries", Occasional Paper, no 33, January 1985.

[28] FAO, "Transnational Corporations in Food and Agriculture, Forestry and Fishery Sectors in Developing Countries", CFS 87/6, February 1987.

Transnational Corporations: Evolution and Characteristics

Broadly speaking, transnational corporations (TNCs) are profit motivated, technically sophisticated and active in a sector or subsector where demand is generated by a relatively high-income population or where there are potential export markets.[29]

Recently, there have been declines in FDI in the primary sectors of developing countries, largely because of declining prices for a wide range of primary commodities, high interest rates and stagnant world economic growth. The manufacturing and service sectors of developing countries, on the other hand, have seen an increase in FDI because of their low labour costs and growing markets.

Because many developing countries are already heavily indebted, increasing attention has been turned toward FDI as a source of investment funds in appropriate sectors, including agriculture. Developing countries also have learned from past experience with TNCs, which have made them more aware of the advantages and disadvantages, and they increasingly have national enterprises more able to compete or cooperate with TNCs. Generally, the host country can expect to gain from TNC expertise in management, its state of the art technology, and its access to foreign exchange and international markets.

Nevertheless, developing countries often prefer loans from foreign commercial banks to FDI to finance development, because a loan is contracted over a specified period of time, is flexible, is managed by host-country officials and does not lay claim to national resources. Furthermore, a TNC may remain for an indefinite period irrespective of the needs and goals of the host country. In addition, the TNC is likely to accumulate capital that may or may not be reinvested in a manner compatible with a host country's development goals or aims.

The cost of a TNC to the host country, comprised of remittances of profits and equity growth, can be significantly higher than interest payments on a comparable loan. However, with FDI, the risk is borne by the investor and not by the host country, whereas with a bank loan the risk is shared. In addition, the repayment of a loan is independent of the profitability of a project, whereas with equity financing, which is a major characteristic of FDI, the rate of repayment is directly linked to the profitability of the investment.

There is much written that is critical of the performance of TNCs in developing countries. However, only some of the accusations made are supported by empirical evidence, and the studies that have been conducted are often inconclusive. In some cases, there are conflicts between a TNC's operations and a host country's goals, but these cases appear to be in the minority and many could have been avoided, particularly if a countervailing institution had existed in the host country.

A TNC's corporate strategy is usually centred around securing a foreign market, raw materials and low-wage costs. Its investment generally is risk capital not likely to be invested in infrastructure or similar projects, possibly with a high social return but a low financial return to the investor. In addition, relatively high rates of return on investment are expected because of the perceived risk due to political and economic instability in potential host countries. Hence, the location of its investments is sensitive to economic conditions in the host and home countries, as well as prospects for foreign markets. The purposes a developing country has for recruiting a TNC may have little to do with the goals of the TNC, so the possibility for misunderstandings can arise.

Because TNCs are profit motivated (and do not act as development aid institutions), they are not likely to invest in small farm production of staple crops for domestic markets, because such ventures are unlikely to make sufficiently attractive profits. TNCs are more frequently associated with products that are sold to a relatively high-income segment of the population, because TNCs develop their expertise in high-income countries in these particular products and look for market opportunities in countries where incomes are rising. They are also export oriented because they have access to international markets, and a developing host country's market often is not big enough for the TNC's operations to be able to exploit economies of scale.

There are opportunities for developing countries and international venture capital to benefit from collaboration in specific sectors with well-defined goals. The recent work of the 128 member country International Finance Corporation (IFC), an affiliate of the World Bank, is an example of this trend. The IFC's ultimate purpose is to provide financing and investment expertise to the private sector in its 107

[29] Hal Hill and Brian Johns, "The Role of Direct Foreign Investment in Developing East Asian Countries", in *Weltwirtschaftliches Archiv, Review of World Economics*, Heft 2, Journal of the Kiel Institute of Economics, Tübingen, 1985.

member developing countries, without interfering with private-sector capital sources. The intention is to bring together foreign or domestic entrepreneurs with either foreign or domestic investment capital in ventures that are productive and contribute to economic development. A recent example of this new effort by the IFC is the promotion of shrimp farming, which has been undertaken because of likely high financial returns, the potential to enhance development, and its suitability to a number of developing countries. In 1984, 8% of IFC investments were for the wood, pulp and paper sector and 3% for the agribusiness sector. In 1986, the Foreign Investment Advisory Service was created by the IFC to attract and regulate specifically FDI.

In order to reduce "political risk" and thereby promote the flow of FDI to developing countries, the World Bank recently initiated the establishment of the Multilateral Investment Guarantee Agency (MIGA). The Preparatory Committee for the Establishment of the MIGA met in September 1986 to formulate its regulations and policies. MIGA will guarantee non-commercial risks of FDI, and conduct programmes of policy consultation, research and technical assistance. It will come into operation when at least five industrial and 15 developing countries subscribe at least one-third of the share capital of $1 082 million. By January 1987, 51 countries had signed the MIGA convention, but only seven had ratified it. Several bilateral investment guarantee schemes already are in operation, but they only cover a small share of FDI.

AGENDA FOR FUTURE RESEARCH

This review of some aspects of agricultural finance has shown the area to be a rich one for research. The more complex and elusive issues centre on the interrelationships between agriculture and other economic sectors in a developing country and the financing measures that best promote a selected development strategy according to the resources available from domestic and external sources. A good deal of preparatory work needs to be done, however, before such complex issues can be tackled. The major parts of this work are as follows.

1. *Definitions and concepts.* There is much confusion over what is currently meant by "agriculture", which renders making too strict a comparison between the various flows of agricultural finance a risky business. Definitions have been fairly tightly drawn for specific areas, particularly those related to economic accounts such as investment and official commitments to agriculture. But definitions are suspected of being particularly weak in the area of public expenditure on agriculture.

2. *Data and information.* This chapter on financing agricultural development has involved much effort in the collection of data, mainly limited to the 35 developing country sample. This effort was not always successful. Areas of particular weaknesses are:

— Public expenditure on agriculture, particularly tracing expenditure by the agricultural parastatal sector, government subsidies and taxes that do not pass through the mainline agricultural ministries, the allocation to current and capital (development) budgets and the allocations by end purpose. In not a few cases, governments probably do not know their overall rate of spending on agriculture.

— Investment in agricultural activities. Here the national accounting definitions are reasonably thorough, but data could be found for the period covered for only about 20 countries. Some of these data are incomplete and a breakdown between public and private investment is virtually lacking.

— While data on official commitments and disbursements on agriculture are reasonably complete and well documented, information on

private external lending to the sector is less satisfactory, being aggregated and highly erratic at the country level. Perhaps such lending is by nature "lumpy". The allocations of this lending to the various subsectors of agriculture, unlike OCA, are not known.

— Few hard facts are known about rural savings or rural financial markets generally. Most estimates of rural savings are drawn from the amounts deposited in bank branches situated in rural areas. But these are not the sole sources of rural savings, while urban branches may be attracting savings from rural areas. Propensities to save in rural areas and the relationship among interest rates, development of financial institutions and saving rates should be investigated further.

Key issues are the viability of rural banking institutions involving rural deposit mobilization, transaction costs and loan recovery; the informal financial markets and its links with the formal sector; and financial and economic policies, including the role of the central bank, that affect the performance of rural financial markets.

— While information on total FDI is available (but not on such a consistent basis as external private lending because the latter is debt creating), there is little information on the sectoral allocation of FDI by country. Estimates of remittances of profits and other transfers would enable estimates of net FDI to be made by sector.

— Information on agricultural taxation is incomplete. Standard reference sources such as the IMF's *Government Finance Yearbooks* provide excellent coverage of total government imposed taxation, but a breakdown by sector is lacking, and taxes or cesses imposed by local administrations may not be captured. Export duties on primary commodities may include non-agricultural commodities such as minerals. Such details can be uncovered only by closer, country-level investigations. The weight of implicit taxation on the sector, such as excessive margins of monopsonistic marketing boards or manipulation of exchange rates, needs to be assessed. FAO's study on agricultural prices, with its estimates of price bias embodying policy and exchange rate components, has gone some way in this direction.[30] Similar estimates could be made of subsidies on agricultural production, information on which is also incomplete.

The main purpose of the above preliminary work would be to improve the transparency of agricultural policies, a necessary precondition to unravelling the complex interrelationships that characterize agriculture's financing role in quickening the pace of economic development.

[30] FAO, op. cit. 1987.

ANNEX 3.1. **Features of selected savings schemes in rural areas of developing countries, 1985-86**

Country and scheme	Characteristics
ASIA	
Bangladesh	
Grameen Bank	Focuses on the poor who are encouraged to form homogeneous groups of five to seven, meeting weekly; each group member deposits 1 taka (about $0.03) a week as personal savings, accumulated in a group fund account. Savings schemes are linked closely with loans for production investment for the poor.
China	
Rural credit cooperatives	More than 300 000 cooperatives (with 370 000 full-time and 320 000 part-time staff) have an active programme of mobilizing rural savings, which totalled RMB 96 200 million (about $25 846 million) in 1986 and have contributed up to two-thirds of rural deposits mobilized by the Agricultural Bank of China.
India	
Regional rural banks	Started in 1975; by 1982, had mobilized deposits totalling Rs 3 801 million ($395 million at 1982 exchange rate).
Indonesia	
KUPEDES-SIMPEDES	In mid-1983, interest rates on savings, time deposits and savings certificates were freed and quantitative credit ceilings eliminated. Bank Rakayat Indonesia initiated a rural credit programme, KUPEDES, with the primary objective of promoting a self-sustaining village banking system to generate enough funds to cover their costs. In 1986, the system had its first profitable year and introduced a new savings instrument, SIMPEDES, offering adequate rates of interest, but with no limitations on withdrawals. There were 3.5 million individual savings accounts in this system in 1986 amounting to an equivalent of $100 million savings or nearly $29 per account at the end of 1986. SIMPEDES has provided 53% of the funds needed for lending through the KUPEDES system.
Nepal	
Small Farmer Development Programme	Under this programme, small farmers, landless labourers, tenants and other rural poor are organized into groups to facilitate their access to credit and other services and to mobilize group savings. Started in 1975, the programme is currently operated through 250 projects in the 60 districts of the country. By July 1986, 5 295 male groups and 705 female groups, totalling 6 000 groups, had been formed covering 54 155 rural households, and NRs 263 million ($12.4 million) had been disbursed to the members and NRs 96 million ($4.5 million) had been collected back. Mobilization of group savings is an important feature of the programme. By July 1986, NRs 3.7 million (about $175 000) had been mobilized under the scheme.
Philippines	
Integrated Rural Financing	Started in 1985, contains a component for research involving the design and pilot-testing of various schemes that will encourage farmers to deposit with banks. The programme covers a two-year pilot-testing period which is expected to be extended.
Integrated Rural Financing Pilot Programme	A specialized lending programme that began in 1983 and includes a savings component aimed at facilitating farmers "to graduate" to self-financing. In each of the eleven sites where the programme has been implemented, farmer organizations play a leading role in instilling "savings consciousness".

Country and scheme	Characteristics
Integrated Estate Development Programme	Launched by the Land Bank of the Philippines, services the financing needs and support requirements primarily of the beneficiaries of the Land Reform Programme. This integrated support package provides for the savings needs of participating farmers, and was achieved by organizing them into cooperative groups or *Samahang Nayons,* under which the farmers mutually agreed on a savings scheme.
Sri Lanka	
Cooperative rural banks	Was introduced in 1984 by the People's Bank and serves as the bank's village-level organization. In 1984 there were 888 cooperative rural banks with 1 802 036 savings accounts and total savings of SLRs 905.5 million ($34.5 million).
Cooperative banks	Efficiently run thrift and credit societies have progressively been converted into cooperative banks. After the conversion, these societies introduced savings schemes to offer comparable rates of interest on deposits and new and varied credit schemes for the benefit of members. In 1984 there were 1 685 societies with a total savings of SLRs 113.2 million ($4.3 million).
Mobile Bank Savings Scheme in the tea plantation sector	The Hatton National Bank Ltd. started the scheme in 1970 specifically for tea plantation workers. By 1984 the bank had mobilized SLRs 285.23 million ($10.9 million) in rural areas.
Thailand	
Informal rotating savings and credit associations	These associations are widespread in rural areas of Thailand, and it has been suggested that the scope for linking them with banking institutions should be explored.
AFRICA	
Burkina Faso	
Village savings and credit cooperatives	The Union des Coopératives d'Epargne et de Crédit du Burkina (UCECB), started in 1970, had at the end of 1986, 40 member cooperatives with 3 480 members. In 1986, it collected savings of CFA 111 700 000 ($346 000). UCECB provides training, inspection and support services to its member coops. The Union Régionale des Caisses Populaires de la Bongouriba, begun in 1972, and the Union des Caisses Populaires Gorom-Gorom, begun in 1986, are savings and credit cooperatives.
National Agricultural Bank	In October 1986, the Caisse Nationale de Crédit Agricole (National Agricultural Bank) started a savings programme in its three branches.
Burundi	
Savings and credit cooperatives	Started in May 1985 with the technical support of the French Centre International de Crédit Mutuel, it promotes savings and loan cooperatives. During the first year, deposits totalling FBu 12 million (about $107 000) were mobilized by 20 cooperatives with 11 921 members. It is a new experience in the country and follows the scheme of the banques populaires of Rwanda.
Cameroon	
Credit union movement	Started in 1963; by 1984, there were 200 credit unions with 53 000 members and shares/savings of CFAF 5 300 million (about $11 million). A Small Farmer Production Credit Programme was begun in 1975.

Country and scheme	Characteristics
Côte d'Ivoire	
Savings and credit cooperatives	Started in 1976 with its first opening in Kauto; by 1981, there were 66 credit unions with average savings accounts of CFAF 35 600 (about $124); some credit unions reached an average of CFAF 60 000 ($209) per saver. Due to internal problems, the movement has not expanded further since 1981. However, by mid-1986, it was proposed that a National Federation be created and an expansion was envisaged with the support of the French Crédit Mutuel.
Ghana	
Rural banks	During 1975-85, the Central Bank of Ghana established 100 rural banks as private unit banks, which in 1984 operated about 267 000 savings accounts, each with an average deposit of about $45 equivalent.
Guinea	
Savings and credit cooperatives	A project was started in early 1987 with assistance from France in the Futa Djallon à Labbé region of the country.
Kenya	
District cooperative unions and primary societies	A cooperative savings scheme started in 1969; by the end of 1986, there were about 540 000 savings accounts operated by union banking sections, closely linked with agricultural credit and investment programmes, with total savings of about $55 million equivalent. By the end of 1986, less than 40% of this amount was outstanding as loans to members.
Lesotho	
Credit unions	Credit unions started in 1961, account for the largest group of cooperative members (30 200) in Lesotho. Sixty-six credit unions are united under the Apex organization, Lesotho Cooperative Credit Union League, which links savings with investment in productive activities. At the end of 1986, total savings amounted to M 2 million ($916 000), a growth of 60% over 1981; outstanding loans increased 38% and totalled M 1.56 million ($714 000).
Mauritius	
Cooperative thrifts	Started in 1954 to mobilize women's savings; in 1962, they extended savings club activities to include credit. There are some 75 such clubs with an accumulated deposit balance of more than Mau Rs 5 million (about $381 000 at 1986 exchange rate).
Cooperative school savings banks	These service primary and secondary schoolchildren. More than 189 such savings banks are in operation, serving about 87 000 schoolchildren. Their total accumulated deposits exceed Mau Rs 4.5 million (about $343 000 at 1986 exchange rate).
Small entrepreneur and small farmer savings scheme	A new savings scheme, linked with credit and covered by insurance was recently developed for small entrepreneurs and small farmers cultivating as tenant farmers. The objectives of the non-contributory scheme are: (i) to cover production-oriented credit not supported by tangible securities; and (ii) to provide death benefits to their customers' heirs.
Rwanda	
Banques populaires	During 1975-85 the Central Bank of Rwanda, with technical support from Switzerland, established 70 banques populaires (rural unit cooperative banks) for promoting savings and extending credit facilities (based on rural savings). Total membership increased from 24 500 in 1980 to 84 500 in 1985. Since 1980 savings have increased at an average rate of 30% a year.

	Year	Members	Savings accounts	Savings *(RF million)*
	1980	24 522	39 576	4 440 ($47.8 million)
	1985 (30.6)	84 497	94 258	14 448 ($140 million)

Senegal

Savings and credit cooperatives

A project is planned to start in 1987 with technical support from France in the Kaolak area, which will be extended to other areas later.

Zambia

Credit unions

In 1985 the Credit Union and Savings Association of Zambia Ltd. had 226 credit unions with 47 000 members and savings of K 16 million (about $2.8 million at 1985 exchange rate); about 20% of these operated in rural areas. In addition to their own funds, credit unions are channelling to farmers funds originating from the government. In 1986, K 16 million ($1.3 million at 1986 exchange rate) was made available by the government.

Finance Services of Zambia, cooperative federation and cooperative unions and societies

The Cooperative Savings Scheme started as a pilot scheme in 1983 and has been expanded to cover four provincial cooperative unions and 14 primary societies. At the end of 1986, 3 400 accounts operated with a balance of K 431 000 (about $34 000).

Zimbabwe

Savings clubs

During 1970-85, the Savings Development Movement of Zimbabwe, a voluntary non-governmental organization, promoted the formation of 5 500 informal, grassroots-level savings clubs (mainly rural women) with 140 000 members. These clubs are closely linked with well-defined agricultural technical package programmes (seed, fertilizer, insecticides) to increase agricultural productivity. By 1984, these clubs had an equivalent of over $2.7 million in savings.

LATIN AMERICA

Dominican Republic

Savings Mobilization Programme

The Banco Agrícola started in 1983 a successful Savings Mobilization Programme in its 29 branches, preceded by proper training programmes for staff and of interest rate adjustments. Over a period of several years, 35 000 savings accounts have been opened and $8 million equivalent mobilized. Savings deposits in four credit unions have since increased tenfold and borrower delinquency, which once ranged between 45% and 71% of their portfolio, has declined to 7-15%.

Sources: FAO: compiled on the basis of country reports. For exchange rates: IMF, *International Financial Statistics,* February 1987.

ANNEX TABLES

ANNEX TABLE 1. VOLUME OF PRODUCTION OF MAJOR AGRICULTURAL, FISHERY AND FOREST PRODUCTS

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	ANNUAL RATE OF CHANGE 1976-86
	.....	.....	.....	.....	THOUSAND METRIC TONS	.....	.....	.....	.....	.....	.....	PERCENT
WORLD												
AGRICULTURAL PRODUCTS												
TOTAL CEREALS	1479909	1471218	1602064	1553025	1566601	1651068	1710472	1644498	1804346	1846397	1864796	2.41
WHEAT	425431	387290	451187	428508	446312	455729	482688	494244	516906	505789	535960	2.76
RICE PADDY	350446	372260	388046	377324	399344	412475	424023	451946	469978	473550	474148	3.20
BARLEY	172157	160258	179939	158214	160117	152300	164258	162156	171778	176073	180730	.51
MAIZE	351358	370994	393511	418793	395992	450413	450333	347609	452864	488440	480361	2.62
MILLET AND SORGHUM	90139	94177	95339	91435	84330	101476	96758	95026	97474	105552	100168	1.16
ROOT CROPS	551278	572172	597795	587383	538190	556232	557513	561215	591833	586522	592418	.34
POTATOES	291880	298741	315617	320943	264163	288965	288387	287645	312079	300274	308548	.12
CASSAVA	114108	117663	121432	117469	125039	128478	127566	124232	130521	136691	137397	1.72
TOTAL PULSES	44762	42291	44167	40902	40548	41197	45308	47047	49036	50740	52643	2.06
CITRUS FRUIT	49022	50400	49763	51079	56227	56042	54975	58738	56706	56058	59948	1.91
BANANAS	33353	35442	35675	35745	37764	38697	38908	38227	40667	40063	41299	1.94
APPLES	31647	30445	32427	36573	34131	32742	41438	39317	39860	38072	40923	2.89
VEGETABLE OILS,OIL EQUIV	40125	45456	47666	51342	49970	53693	57075	53300	59342	64606	64902	4.34
SOYBEANS	57402	73807	75381	88714	81076	88143	92105	79462	90652	101122	95839	3.97
GROUNDNUTS IN SHELL	17019	17669	18487	17980	17111	20558	18144	18711	20223	21629	21729	2.24
SUNFLOWER SEED	10517	12304	13333	15312	13615	14263	16358	15671	16549	18796	20689	5.56
RAPESEED	7612	7904	10570	10538	10512	12344	15066	13997	16548	19050	19716	10.07
COTTONSEED	22067	25659	24444	26424	26650	28740	27920	27489	35149	32278	28491	3.15
COPRA	5285	4717	4861	4296	4509	4701	4851	4746	3945	4849	5323	-.19
PALM KERNELS	1371	1442	1368	1645	1781	1812	2134	1999	2384	2588	2729	7.56
SUGAR (CENTRIFUGAL,RAW)	83191	89659	90360	88379	84185	93264	102740	97231	99976	99052	100090	1.85
COFFEE GREEN	3521	4408	4723	4947	4808	6036	5053	5692	5225	5923	5188	3.47
COCOA BEANS	1351	1461	1487	1679	1664	1736	1611	1608	1748	1963	2002	3.25
TEA	1580	1751	1792	1818	1873	1875	1945	2045	2192	2313	2296	3.57
COTTON LINT	11949	13967	13258	13946	13875	15287	14851	14315	18275	17166	15048	2.82
JUTE AND SIMILAR FIBRES	3036	3289	3962	3945	3538	3553	3333	3458	3598	6551	3681	2.86
SISAL	559	558	503	501	528	491	492	402	424	480	436	-2.57
TOBACCO	5703	5547	5981	5418	5306	5966	6894	5963	6465	7018	6109	1.81
NATURAL RUBBER	3618	3666	3736	3834	3826	3779	3803	4103	4195	4299	4372	1.89
TOTAL MEAT	116158	120226	124865	129742	133579	136073	137264	141651	145381	150559	155040	2.77
TOTAL MILK	435737	448160	454730	461142	467732	469820	480831	498837	502793	512886	520751	1.76
TOTAL EGGS	23439	24476	25627	26444	27211	28006	28814	29382	30253	31061	31935	3.01
WOOL GREASY	2668	2647	2629	2688	2758	2817	2845	2879	2872	2966	3005	1.36
FISHERY PRODUCTS 1/												
FRESHWATER + DIADROMOUS	7279	7481	7429	7685	8021	8609	8888	9669	9957	10849		
MARINE FISH	54728	52991	54734	55091	55332	57296	58379	58057	63967	64149		
CRUST+ MOLLUS+ CEPHALOP	6948	7494	7774	8102	8595	8704	9208	9120	9522	9522		
AQUATIC MAMMALS	421	441	454	492	460	487	457	263	211	184		
AQUATIC ANIMALS	131	237	200	204	128	221	281	428	255	424		
AQUATIC PLANTS	2492	3080	3224	3187	3349	3074	3122	3288	3599	3727		
FOREST PRODUCTS 2/												
SAWLOGS CONIFEROUS	605388	619741	637208	645105	614115	581026	561111	623497	642758	647459	647480	.34
SAWLOGS NONCONIFEROUS	236677	241312	253378	256372	263919	250411	239896	251967	259834	257944	259444	.61
PULPWOOD+PARTICLES	323441	315850	332541	357378	370658	372407	361952	368631	385551	386811	386811	2.01
FUELWOOD	1319548	1331807	1370836	1422373	1479154	1522299	1555849	1583949	1612290	1642302	1667745	2.54
SAWNWOOD CONIFEROUS	329361	343059	348675	346881	333564	315549	311467	326279	343965	346558	346557	.06
SAWNWOOD NONCONIFEROUS	102777	103250	108061	110327	113119	111459	107739	110502	116514	118311	117686	1.28
WOOD-BASED PANELS	95390	101580	104420	106374	101272	100466	95075	101592	105821	108809	109438	.77
PULP FOR PAPER	112938	114535	120628	125862	128671	128142	122779	131908	139436	140322	137345	2.09
PAPER+PAPERBOARD	147152	151869	159641	168991	169691	170380	166605	177177	190077	192832	198449	2.81
WESTERN EUROPE												
AGRICULTURAL PRODUCTS												
TOTAL CEREALS	141806	153145	168203	164351	177511	167203	181333	173591	211434	196224	190243	3.02
WHEAT	56722	53460	63933	60248	70024	66271	73690	73720	92702	80294	80874	4.62
RICE PADDY	1511	1311	1650	1831	1702	1597	1705	1519	1750	1933	1939	2.40
BARLEY	42544	51197	55362	52830	57235	50636	53714	49747	62889	58831	53651	1.76
MAIZE	24098	29539	28202	32384	31280	32623	35556	34534	36439	37779	38973	4.09
MILLET AND SORGHUM	478	604	764	649	618	601	510	466	501	401	399	-4.15
ROOT CROPS	45108	55022	53084	52002	49186	48603	48371	42533	50519	50590	48361	-.50
POTATOES	44958	54872	52940	51857	49040	48465	48240	42411	50411	50476	48242	-.50
TOTAL PULSES	1557	1651	1775	1791	1874	1640	1917	2094	2684	3199	3850	8.28
CITRUS FRUIT	6626	6603	6305	6488	6627	6772	6731	8651	6352	8023	8565	2.46
BANANAS	363	422	431	436	511	522	492	500	490	436	430	1.47
APPLES	10200	7658	10635	10655	10701	7646	12696	9088	10924	9232	10549	.78
VEGETABLE OILS,OIL EQUIV	2128	2596	2737	2677	3309	2929	3763	3639	4240	4548	4709	7.81

1/ NOMINAL CATCH (LIVE WEIGHT) EXCLUDING WHALES
2/ EXCEPT FOR PULP FOR PAPER AND PAPER AND PAPERBOARD, ALL FOREST PRODUCTS ARE EXPRESSED IN THOUSAND CUBIC METRES

ANNEX TABLE 1. (Cont.) VOLUME OF PRODUCTION OF MAJOR AGRICULTURAL, FISHERY AND FOREST PRODUCTS

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	ANNUAL RATE OF CHANGE 1976-86
	THOUSAND METRIC TONS											PERCENT
SOYBEANS	57	78	85	102	66	118	233	300	389	523	1142	32.00
GROUNDNUTS IN SHELL	17	19	20	21	19	15	14	17	15	17	17	-1.91
SUNFLOWER SEED	772	1010	1149	1276	1302	1219	1736	1891	2476	2934	3566	14.91
RAPESEED	1388	1330	1731	1696	2543	2522	3296	3142	4163	4390	4372	14.23
COTTONSEED	300	337	326	284	333	366	285	329	363	446	496	3.80
SUGAR (CENTRIFUGAL,RAW)	13810	15447	15601	15789	15729	19072	18009	14811	16481	16398	16845	1.29
COTTON LINT	148	173	165	146	178	196	156	176	196	241	258	4.54
TOBACCO	446	391	409	439	401	438	462	436	479	494	495	1.90
TOTAL MEAT	25650	26315	27213	28502	29342	29605	29666	30048	30836	30901	31200	1.94
TOTAL MILK	129359	132359	136901	139554	141823	142416	146249	150638	149261	147014	148130	1.41
TOTAL EGGS	5119	5192	5316	5395	5443	5536	5692	5562	5490	5501	5522	.74
WOOL GREASY	154	152	157	157	159	155	157	161	164	170	174	1.10
FISHERY PRODUCTS 1/												
FRESHWATER + DIADROMOUS	182	183	200	210	260	248	265	273	283	325		
MARINE FISH	10888	10945	10288	10037	9951	10007	9502	9747	10199	9765		
CRUST+ MOLLUS+ CEPHALOP	960	947	953	917	1036	1048	1137	1197	1115	1159		
AQUATIC MAMMALS	89	80	60	94	81	82	79	23	12	20		
AQUATIC ANIMALS	4	3	5	2	1	1	1	1	1			
AQUATIC PLANTS	217	280	295	290	258	217	233	231	253	262		
FOREST PRODUCTS 2/												
SAWLOGS CONIFEROUS	83972	87161	89561	96073	97381	90791	89591	94371	95820	94721	94721	.93
SAWLOGS NONCONIFEROUS	20736	21885	24084	23882	24240	23838	22524	21723	22314	22523	22523	.03
PULPWOOD+PARTICLES	79816	73403	75913	83932	83788	86401	84045	82462	88652	91733	91733	1.85
FUELWOOD	37006	35486	34084	35526	37305	38303	38905	39520	39931	39826	39832	1.43
SAWNWOOD CONIFEROUS	47330	49219	49031	53613	54877	50554	50134	51307	53491	51936	51936	.70
SAWNWOOD NONCONIFEROUS	11630	12385	12538	12724	12437	11472	11295	10637	11435	11732	11732	-.82
WOOD-BASED PANELS	25140	25132	25535	26607	26602	24960	23575	23887	24026	23764	23764	-.93
PULP FOR PAPER	24020	23196	24932	26693	26647	26489	25045	26901	29173	29223	29021	2.11
PAPER+PAPERBOARD	38628	39230	41472	45174	44736	44707	43738	45556	49953	50164	50402	2.64
USSR AND EASTERN EUROPE												
AGRICULTURAL PRODUCTS												
TOTAL CEREALS	293808	266091	312719	251009	264130	233882	269542	268902	260613	273597	298087	-.19
WHEAT	126017	121253	151590	113566	127688	107425	113780	107417	105071	110361	127187	-1.49
RICE PADDY	2126	2381	2269	2584	2934	2666	2651	2818	2938	2814	2929	2.87
BARLEY	83290	67038	78108	62927	59219	51413	59740	64703	58151	62221	70493	-1.76
MAIZE	30909	30955	29062	32920	30619	31776	40048	35974	37951	39389	41460	3.40
MILLET AND SORGHUM	3513	2231	2408	1744	2077	2035	2718	2747	2169	3155	2549	.59
ROOT CROPS	152736	145232	154405	163116	111251	135403	129664	135629	147334	134604	149883	-.68
POTATOES	152734	145229	154403	163113	111249	135399	129661	135627	147332	134603	149882	-.68
TOTAL PULSES	9328	8231	8620	5052	7132	5290	7800	9866	10215	10883	9343	2.82
CITRUS FRUIT	134	234	204	340	161	313	286	415	369	156	294	4.70
APPLES	10436	10946	8967	11301	8567	10002	13278	13125	11935	11572	12322	2.44
VEGETABLE OILS,OIL EQUIV	4455	4689	4472	4436	4330	4365	4676	4556	4481	4779	5175	.88
SOYBEANS	834	862	1012	1042	1118	907	1007	953	997	857	1169	1.23
GROUNDNUTS IN SHELL	4	4	5	6	7	9	9	8	8	7	6	6.40
SUNFLOWER SEED	6666	7395	6794	7208	6328	6636	7350	6904	6536	7080	7707	.45
RAPESEED	1531	1285	1306	574	1129	1097	1064	1312	1718	1932	2321	5.73
COTTONSEED	5066	5366	5210	5615	6100	5901	5690	5647	5278	5398	5120	.05
SUGAR (CENTRIFUGAL,RAW)	11603	13889	13621	12229	10842	10943	12450	13392	13434	12969	13150	.57
TEA	92	106	111	118	130	137	140	146	151	152	158	5.19
COTTON LINT	2597	2709	2744	2514	2816	2905	2800	2598	2354	2651	2560	-.51
JUTE AND SIMILAR FIBRES	49	47	44	48	52	45	50	55	58	60	63	3.10
TOBACCO	712	608	567	627	545	574	637	670	665	693	685	1.00
TOTAL MEAT	22258	23831	25051	25245	25096	24844	24737	26042	26902	27261	28124	1.81
TOTAL MILK	127514	134505	135205	133850	131386	127756	129328	137330	140558	141251	143330	.85
TOTAL EGGS	4769	5174	5397	5498	5630	5818	5853	6053	6172	6256	6413	2.65
WOOL GREASY	534	567	578	573	559	574	571	584	595	578	596	.70
FISHERY PRODUCTS 1/												
FRESHWATER + DIADROMOUS	1060	1089	1037	1137	1078	1122	1178	1213	1209	1320		
MARINE FISH	10329	9226	8818	8621	9063	9118	9306	9518	10365	10004		
CRUST+ MOLLUS+ CEPHALOP	109	248	207	437	565	540	732	428	368	478		
AQUATIC MAMMALS	5	7	7	5	6	9	8	8	8	7		
AQUATIC ANIMALS								1		1		
AQUATIC PLANTS	2	2	15	19	20	19	16	15	17	18		

1/ NOMINAL CATCH (LIVE WEIGHT) EXCLUDING WHALES
2/ EXCEPT FOR PULP FOR PAPER AND PAPER AND PAPERBOARD, ALL FOREST PRODUCTS ARE EXPRESSED IN THOUSAND CUBIC METRES

ANNEX TABLE 1. (Cont.) VOLUME OF PRODUCTION OF MAJOR AGRICULTURAL, FISHERY AND FOREST PRODUCTS

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	ANNUAL RATE OF CHANGE 1976-86
	.....	.....	.....	.....	THOUSAND METRIC TONS	.....	.....	.....	.....	.....	.....	PERCENT
FOREST PRODUCTS 2/												
SAWLOGS CONIFEROUS	166669	164533	158643	154849	155724	155698	153520	156432	155219	154857	154857	-.61
SAWLOGS NONCONIFEROUS	35247	35079	34599	33545	33594	33619	33109	33368	33766	33826	33826	-.41
PULPWOOD+PARTICLES	57328	57068	55829	55277	55992	55666	56524	57323	58493	58405	58405	.37
FUELWOOD	97125	94855	92055	91301	92415	96413	99294	95838	95956	96770	96776	.32
SAWNWOOD CONIFEROUS	114640	110966	108612	102829	101494	100809	100153	100268	100630	101091	101091	-1.17
SAWNWOOD NONCONIFEROUS	20031	19551	19365	18638	18260	18269	17623	18255	18357	18297	18297	-.86
WOOD-BASED PANELS	15524	16518	17095	17005	17464	17598	18023	18596	20280	20333	20333	2.67
PULP FOR PAPER	11598	11843	12161	11489	11607	11774	12052	12869	12990	12992	12500	1.10
PAPER+PAPERBOARD	14079	14428	14520	13989	14102	14264	14356	14993	15377	15615	15615	1.06
NORTH AMERICA DEVELOPED												
AGRICULTURAL PRODUCTS												
TOTAL CEREALS	303102	308361	318607	338726	311336	381936	386618	255321	358183	396617	375677	1.91
WHEAT	82068	75529	69459	75277	84092	100608	101988	92363	91817	90251	88642	2.33
RICE PADDY	5246	4501	6040	5985	6629	8289	6969	4523	6296	6120	6097	1.46
BARLEY	18852	21115	20299	16821	19257	24033	25198	21289	23342	25319	26914	3.39
MAIZE	163511	169484	189092	206659	174400	212895	215693	111974	201951	232950	216326	1.70
MILLET AND SORGHUM	18055	19837	18575	20509	14716	22247	21212	12384	22004	28456	23919	2.50
ROOT CROPS	19176	19186	19727	18895	16715	18588	19565	18253	19838	22172	19509	.70
POTATOES	18570	18642	19129	18285	16215	18005	18889	17702	19246	21496	18928	.70
TOTAL PULSES	1111	943	1304	1299	1676	1954	1717	1149	1381	1504	1840	4.03
CITRUS FRUIT	13415	13827	12932	12092	14954	13703	10938	12344	9790	9515	10013	-3.63
BANANAS	2	3	3	2	2	3	3	2	4	4	4	5.00
APPLES	3345	3468	3898	4121	4553	3933	4162	4283	4213	4072	3971	1.58
VEGETABLE OILS,OIL EQUIV	8243	11852	12875	15756	11883	13251	14343	10900	13025	14190	13590	2.49
SOYBEANS	35321	48678	51376	62183	49612	54742	60459	45253	51588	58161	55610	2.35
GROUNDNUTS IN SHELL	1696	1685	1793	1800	1045	1806	1560	1495	1998	1870	1677	.65
SUNFLOWER SEED	487	1411	1943	3528	1863	2201	2513	1502	1795	1512	1267	3.15
RAPESEED	837	1973	3497	3411	2483	1849	2225	2609	3428	3508	3887	8.80
COTTONSEED	3739	5009	3873	5242	4056	5803	4304	2791	4671	4789	3450	-1.10
SUGAR (CENTRIFUGAL,RAW)	6170	5403	5482	5167	5438	5774	5384	5217	5476	5527	5993	-.04
COFFEE GREEN	1	1	1	1	1	1		1	1	1	1	.92
COTTON LINT	2304	3133	2364	3185	2422	3406	2605	1692	2827	2924	2130	-1.20
TOBACCO	1051	973	1034	771	918	1048	975	760	875	774	607	-3.68
TOTAL MEAT	25825	26019	25869	26138	26978	27380	26809	27729	28002	28661	29084	1.22
TOTAL MILK	62205	63384	62716	63626	66099	68182	69691	71204	69535	72821	73404	1.81
TOTAL EGGS	4115	4125	4276	4417	4463	4477	4459	4380	4374	4383	4363	.53
WOOL GREASY	51	50	48	49	49	51	50	48	45	41	40	-1.96
FISHERY PRODUCTS 1/												
FRESHWATER + DIADROMOUS	328	356	396	433	476	502	485	499	491	565		
MARINE FISH	2685	2581	3032	3106	3153	3122	3519	3774	3949	4169		
CRUST+ MOLLUS+ CEPHALOP	1130	1272	1347	1376	1350	1558	1378	1324	1648	1447		
AQUATIC MAMMALS	150	156	177	177	191	217	178	90	56	20		
AQUATIC ANIMALS	9	9	11	10	2	2	10	10	9	11		
AQUATIC PLANTS	189	195	196	195	191	78	103	29	63	105		
FOREST PRODUCTS 2/												
SAWLOGS CONIFEROUS	267372	278553	299879	298266	260961	238884	220996	276510	289792	294985	294985	.27
SAWLOGS NONCONIFEROUS	34953	36846	40908	42727	43206	39834	29093	36240	38131	38294	38294	-.30
PULPWOOD+PARTICLES	139779	136788	146956	157282	163894	164429	156026	161024	168524	165561	165561	1.85
FUELWOOD	23891	35679	51645	71933	95976	107410	107595	108119	108119	108119	108119	14.74
SAWNWOOD CONIFEROUS	106334	117609	122491	122060	109483	98688	94908	109369	122090	124881	124881	.61
SAWNWOOD NONCONIFEROUS	16373	16614	17282	18432	18650	17087	12324	14217	16041	15571	15571	-1.50
WOOD-BASED PANELS	33860	37274	37288	36649	31026	32011	26790	33242	34655	36402	36402	-.27
PULP FOR PAPER	57186	58462	61368	63750	65241	65672	61122	65863	69877	68593	72543	2.04
PAPER+PAPERBOARD	63548	65498	68440	70896	70229	71502	67307	72157	76588	75407	79718	1.86
OCEANIA DEVELOPED												
AGRICULTURAL PRODUCTS												
TOTAL CEREALS	18376	15315	26087	24143	17159	24472	15066	31969	29717	26385	26167	4.43
WHEAT	12213	9724	18415	16483	11162	16686	9168	22317	18981	16477	17048	3.96
RICE PADDY	417	530	490	692	613	728	854	548	632	866	706	4.87
BARLEY	3132	2655	4265	3967	2910	3721	2295	5236	6125	5513	4080	5.27
MAIZE	316	355	305	348	307	325	382	282	392	466	478	3.44
MILLET AND SORGHUM	1151	975	747	1162	936	1231	1355	987	1929	1395	1452	5.11
ROOT CROPS	953	1008	1027	1012	1091	1089	1168	1126	1327	1277	1227	3.01
POTATOES	945	999	1010	1001	1071	1075	1157	1116	1314	1264	1214	3.03
TOTAL PULSES	189	106	120	175	209	225	315	321	609	1068	1082	24.91
CITRUS FRUIT	428	461	496	489	566	509	534	525	590	641	667	3.84

1/ NOMINAL CATCH (LIVE WEIGHT) EXCLUDING WHALES
2/ EXCEPT FOR PULP FOR PAPER AND PAPER AND PAPERBOARD, ALL FOREST PRODUCTS ARE EXPRESSED IN THOUSAND CUBIC METRES

ANNEX TABLE 1. (Cont.) VOLUME OF PRODUCTION OF MAJOR AGRICULTURAL, FISHERY AND FOREST PRODUCTS

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	ANNUAL RATE OF CHANGE 1976-86
	.....	.....	.....	.....	THOUSAND METRIC TONS	.....	.....	.....	.....	.....	.....	PERCENT
BANANAS	115	98	113	125	124	130	140	146	145	132	107	1.85
APPLES	447	447	444	525	510	549	520	534	513	622	575	2.83
VEGETABLE OILS,OIL EQUIV	74	86	140	159	120	126	118	105	164	265	229	9.32
SOYBEANS	45	55	77	99	82	73	77	53	89	110	105	5.76
GROUNONUTS IN SHELL	35	32	39	62	39	43	58	23	47	42	43	1.05
SUNFLOWER SEEO	80	75	158	186	142	139	115	104	170	293	215	8.74
RAPESEEO	9	16	24	41	18	15	7	18	33	88	100	16.99
COTTONSEEO	41	46	72	79	136	161	190	164	230	410	382	25.83
SUGAR (CENTRIFUGAL,RAW)	3296	3318	2902	2963	3330	3435	3536	3170	3548	3350	3350	.84
COTTON LINT	25	28	44	53	83	99	134	101	141	249	258	26.29
TOBACCO	18	19	19	19	18	17	15	15	16	14	14	-3.04
TOTAL MEAT	4032	4089	4307	4102	3799	3812	3850	3923	3579	3775	3762	-1.17
TOTAL MILK	12984	12582	11724	12202	12248	12079	12203	12593	13711	14077	14247	1.32
TOTAL EGGS	263	264	274	268	264	277	272	272	261	246	243	-.70
WOOL GREASY	1066	1005	988	1025	1066	1082	1080	1073	1091	1188	1188	1.48
FISHERY PRODUCTS 1/												
FRESHWATER + DIADROMOUS	4	5	5	5	4	4	4	4	5	4		
MARINE FISH	105	122	136	171	170	202	209	290	308	300		
CRUST+ MOLLUS+ CEPHALOP	72	81	81	93	113	121	150	158	149	139		
AQUATIC PLANTS	1	1	1	1	1	1	1	1	1			
FOREST PRODUCTS 2/												
SAWLOGS CONIFEROUS	7595	7178	6913	7021	8443	8607	8357	7703	7308	7622	7622	.55
SAWLOGS NONCONIFEROUS	6631	6518	6336	5846	5881	6077	5725	4569	4556	4734	4734	-3.99
PULPWOOD+PARTICLES	7191	8596	8335	8330	9890	10177	9513	9865	10455	11083	11083	3.85
FUELWOOD	1607	1619	1636	1447	1458	1818	2118	2524	2924	2924	2930	8.13
SAWNWOOD CONIFEROUS	3067	2917	2559	2743	3101	3370	3414	3141	3156	3484	3484	2.15
SAWNWOOD NONCONIFEROUS	2430	2340	2063	1986	2069	2145	2013	1790	1747	1845	1845	-2.75
WOOD-BASED PANELS	1054	1043	1059	1073	1166	1215	1228	1053	1199	1240	1240	1.73
PULP FOR PAPER	1660	1714	1699	1699	1824	1913	1896	1794	1877	1943	1932	1.56
PAPER+PAPERBOARD	1761	1890	1867	1942	2104	2151	2188	2101	2214	2297	2297	2.59
AFRICA DEVELOPING												
AGRICULTURAL PRODUCTS												
TOTAL CEREALS	48691	43624	46227	45546	49042	47323	51075	47342	46368	58823	61923	2.32
WHEAT	5760	3634	4789	4646	5422	4371	5644	4617	5024	6349	6712	2.92
RICE PADDY	5760	5725	5794	6063	6317	6507	6566	6692	6852	7097	7379	2.61
BARLEY	4699	2468	3894	3769	4464	3150	4435	2882	3157	5292	5252	2.24
MAIZE	15658	14970	14788	13468	13188	14869	15052	13849	14346	17957	18898	1.62
MILLET AND SORGHUM	15480	15598	15553	15930	17958	16954	17642	17847	15926	20153	21167	2.64
ROOT CROPS	80599	80146	80642	81058	84754	86832	89864	87726	91442	101617	102698	2.54
POTATOES	2673	2665	3044	3125	3264	3278	3543	3757	3538	3777	3903	3.88
CASSAVA	46780	46706	45490	45523	48303	49831	51199	50405	53169	58371	60720	2.70
TOTAL PULSES	5072	4296	4634	5092	4791	4701	5200	5177	4438	5448	6407	1.93
CITRUS FRUIT	2394	2486	2699	2498	2617	2549	2499	2396	2556	2507	2886	.62
BANANAS	3995	3943	3990	4164	4476	4582	4602	4633	4624	4722	4834	2.17
APPLES	56	61	61	64	73	81	82	84	103	118	126	8.36
VEGETABLE OILS,OIL EQUIV	4003	3752	3834	3653	3866	3770	3880	3789	3863	4066	4326	.74
SOYBEANS	137	142	172	178	202	183	204	170	185	199	230	3.75
GROUNONUTS IN SHELL	4445	3629	4000	3281	3407	3614	3686	3144	3392	3513	3942	-1.11
SUNFLOWER SEEO	125	149	157	150	140	134	137	139	155	170	168	1.62
RAPESEED	22	22	22	21	22	16	16	24	16	23	23	-.47
COTTONSEEO	933	936	962	907	912	893	874	958	1152	1207	1201	2.66
COPRA	167	161	170	180	178	173	187	195	195	193	202	2.12
PALM KERNELS	656	647	549	659	706	685	663	585	651	681	692	.62
SUGAR (CENTRIFUGAL,RAW)	3105	3040	3366	3524	3524	3726	3900	3920	3938	3992	4205	3.13
COFFEE GREEN	1165	1235	1064	1088	1161	1265	1199	1183	1158	1254	1360	1.18
COCOA BEANS	860	944	902	1034	1024	1068	883	891	1049	1070	1061	1.43
TEA	157	192	202	197	185	195	206	219	235	266	258	4.22
COTTON LINT	505	500	515	493	510	493	496	554	606	679	662	3.03
JUTE AND SIMILAR FIBRES	8	7	8	8	8	8	9	9	9	8	9	1.03
SISAL	223	204	175	156	168	146	142	124	117	104	104	-7.31
TOBACCO	249	224	224	259	275	211	232	254	303	283	299	2.33
NATURAL RUBBER	204	205	195	194	196	200	198	199	228	238	249	1.93
TOTAL MEAT	3989	4218	4391	4510	4639	4759	4923	4951	4895	5063	5213	2.43
TOTAL MILK	6796	7051	7380	7599	7611	7736	8064	8051	7816	7999	8190	1.63
TOTAL EGGS	508	548	571	612	644	675	734	784	821	873	936	6.21
WOOL GREASY	76	67	69	70	73	76	82	95	89	98	97	3.85

1/ NOMINAL CATCH (LIVE WEIGHT) EXCLUDING WHALES
2/ EXCEPT FOR PULP FOR PAPER AND PAPER AND PAPERBOARD, ALL FOREST PRODUCTS ARE EXPRESSED IN THOUSAND CUBIC METRES

ANNEX TABLE 1. (Cont.) VOLUME OF PRODUCTION OF MAJOR AGRICULTURAL, FISHERY AND FOREST PRODUCTS

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	ANNUAL RATE OF CHANGE 1976-86
	.....	.....	.....	.....	THOUSAND METRIC TONS	.....	.....	.....	.....	.....	.....	PERCENT
FISHERY PRODUCTS 1/												
FRESHWATER + DIADROMOUS	1343	1396	1346	1314	1282	1268	1330	1404	1403	1332		
MARINE FISH	1411	1507	1558	1491	1516	1707	1664	1775	1796	1780		
CRUST+ MOLLUS+ CEPHALOP	57	56	59	57	82	103	120	131	129	105		
AQUATIC ANIMALS	1	1	1	1	1	1	1	1	1	1		
AQUATIC PLANTS	5	5	5	5	5	5	5	5	5	5		
FOREST PRODUCTS 2/												
SAWLOGS CONIFEROUS	1137	1292	1316	1032	1286	1241	1339	1177	1271	1239	1239	.42
SAWLOGS NONCONIFEROUS	14947	15867	16225	16814	17952	17845	16892	16571	17085	17320	17320	1.05
PULPWOOD+PARTICLES	2213	2255	2610	2171	2002	2008	2037	2050	2138	2101	2101	-1.12
FUELWOOD	273436	284111	292402	300348	310064	319180	328328	336910	346610	355719	364993	2.90
SAWNWOOD CONIFEROUS	506	527	461	494	508	570	584	531	551	532	532	1.01
SAWNWOOD NONCONIFEROUS	3184	3587	4354	4432	5194	5310	5091	4822	5125	5510	5510	4.74
WOOD-BASED PANELS	752	847	912	955	1141	1151	1213	1231	1277	1365	1309	5.85
PULP FOR PAPER	336	321	343	409	435	471	359	381	376	390	364	1.01
PAPER+PAPERBOARD	219	265	281	344	377	398	397	412	422	443	452	6.88
LATIN AMERICA												
AGRICULTURAL PRODUCTS												
TOTAL CEREALS	86258	86099	85307	84105	88498	104513	105348	99912	106957	110237	107421	3.03
WHEAT	19336	11540	14969	15103	14874	15202	22727	20110	21910	20197	21586	4.58
RICE PADDY	15418	15111	13425	14445	16441	15623	17541	14758	16974	17151	17518	1.79
BARLEY	1883	1376	1716	1330	1302	1262	1147	1161	1331	1262	1198	-3.36
MAIZE	37388	43729	40151	39751	45242	55316	47861	47214	51012	55568	53061	3.54
MILLET AND SORGHUM	10982	13215	13727	12281	9572	16052	14785	15083	14255	15008	12778	2.04
ROOT CROPS	45200	46029	46454	45627	44047	46466	45756	41575	43480	44756	47186	-.22
POTATOES	9738	10102	10903	10988	10360	11848	11752	10089	12142	11329	11499	1.44
CASSAVA	31326	31966	31580	30941	30206	31223	30503	28031	27610	29624	32109	-.70
TOTAL PULSES	3911	4601	4719	4580	4303	5334	5486	4348	5153	5080	5006	1.87
CITRUS FRUIT	12788	13413	13813	14540	16928	17560	18181	18057	21559	19291	21204	5.44
BANANAS	17655	18412	18189	17808	18598	18792	19099	18340	19584	19661	20426	1.19
APPLES	1198	1329	1449	1670	1652	1683	1704	1691	2074	1859	2161	5.05
VEGETABLE OILS,OIL EQUIV	4652	5390	5241	5834	6493	6312	6148	6594	7356	8401	7760	5.17
SOYBEANS	12643	14960	12927	15464	19814	20499	18655	20331	24425	27168	21989	7.10
GROUNDNUTS IN SHELL	1058	1157	1014	1389	1099	1012	915	817	899	853	813	-3.70
SUNFLOWER SEED	1192	955	1717	1550	1756	1353	2068	2463	2268	3309	4275	12.83
RAPESEED	111	91	61	75	96	64	32	17	17	44	109	-9.43
COTTONSEED	2354	3369	3220	3098	2958	2796	2454	2307	3080	3415	2748	-.08
COPRA	229	232	236	214	235	227	282	282	239	184	189	-1.01
PALM KERNELS	297	311	298	327	328	314	307	309	292	310	323	.15
SUGAR (CENTRIFUGAL,RAW)	25930	27225	26909	26272	26394	27227	28886	28590	29385	28466	28031	1.00
COFFEE GREEN	1905	2673	3096	3259	2966	4074	3138	3792	3396	3899	3020	4.13
COCOA BEANS	432	459	520	572	552	561	606	572	532	712	731	4.22
TEA	44	52	39	44	51	39	49	54	55	66	73	4.47
COTTON LINT	1341	1898	1809	1728	1652	1555	1355	1314	1734	1887	1459	-.43
JUTE AND SIMILAR FIBRES	127	114	100	114	112	132	95	104	113	102	104	-1.31
SISAL	321	342	316	333	346	335	341	270	298	366	323	-.27
TOBACCO	727	740	768	797	732	689	762	713	719	703	689	-.78
NATURAL RUBBER	35	39	41	43	46	51	54	57	58	63	67	6.49
TOTAL MEAT	13208	13907	14459	14572	15068	15830	15802	15850	15578	16037	16555	1.96
TOTAL MILK	33468	32658	32777	33759	35455	35840	36568	36405	36813	38443	39022	1.79
TOTAL EGGS	1889	1997	2205	2410	2567	2617	2725	2698	2909	3064	3171	5.05
WOOL GREASY	296	314	298	301	306	314	315	324	320	318	325	.81
FISHERY PRODUCTS 1/												
FRESHWATER + DIADROMOUS	226	249	279	235	296	322	338	444	468	454		
MARINE FISH	7483	6018	8032	9198	8676	9405	10423	8099	10835	12462		
CRUST+ MOLLUS+ CEPHALOP	450	437	576	633	538	532	570	591	649	651		
AQUATIC MAMMALS	23	16	23	20	16	10	1		7	7		
AQUATIC ANIMALS	25	71	52	54	50	49	36	30	46	77		
AQUATIC PLANTS	92	99	90	129	124	152	222	213	213	235		
FOREST PRODUCTS 2/												
SAWLOGS CONIFEROUS	21766	23930	22958	26802	29294	28493	29037	30038	31568	32241	32241	4.02
SAWLOGS NONCONIFEROUS	23044	23694	23908	27100	30176	29789	29631	30027	30855	31249	31249	3.31
PULPWOOD+PARTICLES	12913	13667	19804	26641	29274	29135	29009	29832	30440	30631	30631	8.58
FUELWOOD	213142	218050	223529	230758	235781	240828	247295	254466	260211	265472	270728	2.47
SAWNWOOD CONIFEROUS	9695	10541	11289	12149	11552	11500	11177	12068	12689	13104	13104	2.47
SAWNWOOD NONCONIFEROUS	10843	11725	11531	12167	13736	14496	14024	14365	15090	15122	15122	3.55
WOOD-BASED PANELS	3119	3364	3514	3741	4295	4439	4323	4447	4580	4671	4671	4.16
PULP FOR PAPER	3291	3734	4180	4485	5485	5370	5684	6162	6242	6588	6477	7.09
PAPER+PAPERBOARD	5306	5637	6263	7026	7730	7451	7723	7962	8759	9167	9761	5.85

1/ NOMINAL CATCH (LIVE WEIGHT) EXCLUDING WHALES
2/ EXCEPT FOR PULP FOR PAPER AND PAPER AND PAPERBOARD, ALL FOREST PRODUCTS ARE EXPRESSED IN THOUSAND CUBIC METRES

ANNEX TABLE 1. (Cont.) VOLUME OF PRODUCTION OF MAJOR AGRICULTURAL, FISHERY AND FOREST PRODUCTS

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	ANNUAL RATE OF CHANGE 1976-86
	.....	.....	.....	.....	THOUSAND METRIC TONS	.....	.....	.....	.....	.....	.....	PERCENT
NEAR EAST DEVELOPING												
AGRICULTURAL PRODUCTS												
TOTAL CEREALS	56018	51652	54595	53694	55536	59736	58541	55943	53549	62521	67271	1.61
WHEAT	31354	29206	30324	30634	30782	32145	32553	31091	30834	33984	36504	1.37
RICE PADDY	4754	4569	4807	4762	4437	4839	5036	4566	4408	4734	4901	.07
BARLEY	8935	7403	8197	8163	9536	10676	10601	10157	9508	11313	12599	4.08
MAIZE	5406	5052	5498	5309	5547	5535	5721	6007	5679	6662	7206	2.69
MILLET AND SORGHUM	4186	4132	4557	3625	4161	5503	3733	3297	2330	5046	5389	-.23
ROOT CROPS	5710	5828	5892	6514	7234	7551	7818	7813	7943	8934	8958	4.93
POTATOES	5303	5435	5484	6025	6773	7084	7316	7334	7475	8443	8458	5.12
CASSAVA	99	95	103	127	122	125	125	125	125	128	130	2.88
TOTAL PULSES	1904	1860	1734	1687	1857	1920	2284	2471	2301	2552	3025	5.03
CITRUS FRUIT	3157	3262	3393	3698	3644	3706	4253	4389	4306	4003	4237	3.23
BANANAS	277	298	270	260	291	295	335	340	335	347	355	2.92
APPLES	1626	1685	1850	2359	2567	2513	2966	3205	3508	3338	3315	8.50
VEGETABLE OILS,OIL EQUIV	1536	1426	1551	1400	1673	1340	1552	1326	1426	1352	1691	-.15
SOYBEANS	123	119	197	195	145	209	319	340	297	377	432	13.57
GROUNDNUTS IN SHELL	870	1145	923	977	814	842	611	523	496	397	569	-8.49
SUNFLOWER SEED	612	506	524	634	794	630	652	763	755	848	994	5.38
RAPESEED	6	14	13	43	12	6	2					-38.91
COTTONSEED	2329	2609	2471	2330	2284	2201	2311	2467	2587	2501	2425	.27
SUGAR (CENTRIFUGAL,RAW)	2846	2678	2512	2587	2492	3104	3748	3825	3714	3667	3633	4.50
COFFEE GREEN	4	4	5	5	5	5	4	4	4	5	6	1.29
TEA	80	104	113	133	128	76	103	137	154	177	177	6.47
COTTON LINT	1364	1520	1446	1376	1360	1318	1379	1442	1500	1455	1360	.03
JUTE AND SIMILAR FIBRES	14	13	13	13	13	13	13	13	13	14	14	.15
TOBACCO	379	298	344	274	295	238	277	303	246	231	247	-3.60
TOTAL MEAT	2917	3099	3212	3316	3492	3713	3885	4089	4319	4500	4651	4.88
TOTAL MILK	13486	13646	14561	15232	15808	16520	16667	16929	16253	17350	17404	2.61
TOTAL EGGS	597	696	763	715	751	851	917	985	1036	1095	1143	6.40
WOOL GREASY	161	163	157	162	167	174	177	183	170	182	190	1.67
FISHERY PRODUCTS 1/												
FRESHWATER + DIADROMOUS	133	132	140	161	174	176	181	180	186	185		
MARINE FISH	606	486	557	699	771	810	835	900	935	945		
CRUST+ MOLLUS+ CEPHALOP	40	41	29	37	41	33	36	36	44	52		
AQUATIC MAMMALS	2	3	2	2	3	1						
FOREST PRODUCTS 2/												
SAWLOGS CONIFEROUS	4796	5265	5216	4718	4964	5218	5214	4190	4150	4060	4060	-2.47
SAWLOGS NONCONIFEROUS	1314	1442	1859	1523	1315	1366	1366	1371	1353	1339	1339	-1.20
PULPWOOD+PARTICLES	907	984	1003	1043	672	714	712	765	513	379	379	-9.31
FUELWOOD	61608	37801	37827	40679	41839	41021	41561	42005	40174	40776	41619	-1.28
SAWNWOOD CONIFEROUS	2916	2917	4104	4114	4127	4107	4101	3787	3794	3792	3792	1.79
SAWNWOOD NONCONIFEROUS	646	871	1146	1146	1139	1121	917	916	915	915	915	.54
WOOD-BASED PANELS	615	761	797	843	734	733	724	764	984	1072	1073	4.25
PULP FOR PAPER	317	340	273	463	494	487	487	517	588	588	366	5.05
PAPER+PAPERBOARD	587	629	560	737	774	832	821	674	808	760	760	2.80
FAR EAST DEVELOPING												
AGRICULTURAL PRODUCTS												
TOTAL CEREALS	233715	252275	267448	250759	273697	290001	276050	317384	318575	325110	329226	3.45
WHEAT	38288	38904	41013	46459	44140	49540	50449	57213	58446	57998	62657	5.29
RICE PADDY	152822	171767	181435	162613	186944	193463	184162	209545	211008	223030	219761	3.52
BARLEY	5126	3320	3819	3819	2592	3366	2937	2901	2810	2292	2574	-5.54
MAIZE	16231	15455	17940	17060	19227	20325	18141	22257	23854	22559	24315	4.52
MILLET AND SORGHUM	21163	22738	23155	20725	20705	23226	20268	25390	22378	18884	20230	-.62
ROOT CROPS	49949	51302	56421	55087	58011	60282	59160	59397	65497	65071	58900	2.20
POTATOES	9712	9455	10312	12459	10921	12423	12822	12994	15341	16106	13994	5.02
CASSAVA	31373	33408	37741	34125	39338	40179	39139	38839	42563	41624	37580	2.20
TOTAL PULSES	14676	13866	14070	13853	11319	13032	13557	14960	15158	14430	15712	.97
CITRUS FRUIT	3259	2885	3074	3183	3499	3852	3819	4102	4084	3979	3985	3.46
BANANAS	9013	10211	10576	10705	11377	11930	11572	11532	12546	11329	11890	2.28
APPLES	891	989	1070	1208	1179	1462	1586	1684	1660	1681	1760	7.35
VEGETABLE OILS,OIL EQUIV	10651	10934	11414	11684	11861	13676	14211	13974	15283	16605	17309	5.14
SOYBEANS	1094	1128	1353	1387	1484	1423	1423	1602	2238	2437	2766	9.00
GROUNDNUTS IN SHELL	6579	7495	7712	7159	6440	8790	6976	8372	8142	7622	8206	1.58
SUNFLOWER SEED	218	141	154	114	41	91	236	349	504	506	524	16.75
RAPESEED	2350	1996	2042	2268	1820	2705	2764	2583	2965	3456	3030	4.90
COTTONSEED	3075	3711	3746	4229	4213	4423	4404	3345	5071	5567	5386	4.56

1/ NOMINAL CATCH (LIVE WEIGHT) EXCLUDING WHALES
2/ EXCEPT FOR PULP FOR PAPER AND PAPER AND PAPERBOARD, ALL FOREST PRODUCTS ARE EXPRESSED IN THOUSAND CUBIC METRES

ANNEX TABLE 1. (Cont.) VOLUME OF PRODUCTION OF MAJOR AGRICULTURAL, FISHERY AND FOREST PRODUCTS

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	ANNUAL RATE OF CHANGE 1976-86
	THOUSAND METRIC TONS											PERCENT
COPRA	4564	3963	4086	3500	3706	3899	3984	3869	3053	3994	4490	-.59
PALM KERNELS	366	431	465	600	691	739	1086	1024	1352	1496	1610	16.83
SUGAR (CENTRIFUGAL,RAW)	10817	12381	13511	12840	9660	12023	17903	16831	14223	14411	15030	3.29
COFFEE GREEN	386	435	498	530	604	619	652	636	598	685	718	5.51
COCOA BEANS	24	27	33	44	54	71	90	111	134	146	176	23.61
TEA	820	889	897	890	911	923	887	919	1024	1054	1003	1.95
COTTON LINT	1538	1856	1873	2114	2007	2195	2202	1679	2536	2786	2701	4.63
JUTE AND SIMILAR FIBRES	2436	2643	3217	3186	2767	2688	2595	2712	2604	4236	2701	1.26
TOBACCO	851	1001	1060	1003	951	993	1081	1151	1080	1113	1077	1.89
NATURAL RUBBER	3252	3269	3331	3431	3415	3346	3342	3612	3657	3737	3774	1.50
TOTAL MEAT	4630	4662	5020	5411	5625	5780	5889	6312	6732	7051	7290	4.80
TOTAL MILK	38341	39815	40844	42156	43838	45534	47705	50713	53287	57693	60179	4.64
TOTAL EGGS	1486	1634	1757	1890	2038	2117	2209	2346	2507	2627	2791	6.21
WOOL GREASY	65	70	71	75	80	77	80	83	86	90	94	3.34
FISHERY PRODUCTS 1/												
FRESHWATER + DIADROMOUS	2310	2362	2364	2402	2537	2849	2804	3025	2849	2836		
MARINE FISH	7039	7823	7947	7863	7792	8243	8214	8763	9655	9182		
CRUST+ MOLLUS+ CEPHALOP	1668	1799	1801	1972	2087	2140	2204	2215	2262	2220		
AQUATIC ANIMALS	47	100	84	77	24	55	132	249	60	214		
AQUATIC PLANTS	312	371	352	372	442	538	477	534	586	645		
FOREST PRODUCTS 2/												
SAWLOGS CONIFEROUS	3119	3250	2920	3629	3367	3430	3471	3666	3645	3706	3727	1.96
SAWLOGS NONCONIFEROUS	75901	75645	80554	78791	81992	74193	77136	82880	83530	80571	82071	.72
PULPWOOD+PARTICLES	2943	3331	3367	3388	3436	3167	3123	3430	3507	3482	3482	.98
FUELWOOD	428680	437883	448002	457141	467364	476729	486413	496464	506419	516817	526250	2.08
SAWNWOOD CONIFEROUS	1953	2810	3006	3454	3148	3854	4012	4580	4220	4402	4401	7.23
SAWNWOOD NONCONIFEROUS	20545	22138	23533	23479	25863	25997	28997	30286	31802	33631	33006	5.19
WOOD-BASED PANELS	4466	5290	5859	6055	5713	6338	7230	8106	8534	9481	10166	7.93
PULP FOR PAPER	1466	1508	1666	1830	1801	1875	1976	2587	2769	2959	2725	7.64
PAPER+PAPERBOARD	2332	2916	3361	3764	3807	4190	4151	4770	5358	5681	6142	8.99
ASIAN CENT PLANNED ECON												
AGRICULTURAL PRODUCTS												
TOTAL CEREALS	272077	264823	293700	313601	303114	310120	341362	373296	394946	370245	381326	4.07
WHEAT	51006	41724	54471	63333	55823	60338	69362	82589	88918	87196	91671	7.64
RICE PADDY	147075	149330	156372	163368	161102	165905	185667	193991	204239	195191	198323	3.56
BARLEY	3404	3391	3809	4035	3125	3533	3678	3509	3888	3383	3415	-.04
MAIZE	50501	51803	58522	62634	65434	62070	63491	71401	76815	67424	71552	3.56
MILLET AND SORGHUM	14820	14434	15218	14412	12859	13055	14226	16587	15488	12428	11824	-1.17
ROOT CROPS	143917	160397	172462	156236	158121	143638	147710	159003	155699	148640	146731	-.50
POTATOES	42640	46843	54145	49792	50982	47205	50123	52031	50153	47727	47291	.39
CASSAVA	4398	5350	6378	6613	6925	6969	6444	6670	6863	6758	6670	2.94
TOTAL PULSES	6757	6436	6908	7131	7169	6879	6773	6492	6833	6315	6126	-.76
CITRUS FRUIT	875	973	948	1150	1345	1464	1680	2067	2251	2675	2900	13.60
BANANAS	883	986	1015	1128	1235	1281	1479	1585	1787	2222	2022	9.46
APPLES	2101	2519	2723	3331	2843	3501	2941	4083	3515	4209	4617	6.76
VEGETABLE OILS,OIL EQUIV	3828	4020	4630	5066	5691	7065	7709	7779	8825	9606	9359	10.57
SOYBEANS	7019	7646	7957	7844	8339	9748	9480	10214	10173	11025	12116	5.21
GROUNDNUTS IN SHELL	2070	2155	2568	2994	3788	4021	4119	4146	5072	7033	6261	12.59
SUNFLOWER SEED	100	170	279	340	910	1332	1286	1341	1705	1901	1700	34.18
RAPESEED	1353	1173	1871	2404	2386	4067	5657	4288	4206	5607	5872	17.83
COTTONSEED	4120	4112	4347	4424	5422	5945	7207	9286	12529	8310	7099	9.99
COPRA	32	40	46	61	64	65	70	98	112	115	121	14.21
PALM KERNELS	41	40	42	43	40	41	45	47	46	48	49	2.01
SUGAR (CENTRIFUGAL,RAW)	2675	3154	3303	3690	3840	4486	5198	4860	5767	6712	6410	9.43
COFFEE GREEN	18	21	14	14	16	21	19	20	22	28	29	5.42
TEA	277	295	313	325	350	389	444	449	463	483	515	6.69
COTTON LINT	2060	2056	2173	2212	2711	2973	3603	4643	6265	4155	3549	9.99
JUTE AND SIMILAR FIBRES	401	463	578	574	584	665	570	564	800	2130	789	9.92
SISAL	9	8	9	8	8	3	3	3	3	4	4	-11.60
TOBACCO	1060	1077	1338	1026	994	1591	2279	1485	1909	2554	1833	8.35
NATURAL RUBBER	123	149	166	162	164	177	204	232	249	257	277	7.93
TOTAL MEAT	10235	10374	11328	13641	15162	16017	17183	18048	19740	22286	24120	9.21
TOTAL MILK	3003	3094	3232	3376	3579	3759	4168	4460	4922	5349	5825	7.03
TOTAL EGGS	2592	2698	2840	2988	3151	3360	3614	3934	4253	4560	4844	6.69
WOOL GREASY	155	156	157	174	196	210	223	214	203	197	202	3.32

1/ NOMINAL CATCH (LIVE WEIGHT) EXCLUDING WHALES
2/ EXCEPT FOR PULP FOR PAPER AND PAPER AND PAPERBOARD, ALL FOREST PRODUCTS ARE EXPRESSED IN THOUSAND CUBIC METRES

ANNEX TABLE 1. (Cont.) VOLUME OF PRODUCTION OF MAJOR AGRICULTURAL, FISHERY AND FOREST PRODUCTS

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	ANNUAL RATE OF CHANGE 1976-86
	THOUSAND METRIC TONS											PERCENT
FISHERY PRODUCTS 1/												
FRESHWATER + DIADROMOUS	1401	1422	1376	1468	1605	1785	1978	2289	2724	3439		
MARINE FISH	4485	4568	4532	4335	4470	4517	4777	4795	5109	5228		
CRUST+ MOLLUS+ CEPHALOP	1045	1167	1239	1122	1144	1151	1322	1435	1580	1679		
AQUATIC MAMMALS	2	2	1	1	1	1	1	1	1	1		
AQUATIC ANIMALS	6	13	4	14	10	19	19	20	20	22		
AQUATIC PLANTS	965	1434	1606	1519	1601	1399	1419	1535	1675	1726		
FOREST PRODUCTS 2/												
SAWLOGS CONIFEROUS	27944	28588	29311	30973	30984	27923	28442	29419	33965	33965	33965	1.76
SAWLOGS NONCONIFEROUS	17942	18535	19005	20031	19665	18473	18779	19383	22283	22283	22283	2.01
PULPWOOD+PARTICLES	4476	4671	4876	5089	5074	4670	4752	4893	5614	5614	5614	1.97
FUELWOOD	170100	173263	176538	179956	183467	187081	190792	194587	198435	202372	202990	1.88
SAWNWOOD CONIFEROUS	11697	12188	12745	13318	13887	14511	15162	15695	18134	18134	18134	4.89
SAWNWOOD NONCONIFEROUS	7039	7445	7728	8025	8323	8652	9019	9291	10742	10742	10742	4.59
WOOD-BASED PANELS	1429	1516	2023	2160	2303	2388	2566	2742	2807	2807	2807	6.97
PULP FOR PAPER	3345	3698	4295	4699	4932	4969	4942	5414	5976	7210	1698	.51
PAPER+PAPERBOARD	4289	4580	5243	6031	6438	6509	7015	8433	9591	11169	11173	10.44

1/ NOMINAL CATCH (LIVE WEIGHT) EXCLUDING WHALES
2/ EXCEPT FOR PULP FOR PAPER AND PAPER AND PAPERBOARD, ALL FOREST PRODUCTS ARE EXPRESSED IN THOUSAND CUBIC METRES

ANNEX TABLE 2. INDICES OF FOOD PRODUCTION

	TOTAL						PER CAPUT					
	1982	1983	1984	1985	1986	CHANGE 1985 TO 1986	1982	1983	1984	1985	1986	CHANGE 1985 TO 1986
	1979-81=100					PERCENT	1979-81=100					PERCENT
WORLD	106	106	111	113	116	2.12	102	101	104	104	105	.49
DEVELOPED COUNTRIES	104	100	107	108	109	1.26	103	98	104	104	105	.59
WESTERN EUROPE	105	103	110	106	107	.67	104	102	108	105	105	.47
EUROPEAN ECON COMMUNITY	104	103	110	107	108	.72	104	102	108	105	106	.54
BELGIUM-LUXEMBOURG	97	94	104	104	104	-.11	97	94	104	104	104	-.20
DENMARK	111	105	127	123	126	1.94	111	105	127	124	126	1.94
FRANCE	105	101	110	110	108	-1.96	104	100	108	107	105	-2.26
GERMANY FED.REP. OF	109	106	114	108	115	6.41	109	106	114	109	116	6.60
GREECE	109	102	107	103	99	-3.46	107	100	104	99	96	-3.85
IRELAND	98	99	113	111	106	-4.11	95	96	107	104	99	-5.31
ITALY	99	108	100	101	101	.08	99	107	99	100	100	-.01
NETHERLANDS	109	107	110	104	111	6.59	108	105	107	101	108	6.23
UNITED KINGDOM	103	105	115	109	112	2.99	103	105	115	108	111	2.96
OTHER WESTERN EUROPE	109	106	110	104	104	.34	108	104	108	102	102	.04
AUSTRIA	112	107	111	109	104	-4.03	112	107	111	109	104	-4.05
FINLAND	107	117	114	113	112	-1.05	106	115	112	110	108	-1.35
ICELAND	99	96	98	99	97	-1.79	96	93	93	93	91	-2.59
MALTA	115	114	109	113	119	5.82	113	112	106	108	114	5.00
NORWAY	109	104	114	111	105	-5.92	108	103	112	110	103	-6.08
PORTUGAL	106	94	103	104	105	.78	104	92	100	100	100	.14
SPAIN	103	95	112	107	105	-2.51	102	93	109	104	101	-3.11
SWEDEN	106	105	114	103	103		105	104	114	103	103	.11
SWITZERLAND	110	105	108	108	108	-.35	108	103	106	106	105	-.40
YUGOSLAVIA	109	104	107	99	102	3.38	108	102	104	95	98	2.73
USSR AND EASTERN EUROPE	104	108	110	110	117	6.49	103	105	107	106	112	5.64
EASTERN EUROPE	104	104	111	109	115	5.86	103	102	109	106	112	5.32
ALBANIA	102	109	109	109	108	-.61	98	102	100	98	95	-2.69
BULGARIA	110	101	109	95	106	11.37	110	101	108	93	104	10.95
CZECHOSLOVAKIA	109	114	120	117	119	1.78	109	113	119	116	117	1.46
GERMAN DEMOCRATIC REP.	97	98	105	111	109	-1.69	97	98	106	111	109	-1.83
HUNGARY	112	109	116	108	109	1.23	112	109	116	109	110	1.31
POLAND	100	104	107	109	116	6.06	98	101	103	105	110	5.32
ROMANIA	106	104	116	109	125	14.36	104	102	114	107	121	13.58
USSR	104	109	110	110	117	6.00	102	106	106	105	110	5.02
NORTH AMERICA DEVELOPED	106	89	102	109	106	-2.74	104	87	98	103	100	-3.58
CANADA	117	109	108	112	124	10.66	114	106	104	106	116	9.54
UNITED STATES	105	90	102	108	104	-3.80	103	87	98	103	98	-4.62
OCEANIA DEVELOPED	93	111	106	106	107	.52	91	107	101	100	99	-.66
AUSTRALIA	87	116	110	105	108	2.66	85	111	104	98	100	1.38
NEW ZEALAND	104	107	106	116	110	-4.99	104	105	103	112	105	-5.80
OTHER DEV.ED COUNTRIES	100	95	101	104	106	1.42	98	92	97	99	100	.46
ISRAEL	107	117	111	124	116	-6.45	102	110	102	112	103	-7.98
JAPAN	99	99	110	110	111	.38	98	97	107	107	106	-.13
SOUTH AFRICA	96	79	89	95	99	4.18	92	73	81	84	85	1.58
DEVELOPING COUNTRIES	107	112	116	119	123	2.94	103	105	107	108	109	.98
AFRICA DEVELOPING	105	103	103	113	118	3.94	99	95	92	97	98	.74
NORTH WESTERN AFRICA	101	104	105	119	128	7.57	96	96	95	105	109	4.73
ALGERIA	96	102	108	121	125	2.89	90	93	96	104	104	-.35
MOROCCO	115	105	107	114	137	20.12	110	98	97	101	118	17.39
TUNISIA	91	106	104	134	120	-10.61	88	99	96	121	106	-12.54
WESTERN AFRICA	106	102	110	117	122	4.42	99	93	97	100	101	1.07
BENIN	99	103	126	133	139	4.93	94	94	112	114	116	1.72
BURKINA FASO	105	107	106	130	146	11.94	100	99	96	116	126	9.02
COTE D'IVOIRE	99	102	117	126	122	-3.68	92	91	101	105	98	-6.95
GAMBIA	143	100	110	136	136	-.45	138	95	102	124	121	-2.57
GHANA	97	89	131	124	138	11.29	91	81	115	106	114	7.61
GUINEA	107	100	102	103	108	4.90	102	93	93	92	94	2.34
LIBERIA	104	112	115	115	118	2.70	97	102	101	98	97	-.57
MALI	116	122	113	109	122	11.84	110	112	101	95	103	8.60
MAURITANIA	99	91	94	96	110	11.71	93	84	84	85	92	8.33
NIGER	100	102	82	104	108	3.72	95	94	73	91	91	.64
NIGERIA	109	107	113	123	129	4.61	102	97	99	104	105	1.02
SENEGAL	122	88	104	123	117	-5.00	115	81	94	109	100	-7.54
SIERRA LEONE	112	116	105	101	112	10.90	109	110	98	93	101	8.79
TOGO	100	94	106	105	100	-4.76	94	87	94	91	84	-7.63
CENTRAL AFRICA	103	105	105	109	111	1.66	98	97	94	95	94	-1.18
ANGOLA	101	102	102	102	102	.20	96	94	92	90	87	-2.43
CAMEROON	103	104	104	108	111	2.74	98	96	93	95	95	-.11
CENTRAL AFRICAN REP	105	106	103	98	108	9.84	100	99	95	87	94	7.22
CHAD	100	105	96	119	122	2.61	96	98	88	106	106	.14
CONGO	106	102	103	106	108	1.93	101	94	93	93	92	-.80
GABON	104	107	107	103	107	2.32	101	102	100	97	97	.31
ZAIRE	108	110	113	116	117	.99	102	101	101	100	98	-2.03
EASTERN AFRICA	106	104	97	109	113	3.13	100	95	85	94	93	-.15
BURUNDI	107	106	103	111	115	3.44	101	98	92	97	97	.55

ANNEX TABLE 2. (Cont.) INDICES OF FOOD PRODUCTION

	TOTAL						PER CAPUT					
	1982	1983	1984	1985	1986	CHANGE 1985 TO 1986	1982	1983	1984	1985	1986	CHANGE 1985 TO 1986
	1979-81=100					PERCENT	1979-81=100					PERCENT
ETHIOPIA	107	100	90	99	102	3.19	102	93	82	88	88	.34
KENYA	114	112	84	111	119	7.36	105	99	72	90	93	2.94
MADAGASCAR	104	110	111	114	114	-.04	99	101	100	99	96	-2.90
MALAWI	106	103	104	105	106	1.69	100	94	92	90	88	-1.62
MAURITIUS	121	103	101	111	120	7.77	116	97	93	101	107	6.05
MOZAMBIQUE	102	97	96	98	101	2.89	96	89	86	85	85	.15
RWANDA	112	119	97	103	106	2.77	104	108	85	87	87	-.62
SOMALIA	106	101	100	106	108	1.19	100	92	88	92	91	-.92
TANZANIA	100	104	109	110	114	2.90	94	93	95	93	92	-.78
UGANDA	117	125	94	146	152	4.10	110	113	83	124	125	.53
ZAMBIA	98	103	104	114	118	2.78	92	94	91	97	96	-.68
ZIMBABWE	102	80	88	125	122	-2.35	96	72	77	106	99	-5.81
SOUTHERN AFRICA	104	99	98	101	102	.96	98	91	87	87	86	-2.06
BOTSWANA	105	98	92	98	99	.99	97	88	79	81	78	-2.70
LESOTHO	86	89	89	100	93	-7.31	81	83	80	88	79	-9.69
SWAZILAND	108	111	112	111	113	1.88	102	102	99	95	94	-1.31
LATIN AMERICA	107	106	110	113	113	.39	102	99	100	101	99	-1.76
CENTRAL AMERICA	102	107	108	109	112	2.90	97	99	97	95	96	.35
COSTA RICA	94	96	102	105	109	3.33	89	89	92	92	93	.85
EL SALVADOR	87	92	103	104	100	-4.28	82	84	92	90	84	-7.21
GUATEMALA	111	111	111	112	112	.16	105	102	100	97	95	-2.69
HONDURAS	102	96	95	100	110	9.66	96	87	83	85	90	6.31
MEXICO	102	109	111	111	113	1.80	97	101	100	97	97	-.60
NICARAGUA	93	92	89	90	91	.68	87	83	77	76	74	-2.65
PANAMA	102	108	107	112	106	-5.11	98	102	98	100	93	-7.08
CARIBBEAN	104	104	109	106	107	1.11	101	99	102	98	97	-.57
BARBADOS	86	81	85	86	92	6.92	85	80	84	85	90	6.08
CUBA	108	105	114	112	113	.81	107	103	111	108	108	-.17
DOMINICAN REPUBLIC	105	111	115	112	111	-.31	101	103	105	99	97	-2.48
HAITI	100	104	107	106	110	3.34	95	97	97	94	94	.67
JAMAICA	94	102	112	109	108	-.71	91	98	105	101	99	-2.21
SOUTH AMERICA	108	105	110	115	114	-.32	103	99	101	103	100	-2.37
ARGENTINA	108	105	108	104	109	4.25	104	100	101	96	99	2.74
BOLIVIA	111	84	103	111	104	-6.46	105	78	92	97	89	-9.00
BRAZIL	113	108	115	123	119	-3.36	108	101	105	110	104	-5.35
CHILE	104	99	104	108	116	8.02	101	95	98	100	106	6.39
COLOMBIA	101	99	104	106	110	4.00	96	93	96	95	97	1.88
ECUADOR	107	92	103	117	120	1.96	101	85	92	102	101	-.84
GUYANA	103	93	88	89	91	1.76	98	88	81	81	81	-.03
PARAGUAY	108	112	108	121	116	-4.04	101	102	96	104	97	-6.68
PERU	111	104	115	114	112	-1.15	105	96	104	100	96	-3.60
URUGUAY	112	115	105	106	102	-3.84	111	113	102	102	98	-4.57
VENEZUELA	98	105	103	106	110	3.83	93	96	92	92	93	1.15
NEAR EAST DEVELOPING	109	108	106	113	118	4.95	103	100	96	99	101	2.01
NEAR EAST IN AFRICA	106	109	106	115	119	3.63	100	100	96	100	101	1.05
EGYPT	110	113	113	119	120	1.04	105	105	102	105	104	-1.23
LIBYA	142	142	138	172	178	3.67	131	126	118	141	141	-.07
SUDAN	100	102	93	115	123	6.58	94	93	83	100	104	3.55
NEAR EAST IN ASIA	110	107	106	112	118	5.40	104	100	96	99	101	2.31
AFGHANISTAN	103	104	104	103	99	-4.28	102	102	101	100	92	-8.79
CYPRUS	108	92	103	96	96	.02	105	89	98	90	89	-1.02
IRAN	113	110	110	114	117	2.84	107	101	98	98	98	.03
IRAQ	115	112	109	132	147	10.79	107	100	94	111	119	7.19
JORDAN	109	116	121	120	125	3.79	102	105	105	100	100	-.27
LEBANON	119	106	108	123	129	5.18	120	108	109	123	127	2.98
SAUDI ARABIA	124	158	157	246	260	5.72	113	138	132	198	202	1.73
SYRIA	114	113	101	109	123	13.00	107	102	88	91	99	8.91
TURKEY	107	106	106	110	116	5.28	103	99	98	99	103	3.13
YEMEN ARAB REPUBLIC	109	102	113	122	140	14.79	103	94	101	106	119	11.49
YEMEN DEMOCRATIC	95	100	101	100	98	-2.15	90	92	90	87	83	-5.04
FAR EAST DEVELOPING	105	114	117	121	123	1.68	101	107	108	109	109	-.19
SOUTH ASIA	104	116	118	121	123	1.48	100	109	108	109	108	-.40
BANGLADESH	105	108	110	114	118	2.87	100	99	98	100	100	.22
INDIA	104	118	120	123	124	.59	100	111	111	112	111	-1.13
NEPAL	99	115	115	116	112	-3.93	94	107	105	103	97	-6.09
PAKISTAN	107	111	113	117	124	6.12	101	101	100	100	104	3.78
SRI LANKA	91	100	90	95	101	6.27	88	95	83	87	91	4.71
EAST SOUTH-EAST ASIA	107	111	117	120	123	2.05	103	104	108	109	109	.21
BURMA	118	122	129	136	143	3.65	113	116	119	125	127	1.71
INDONESIA	108	115	127	129	134	3.98	104	108	117	117	119	2.19
KOREA REP	101	103	109	111	117	5.12	98	98	103	103	106	3.39
LAO	111	116	129	141	147	4.55	107	109	118	127	129	1.56
MALAYSIA	114	108	115	123	130	5.30	108	100	104	109	112	3.08
PHILIPPINES	101	101	102	106	110	3.58	96	94	93	94	95	1.28
THAILAND	109	116	118	122	118	-3.19	105	109	109	111	105	-4.73
ASIAN CENT PLANNED ECON	110	118	125	127	133	5.08	107	113	119	118	123	3.77
CHINA	113	117	125	129	133	3.29	107	113	119	118	123	4.05
KAMPUCHEA,DEMOCRATIC	118	139	154	166	163	-1.26	113	130	140	147	142	-3.68
KOREA DPR	115	110	116	121	123	1.78	100	102	105	107	106	-.60
MONGOLIA	107	112	108	109	113	3.46	101	103	97	95	96	.66
VIET NAM	110	115	122	128	134	4.56	106	109	113	116	119	2.44
OTHER DEV.ING COUNTRIES	103	99	109	111	113	1.79	99	92	99	98	97	-.49

ANNEX TABLE 3. INDICES OF AGRICULTURAL PRODUCTION

	TOTAL						PER CAPUT					
	1982	1983	1984	1985	1986	CHANGE 1985 TO 1986	1982	1983	1984	1985	1986	CHANGE 1985 TO 1986
	1979-81=100					PERCENT	1979-81=100					PERCENT
WORLO	106	106	111	114	115	1.26	102	100	104	105	104	-.35
DEVELOPEO COUNTRIES	104	100	106	108	109	.86	103	97	103	104	104	.20
WESTERN EUROPE	105	103	110	107	107	.64	104	102	108	105	106	.44
EUROPEAN ECON COMMUNITY	104	103	110	107	108	.67	104	102	108	106	106	.49
BELGIUM-LUXEMBOURG	97	94	104	104	104	-.12	97	94	104	104	104	-.21
OENMARK	111	105	127	123	126	1.94	111	105	127	124	126	1.94
FRANCE	105	101	110	110	107	-2.02	103	100	108	107	105	-2.32
GERMANY FEO.REP. OF	109	106	114	108	115	6.40	109	106	114	109	116	6.59
GREECE	108	102	108	105	102	-2.93	106	100	105	101	98	-3.32
IRELANO	98	99	112	111	106	-4.09	95	96	107	104	99	-5.30
ITALY	99	108	100	101	101	-.02	99	108	99	100	100	-.11
NETHERLANOS	109	107	110	104	111	6.53	108	105	107	102	108	6.17
UNITEO KINGOOM	103	105	115	109	112	2.96	103	105	114	108	111	2.93
OTHER WESTERN EUROPE	109	106	110	104	104	.44	108	104	108	102	102	.13
AUSTRIA	112	107	111	109	105	-4.03	112	107	111	109	104	-4.04
FINLANO	107	117	114	113	112	-1.05	106	115	112	110	108	-1.35
ICELANO	99	96	98	99	97	-1.74	96	93	93	93	91	-2.54
MALTA	115	114	109	113	119	5.82	113	112	106	108	114	5.00
NORWAY	109	104	114	112	105	-5.82	108	103	112	110	103	-5.98
PORTUGAL	106	94	103	104	105	.78	104	92	100	100	100	.14
SPAIN	103	95	112	108	105	-2.31	102	93	109	104	101	-2.91
SWEOEN	106	105	114	103	103		105	104	114	103	103	.11
SWITZERLANO	109	105	108	108	108	-.30	108	103	106	106	105	-.35
YUGOSLAVIA	110	104	107	99	103	3.51	108	102	104	96	98	2.86
USSR ANO EASTERN EUROPE	104	108	109	109	116	6.04	103	105	106	105	111	5.20
EASTERN EUROPE	104	104	111	109	115	5.65	103	102	109	106	112	5.12
ALBANIA	102	108	108	109	108	-.57	97	101	99	97	95	-2.64
BULGARIA	110	99	108	94	103	8.84	109	98	107	93	101	8.43
CZECHOSLOVAKIA	109	114	120	117	119	1.63	109	113	119	116	117	1.31
GERMAN OEMOCRATIC REP.	97	98	106	111	110	-1.41	98	98	106	112	110	-1.55
HUNGARY	112	109	116	108	109	1.15	112	109	116	109	110	1.23
POLANO	99	104	107	109	116	5.73	97	101	103	105	110	4.99
ROMANIA	105	103	116	109	125	14.16	104	102	114	107	121	13.38
USSR	104	109	109	109	115	5.51	102	106	105	105	109	4.54
NORTH AMERICA OEVELOPEO	105	88	102	108	104	-3.58	103	86	98	103	98	-4.42
CANAOA	116	109	108	112	123	10.09	113	105	104	106	116	8.98
UNITEO STATES	104	88	102	107	102	-4.90	102	85	98	102	96	-5.71
OCEANIA OEVELOPEO	95	109	106	109	109	.49	93	105	101	102	101	-.69
AUSTRALIA	90	113	110	109	112	2.73	88	109	104	102	104	1.46
NEW ZEALANO	104	106	105	114	108	-5.32	103	104	102	109	103	-6.12
OTHER OEV.EO COUNTRIES	100	95	101	104	105	1.08	98	92	96	98	98	.12
ISRAEL	107	116	110	123	110	-10.33	102	109	101	111	98	-11.79
JAPAN	99	99	108	108	109	.34	97	97	105	105	104	-.17
SOUTH AFRICA	96	80	90	96	99	3.74	92	75	81	85	85	1.15
OEVELOPING COUNTRIES	107	112	116	120	122	1.62	103	105	107	108	108	-.32
AFRICA OEVELOPING	105	104	104	113	118	3.93	99	95	92	98	98	.73
NORTH WESTERN AFRICA	102	105	106	121	129	7.16	97	97	96	106	110	4.33
ALGERIA	97	103	109	122	126	2.76	91	94	96	105	105	-.48
MOROCCO	115	106	108	114	137	19.79	110	98	97	101	118	17.07
TUNISIA	92	106	104	134	120	-10.38	88	99	96	120	106	-12.31
WESTERN AFRICA	105	102	107	117	122	4.65	99	93	95	100	101	1.29
BENIN	100	105	129	136	145	6.60	94	96	115	117	121	3.33
BURKINA FASO	105	107	106	131	148	12.59	100	100	97	116	128	9.66
COTE O'IVOIRE	97	101	101	121	118	-2.15	90	90	87	101	95	-5.48
GAMBIA	143	100	110	136	135	-.44	138	94	102	123	120	-2.56
GHANA	97	89	129	123	137	11.19	91	81	114	105	113	7.52
GUINEA	106	100	102	103	108	4.72	102	94	93	92	94	2.17
LIBERIA	103	107	115	113	116	2.65	97	97	101	97	96	-.62
MALI	114	121	113	110	123	11.79	108	111	101	96	104	8.55
MAURITANIA	99	91	94	98	110	11.71	93	84	84	85	92	8.33
NIGER	100	102	82	104	108	3.73	95	94	73	91	91	.65
NIGERIA	109	107	113	123	128	4.63	102	97	99	104	105	1.04
SENEGAL	122	88	105	124	118	-4.55	116	82	95	109	101	-7.11
SIERRA LEONE	111	112	101	101	111	10.82	107	107	94	92	100	8.71
TOGO	100	95	105	108	103	-4.50	94	87	93	93	86	-7.38
CENTRAL AFRICA	104	105	107	110	112	2.10	99	96	96	96	95	-.75
ANGOLA	99	100	101	101	102	1.59	94	93	91	89	88	-1.08
CAMEROON	105	100	106	107	112	4.61	99	92	95	93	95	1.71
CENTRAL AFRICAN REP	106	105	105	99	108	9.15	101	98	96	88	94	6.54
CHAO	101	110	97	120	120	.61	97	103	89	107	105	-1.82
CONGO	106	102	103	106	108	1.69	101	94	93	93	92	-1.04
GABON	104	107	107	105	107	2.32	101	102	100	97	97	.32
ZAIRE	108	111	113	116	118	.96	102	102	101	101	99	-2.06
EASTERN AFRICA	106	104	100	110	114	2.98	100	95	88	95	94	-.30
BURUNOI	103	107	102	111	113	2.06	98	99	91	97	96	-.80

ANNEX TABLE 3. (Cont.) INDICES OF AGRICULTURAL PRODUCTION

	TOTAL						PER CAPUT					
	1982	1983	1984	1985	1986	CHANGE 1985 TO 1986	1982	1983	1984	1985	1986	CHANGE 1985 TO 1986
	1979-81=100					PERCENT	1979-81=100					PERCENT
ETHIOPIA	107	101	93	99	103	4.88	102	94	84	87	89	1.99
KENYA	112	113	100	117	127	8.57	103	100	85	95	99	4.11
MADAGASCAR	104	109	111	113	113	.22	98	100	99	98	96	-2.65
MALAWI	108	105	109	109	112	2.16	102	96	96	94	93	-1.17
MAURITIUS	119	103	104	113	121	7.07	114	97	96	103	108	5.37
MOZAMBIQUE	101	96	96	97	100	2.84	95	88	85	84	84	.11
RWANDA	110	119	100	104	107	2.42	103	107	87	89	88	-.96
SOMALIA	106	101	100	106	108	1.19	100	92	88	92	91	-.92
TANZANIA	99	102	107	108	111	2.70	92	92	93	90	89	-.97
UGANDA	118	125	97	147	153	3.65	111	114	85	125	125	.10
ZAMBIA	97	103	106	115	119	3.19	91	94	93	97	97	-.28
ZIMBABWE	99	85	101	128	123	-4.08	92	76	88	107	99	-7.48
SOUTHERN AFRICA	103	99	98	101	102	1.00	98	90	87	87	85	-2.03
BOTSWANA	105	98	92	98	99	.99	97	88	79	81	78	-2.71
LESOTHO	87	91	91	101	94	-6.67	83	85	82	89	81	-9.06
SWAZILAND	108	111	112	111	113	1.70	102	102	99	95	94	-1.49
LATIN AMERICA	105	105	109	113	111	-1.62	100	98	99	101	97	-3.72
CENTRAL AMERICA	101	105	106	106	108	1.56	95	97	95	93	92	-.97
COSTA RICA	97	101	108	115	111	-3.53	92	93	97	101	95	-5.85
EL SALVADOR	84	89	94	94	85	-9.87	79	81	83	81	71	-12.63
GUATEMALA	107	103	105	102	101	-1.09	101	94	93	89	85	-3.90
HONDURAS	102	99	98	102	108	5.72	95	90	85	86	88	2.48
MEXICO	102	109	109	109	111	1.54	97	100	98	96	95	-.85
NICARAGUA	98	92	92	91	86	-5.56	92	83	80	77	70	-8.69
PANAMA	103	109	109	113	110	-2.01	98	102	100	101	97	-4.03
CARIBBEAN	104	103	109	106	106	.33	101	99	102	98	97	-1.33
BARBADOS	86	81	85	86	92	6.92	85	80	84	85	90	6.08
CUBA	109	105	114	112	113	.73	108	103	112	109	109	-.25
DOMINICAN REPUBLIC	105	111	115	111	106	-4.82	101	104	105	99	92	-6.89
HAITI	100	105	107	106	110	3.42	95	97	97	94	94	.75
JAMAICA	94	102	111	109	108	-.53	91	98	105	101	99	-2.04
SOUTH AMERICA	106	105	109	115	112	-2.58	102	98	100	103	98	-4.58
ARGENTINA	108	104	108	104	108	3.77	104	99	101	96	98	2.27
BOLIVIA	110	84	102	109	103	-6.12	104	78	91	96	87	-8.68
BRAZIL	108	107	113	124	115	-7.66	104	101	104	111	101	-9.55
CHILE	104	99	104	108	116	7.89	101	95	98	100	106	6.27
COLOMBIA	101	100	103	103	107	3.55	97	94	94	93	94	1.44
ECUADOR	107	92	104	119	122	2.86	101	84	93	103	103	.03
GUYANA	102	93	88	89	91	1.75	98	88	81	81	81	-.03
PARAGUAY	108	110	110	129	120	-6.82	102	100	97	111	101	-9.38
PERU	105	101	113	111	110	-1.00	100	94	101	98	94	-3.46
URUGUAY	112	115	106	109	107	-1.92	110	113	103	105	103	-2.66
VENEZUELA	98	105	103	108	111	3.59	92	96	92	93	94	.91
NEAR EAST DEVELOPING	108	108	106	112	117	4.30	103	100	96	98	100	1.39
NEAR EAST IN AFRICA	105	107	105	113	116	2.56	99	99	95	99	99	
EGYPT	107	108	108	114	115	.91	102	101	98	101	100	-1.35
LIBYA	142	142	137	171	177	3.65	131	126	117	141	141	-.09
SUDAN	101	105	98	118	123	4.17	96	97	88	102	104	1.21
NEAR EAST IN ASIA	109	108	106	112	117	4.92	104	100	96	98	100	1.84
AFGHANISTAN	101	103	103	103	99	-4.01	100	101	101	100	91	-8.53
CYPRUS	107	92	103	96	96	-.02	105	89	98	90	89	-1.05
IRAN	113	110	110	113	117	2.97	107	101	98	98	98	.16
IRAQ	115	112	110	133	147	10.62	107	101	95	111	119	7.02
JORDAN	109	117	120	120	124	3.64	102	106	105	100	100	-.41
LEBANON	118	106	107	122	128	5.14	119	107	108	122	125	2.94
SAUDI ARABIA	124	157	157	245	259	5.68	113	138	132	197	201	1.70
SYRIA	115	116	103	110	124	12.41	107	105	90	93	100	8.34
TURKEY	107	106	106	110	115	4.67	103	99	98	99	101	2.53
YEMEN ARAB REPUBLIC	109	102	112	121	139	14.62	103	94	101	106	118	11.32
YEMEN DEMOCRATIC	95	101	102	101	99	-2.03	90	93	91	88	84	-4.93
FAR EAST DEVELOPING	105	113	117	121	122	1.05	101	106	107	109	108	-.81
SOUTH ASIA	104	114	117	121	122	.43	100	107	108	109	108	-1.43
BANGLADESH	105	107	109	116	116	.15	100	99	98	101	99	-2.43
INDIA	104	117	120	123	123	-.26	100	110	111	112	110	-1.96
NEPAL	98	114	113	115	111	-3.42	94	106	103	102	97	-5.59
PAKISTAN	107	107	115	121	128	5.59	101	98	102	104	107	3.26
SRI LANKA	93	99	91	97	103	5.58	90	94	85	89	92	4.03
EAST SOUTH-EAST ASIA	107	110	116	120	122	2.21	103	104	107	108	109	.37
BURMA	117	122	128	137	141	3.30	112	115	118	124	126	1.37
INDONESIA	107	114	125	128	133	4.16	103	107	116	116	119	2.37
KOREA REP	102	102	109	110	116	5.10	99	98	102	102	105	3.37
LAO	111	116	129	140	146	4.15	107	109	118	126	128	1.66
MALAYSIA	110	106	112	117	122	4.34	105	99	101	104	106	2.14
PHILIPPINES	103	101	102	106	110	3.61	98	94	93	94	95	1.31
THAILAND	109	115	118	123	120	-2.48	105	109	109	111	107	-4.03
ASIAN CENT PLANNED ECON	112	119	129	129	133	2.98	109	115	123	121	123	1.69
CHINA	112	119	130	129	133	2.99	109	115	123	121	123	1.78
KAMPUCHEA, DEMOCRATIC	117	139	154	167	165	-1.14	113	130	141	148	143	-3.56
KOREA OPR	105	110	116	121	123	1.82	100	102	105	107	106	-.55
MONGOLIA	107	111	106	107	110	3.15	101	102	95	93	94	.36
VIET NAM	110	115	122	129	135	4.57	106	109	113	117	120	2.44
OTHER DEV.ING COUNTRIES	101	100	108	110	112	1.94	97	93	97	97	97	-.34

ANNEX TABLE 4. VOLUME OF EXPORTS OF MAJOR AGRICULTURAL, FISHERY AND FOREST PRODUCTS

	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	ANNUAL RATE OF CHANGE 1975-85
	THOUSAND METRIC TONS											PERCENT
WORLD												
AGRICULTURAL PRODUCTS												
WHEAT+FLOUR,WHEAT EQUIV.	73824	69064	74486	84921	81563	99527	105202	104979	111816	116489	104994	5.37
RICE MILLED	7724	8916	10853	9600	11644	12978	13093	12044	11436	12680	10851	3.55
BARLEY	12604	13930	13112	14585	14106	16226	20277	18346	17754	23008	21808	6.07
MAIZE	52085	62377	57764	68792	76096	80304	79442	70040	69045	68961	69597	2.27
MILLET	207	303	272	315	296	214	242	226	220	178	181	-3.82
SORGHUM	10156	11161	11937	10923	11365	11164	14464	13724	11728	12381	12885	2.07
POTATOES	3931	4411	4696	4038	4630	4921	4949	5204	4779	4722	5079	2.00
SUGAR,TOTAL (RAW EQUIV.)	21937	23185	28985	26139	26686	27510	29344	30725	29706	28675	28286	2.40
PULSES	1788	1906	1981	2116	2349	2815	3148	2968	3148	3289	3683	7.69
SOYBEANS	16479	19766	20025	24062	25489	26877	26219	28928	26585	25775	25527	4.17
SOYBEAN OIL	1365	1839	2106	2610	2953	3196	3488	3406	3651	4026	3490	9.70
GROUNDNUTS SHELLED BASIS	899	1035	874	745	744	730	826	730	759	748	805	-2.00
GROUNDNUT OIL	402	561	581	418	502	474	320	447	495	290	315	-4.15
COPRA	1082	1147	941	703	443	461	415	430	256	289	381	-13.29
COCONUT OIL	1043	1374	1110	1334	1142	1216	1357	1264	1324	991	1233	.11
PALM NUTS KERNELS	308	391	279	181	160	201	138	111	120	130	93	-12.01
PALM OIL	2043	2186	2333	2404	2845	3614	3227	3773	4014	4302	5233	9.58
OILSEED CAKE AND MEAL	14463	18820	19110	21873	23221	25687	27706	27602	31863	28498	30562	7.13
BANANAS	6370	6341	6658	7045	6948	6957	6998	7291	6335	6999	6943	.69
ORANGES+TANGER+CLEMEN	5165	5154	5404	5212	4967	5140	4998	5033	4836	5323	4955	-.43
LEMONS AND LIMES	813	967	894	982	921	996	936	1016	951	1018	1011	1.43
COFFEE GREEN+ROASTED	3573	3656	2934	3441	3796	3706	3708	3928	4039	4210	4404	2.59
COCOA BEANS	1160	1148	972	1086	930	1064	1329	1251	1206	1349	1444	2.79
TEA	813	852	904	885	903	981	950	919	980	1081	1080	2.52
COTTON LINT	3994	4049	3929	4472	4373	4832	4264	4417	4307	4316	4211	.68
JUTE AND SIMILAR FIBRES	590	668	565	496	561	520	573	513	500	490	340	-3.81
TOBACCO UNMANUFACTURED	1251	1306	1280	1432	1374	1353	1490	1429	1342	1396	1354	.80
NATURAL RUBBER	3011	3249	3292	3317	3422	3330	3148	3116	3450	3654	3685	1.29
WOOL GREASY	853	1010	1103	890	937	907	952	874	893	879	905	-.83
BOVINE CATTLE 1/	6681	6769	6675	7580	7442	7024	7218	7595	7384	7088	6819	.51
SHEEP AND GOATS 1/	11830	10776	12430	14776	15267	18639	17607	18572	20420	19238	18763	6.29
PIGS 1/	6428	6945	6942	7951	8421	10746	9846	9357	9575	10123	10065	4.84
TOTAL MEAT	5547	6264	6811	7170	7829	8094	8860	8583	8944	8793	8966	4.71
MILK DRY	391	457	586	602	662	871	868	816	742	827	844	7.36
TOTAL EGGS IN SHELL	535	518	573	606	656	746	807	826	794	841	775	5.22
FISHERY PRODUCTS												
FISH FRESH FROZEN	2893	2975	3364	3894	4197	4360	4486	4444	4838	4718	4990	5.60
FISH CURED	434	437	406	405	445	455	479	448	424	408	405	-.20
SHELLFISH	760	896	848	985	1137	1056	1121	1243	1374	1510	1649	7.40
FISH CANNED AND PREPARED	721	841	792	844	887	1021	1033	946	910	976	1031	2.93
SHELLFISH CANNED+PREPAR	88	94	115	112	115	138	148	161	184	195	204	9.03
FISH BODY AND LIVER OIL	597	567	581	696	728	746	728	730	733	948	1049	5.29
FISH MEAL	2188	2118	2056	2101	2342	2369	2178	2687	2360	2648	3239	3.41
FOREST PRODUCTS 2/												
SAWLOGS CONIFEROUS	23898	28411	28593	29773	31753	27909	22485	26315	29386	30888	32577	1.26
SAWLOGS NONCONIFEROUS	36239	45376	47067	48311	45953	42001	32973	33260	32248	29593	29972	-4.33
PULPWOOD+PARTICLE	31876	33858	35121	32616	36223	40643	39495	34471	34712	38588	39668	1.63
FUELWOOD	2229	1998	2423	1894	2243	2780	2248	2392	2715	2720	2475	2.36
SAWNWOOD CONIFEROUS	43250	56294	61710	65879	68743	65938	60646	61439	70576	72755	73472	3.53
SAWNWOOD NONCONIFEROUS	7918	11425	11168	11994	13380	12545	10950	10923	12506	12576	11780	2.13
WOOD-BASED PANELS	12436	14384	14971	16401	16680	16323	16759	15452	17404	18013	18860	3.06
PULP FOR PAPER	13660	15523	15594	17489	18704	19749	18746	17310	19748	20271	20610	3.53
PAPER AND PAPERBOARD	23074	27090	28292	30273	33278	35034	35356	33618	36721	39789	40439	5.03
WESTERN EUROPE												
AGRICULTURAL PRODUCTS												
WHEAT+FLOUR,WHEAT EQUIV.	14417	14499	12860	13773	16091	19926	23693	22408	23811	27408	29646	8.88
RICE MILLED	613	660	738	839	874	943	999	933	941	984	1198	5.63
BARLEY	5686	5078	4408	8634	7199	8052	10795	7416	8390	11526	12791	8.89
MAIZE	5666	5876	4457	4869	5050	5474	4808	5743	7705	7809	7029	3.83
MILLET	15	11	12	12	13	15	20	20	26	20	24	8.31
SORGHUM	737	771	385	262	308	206	240	269	159	165	190	-13.40
POTATOES	2589	2337	2707	2798	3016	3455	3543	3666	3517	3491	3777	4.63
SUGAR,TOTAL (RAW EQUIV.)	2249	3072	3924	4448	4632	5628	6147	6466	6078	5631	5258	8.54
PULSES	323	226	302	353	450	458	448	419	606	814	1237	13.84
SOYBEANS	111	189	120	237	353	327	160	207	127	88	95	-4.22

1/ THOUSAND HEAD
2/ EXCEPT FOR PULP FOR PAPER AND PAPER AND PAPERBOARD, ALL FOREST PRODUCTS ARE EXPRESSED IN THOUSAND CUBIC METRES

ANNEX TABLE 4. (Cont.) VOLUME OF EXPORTS OF MAJOR AGRICULTURAL, FISHERY AND FOREST PRODUCTS

	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	ANNUAL RATE OF CHANGE 1975-85
	THOUSAND METRIC TONS											PERCENT
SOYBEAN OIL	719	744	767	1099	1208	1204	1272	1380	1387	1427	1324	7.49
GROUNONUTS SHELLED BASIS	13	24	21	28	14	18	24	25	17	24	24	2.35
GROUNDNUT OIL	74	49	44	45	64	79	68	74	99	62	61	3.22
COPRA	1	17	3	4	1	2		1				-39.38
COCONUT OIL	203	269	163	119	61	43	58	87	60	57	51	-14.16
PALM NUTS KERNELS	1	1	1	1	2	3	1	2				-26.87
PALM OIL	86	98	111	97	92	123	114	94	123	131	141	3.77
OILSEED CAKE AND MEAL	2251	2630	2518	3437	3957	4247	4921	5330	6417	6113	6378	12.02
BANANAS	35	25	31	41	43	43	48	46	35	47	35	3.02
ORANGES+TANGER+CLEMEN	1999	2057	2113	1921	1907	1799	1659	1880	1702	2425	1956	-.26
LEMONS AND LIMES	461	525	464	505	483	512	430	574	449	532	542	.82
COFFEE GREEN+ROASTED	86	92	78	102	130	106	122	126	142	165	202	8.28
COCOA BEANS	11	15	30	34	31	44	48	52	52	66	76	18.16
TEA	43	46	60	50	46	43	44	43	51	56	56	1.20
COTTON LINT	65	89	70	71	60	57	55	75	69	68	98	.91
JUTE AND SIMILAR FIBRES	21	18	17	19	16	17	17	15	16	14	14	-3.23
TOBACCO UNMANUFACTURED	177	179	153	223	234	197	210	247	249	265	243	4.35
NATURAL RUBBER	29	32	27	21	21	16	14	15	16	23	23	-4.62
WOOL GREASY	55	64	57	60	65	69	61	57	69	65	62	.98
BOVINE CATTLE 1/	3416	3121	2979	3322	3340	3412	3620	3546	3493	3537	3480	1.17
SHEEP AND GOATS 1/	1152	1183	1318	1732	1384	1418	927	784	1196	1137	1411	-1.28
PIGS 1/	2596	3112	3106	3421	4004	4777	4747	4537	4737	4688	4755	6.25
TOTAL MEAT	2433	2395	2648	2894	3173	3673	3900	3785	4075	4303	4451	6.96
MILK DRY	285	334	433	450	516	660	673	599	531	641	623	7.52
TOTAL EGGS IN SHELL	326	335	349	382	444	506	538	601	596	586	542	7.05
FISHERY PRODUCTS												
FISH FRESH FROZEN	1054	1086	1137	1398	1686	1642	1788	1874	1966	1915	2018	7.35
FISH CURED	278	287	259	254	276	279	309	274	271	268	266	-.08
SHELLFISH	250	277	234	266	283	280	327	314	344	405	413	5.28
FISH CANNED AND PREPARED	207	249	249	262	265	258	261	263	266	275	277	1.87
SHELLFISH CANNED+PREPAR	27	32	34	36	38	42	47	57	72	75	80	11.75
FISH BODY AND LIVER OIL	249	319	339	271	297	333	335	270	265	272	392	.92
FISH MEAL	864	948	1020	871	951	922	846	826	936	1008	970	.31
FOREST PRODUCTS 2/												
SAWLOGS CONIFEROUS	1704	2428	2590	1899	2395	2937	2735	2429	2494	2786	3282	4.02
SAWLOGS NONCONIFEROUS	1665	1833	2077	2017	2055	2257	2128	1928	2011	2335	2458	2.54
PULPWOOD+PARTICLE	8627	8173	7575	6846	8321	10313	10737	9666	8771	10597	12176	3.84
FUELWOOD	987	816	1033	551	797	965	745	1010	1172	1172	940	2.51
SAWNWOOD CONIFEROUS	12640	17061	16554	18051	20349	19783	17142	18334	20620	20377	19637	3.17
SAWNWOOD NONCONIFEROUS	1607	2801	2494	2756	2514	2395	2037	1896	2017	2428	2287	-.36
WOOD-BASED PANELS	5171	6151	6194	6737	7386	7047	6696	6321	6474	6906	7225	1.87
PULP FOR PAPER	5199	5697	5578	6705	6852	6654	6210	5612	6726	7068	7183	2.38
PAPER AND PAPERBOARD	10655	13098	13753	15659	17385	17423	18108	17770	19624	21939	22807	6.79
USSR AND EASTERN EUROPE												
AGRICULTURAL PRODUCTS												
WHEAT+FLOUR,WHEAT EQUIV.	5335	4164	5443	3969	5002	4170	4380	5092	4042	3805	4610	-1.46
RICE MILLED	16	11	11	13	24	33	25	28	38	64	41	16.92
BARLEY	1040	943	1725	222	232	336	247	276	276	277	270	-14.05
MAIZE	983	1536	1318	1493	554	1325	1770	1326	860	854	977	-2.45
MILLET	3	7	3	3	5	6	3	5	4	3	2	-3.57
SORGHUM	10	11	5	7	7	5	9	6	4	4	6	-6.58
POTATOES	490	442	682	371	655	322	323	299	185	141	308	-10.27
SUGAR,TOTAL (RAW EQUIV.)	438	573	808	953	717	738	631	807	762	871	1086	5.20
PULSES	119	112	117	135	145	122	122	112	118	178	207	3.76
SOYBEANS	11	10	32	6	30	5	4	5	5	11	6	-8.53
SOYBEAN OIL	2	12	13	7	10	17	14	20	15	35	14	17.03
GROUNONUTS SHELLED BASIS					1	1				2		
COCONUT OIL					1	1						
OILSEED CAKE AND MEAL	49	14	61	53	20	27	91	100	91	63	140	14.87
ORANGES+TANGER+CLEMEN						1	2	2	1	1		
COCOA BEANS									5	12		
TEA	17	15	22	17	17	20	18	17	26	30	19	3.36
COTTON LINT	801	887	976	865	807	863	928	970	826	653	638	-2.25
TOBACCO UNMANUFACTURED	102	101	99	89	102	103	90	88	85	81	79	-2.54
WOOL GREASY	1	1	1	2	3	3	1		1	1	1	-7.18
BOVINE CATTLE 1/	686	498	540	544	676	577	460	607	705	702	675	1.77
SHEEP AND GOATS 1/	3457	3025	3504	3800	4719	4598	3720	3654	4179	4233	3576	1.58
PIGS 1/	944	720	720	1158	1152	1144	1713	1091	973	857	939	1.70
TOTAL MEAT	627	547	658	620	744	738	779	715	758	832	801	3.38

1/ THOUSAND HEAD
2/ EXCEPT FOR PULP FOR PAPER AND PAPER AND PAPERBOARD, ALL FOREST PRODUCTS ARE EXPRESSED IN THOUSAND CUBIC METRES

ANNEX TABLE 4. (Cont.) VOLUME OF EXPORTS OF MAJOR AGRICULTURAL, FISHERY AND FOREST PRODUCTS

	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	ANNUAL RATE OF CHANGE 1975-85
	THOUSAND METRIC TONS											PERCENT
TOTAL EGGS IN SHELL	121	101	120	114	104	90	78	59	55	65	46	-9.14
FISHERY PRODUCTS												
FISH FRESH FROZEN	606	607	532	561	594	610	496	412	542	531	605	-1.17
FISH CURED	19	12	11	15	21	17	11	6	18	6		-24.42
SHELLFISH	1	1	1	1	1	2	1	38	72	70	113	73.46
FISH CANNED AND PREPARED	45	47	46	37	33	36	35	29	37	38	66	-.09
SHELLFISH CANNED+PREPAR	3	2	1	1	1	2	1	2	2	1	3	.64
FISH BODY AND LIVER OIL	4	2	1	1	1	1						
FISH MEAL	19	18	14	21	20	22	12	9	12	8	11	-7.71
FOREST PRODUCTS 2/												
SAWLOGS CONIFEROUS	8884	9534	9919	10281	8774	7430	6783	7025	7762	8085	8257	-2.50
SAWLOGS NONCONIFEROUS	354	201	315	296	404	384	285	289	315	232	198	-2.47
PULPWOOD+PARTICLE	12146	12401	12155	11375	12066	12162	12428	10730	12086	13862	13872	.92
FUELWOOD	235	92	115	141	143	183	94	70	92	121	132	-3.81
SAWNWOOD CONIFEROUS	10362	11009	10592	10782	9956	9513	9363	9630	9697	9476	9672	-1.35
SAWNWOOD NONCONIFEROUS	749	714	702	752	600	597	539	487	536	564	294	-6.51
WOOD-BASED PANELS	1588	1702	1791	1875	1842	1827	1683	1548	1598	1437	1518	-1.55
PULP FOR PAPER	673	854	856	926	827	895	896	982	1162	1217	1332	5.55
PAPER AND PAPERBOARD	1295	1480	1653	1779	1664	1732	1697	1701	1731	1718	1693	1.84
NORTH AMERICA DEVELOPED												
AGRICULTURAL PRODUCTS												
WHEAT+FLOUR,WHEAT EQUIV.	43589	38974	40736	50841	47174	54495	61342	61264	63319	65263	43504	3.71
RICE MILLED	2139	2107	2288	2279	2301	3054	3133	2540	2385	2141	1940	.21
BARLEY	4068	5432	4343	4249	4654	4195	6853	7097	7258	5876	2938	1.50
MAIZE	33526	44692	40580	50550	59414	63923	56067	49658	48099	49602	44482	2.06
MILLET				23	15	60	24	28	41	55	39	
SORGHUM	5848	5797	6139	5184	5950	8050	8032	6051	5325	6828	7239	1.75
POTATOES	369	857	503	282	289	344	395	461	363	296	321	-4.13
SUGAR,TOTAL (RAW EQUIV.)	291	122	166	149	135	654	1187	154	323	399	436	10.54
PULSES	390	400	374	390	470	913	1141	854	679	635	646	8.15
SOYBEANS	12506	15361	16234	20794	20951	21882	21980	25652	22791	19641	17052	3.72
SOYBEAN OIL	355	506	768	916	1110	1081	809	911	786	1043	588	4.80
GROUNDNUTS SHELLED BASIS	241	130	302	381	356	285	146	201	224	266	311	.99
GROUNDNUT OIL	12	48	45	40	5	18	20	10	2	7	17	-14.25
COCONUT OIL	8	26	17	9	5	19	14	13	11	21	19	3.37
OILSEED CAKE AND MEAL	4105	5370	4740	6793	6845	8009	7471	6917	7517	5563	5619	2.97
BANANAS	187	201	199	201	197	205	217	210	188	202	197	.27
ORANGES+TANGER+CLEMEN	481	461	410	356	318	482	443	353	497	374	412	-.66
LEMONS AND LIMES	183	225	236	237	173	171	176	135	163	148	144	-4.56
COFFEE GREEN+ROASTED	55	69	106	59	79	79	70	60	43	63	52	-3.08
COCOA BEANS	9	10	14	9	9	7	14	14	16	12	11	3.52
TEA	4	3	4	5	5	5	4	4	5	5	13	8.59
COTTON LINT	871	779	1017	1347	1527	1823	1269	1392	1205	1497	1097	3.85
JUTE AND SIMILAR FIBRES	1	1	2	1								-26.32
TOBACCO UNMANUFACTURED	293	293	314	364	299	293	300	290	264	275	277	-1.36
NATURAL RUBBER	29	29	25	20	21	28	18	16	20	35	41	1.07
WOOL GREASY	1						1	1	1	1	1	7.11
BOVINE CATTLE 1/	421	684	651	592	436	424	441	563	440	479	506	-1.60
SHEEP AND GOATS 1/	344	250	214	153	135	144	225	287	226	332	382	3.34
PIGS 1/	47	56	54	201	145	254	171	342	483	1362	1171	39.62
TOTAL MEAT	472	693	700	721	777	973	1073	987	926	956	1013	6.47
MILK DRY	17	16	16	7	5	36	37	29	37	19	49	13.14
TOTAL EGGS IN SHELL	22	22	38	39	30	61	87	64	31	25	22	1.91
FISHERY PRODUCTS												
FISH FRESH FROZEN	236	250	354	383	414	418	499	546	494	509	558	8.56
FISH CURED	47	62	65	63	64	76	87	89	70	65	70	3.06
SHELLFISH	42	48	71	93	133	115	88	80	69	64	79	3.28
FISH CANNED AND PREPARED	36	46	52	63	64	81	93	68	82	82	85	8.06
SHELLFISH CANNED+PREPAR	8	9	9	11	11	11	11	11	4	3	3	-10.00
FISH BODY AND LIVER OIL	93	91	60	110	101	137	117	98	191	188	133	7.63
FISH MEAL	35	63	61	82	40	108	75	42	95	41	58	1.33
FOREST PRODUCTS 2/												
SAWLOGS CONIFEROUS	12196	14842	14362	15565	17865	15135	11676	15269	17395	18441	19320	3.03
SAWLOGS NONCONIFEROUS	328	470	481	522	630	784	751	506	755	761	602	6.02
PULPWOOD+PARTICLE	6867	8337	8710	8216	9463	9887	8382	6605	6422	5847	5498	-3.57
FUELWOOD	206	162	200	170	98	63	108	85	85	90	89	-9.05
SAWNWOOD CONIFEROUS	18553	26379	32305	34492	35407	33612	31770	31423	38296	40879	42219	5.68
SAWNWOOD NONCONIFEROUS	807	814	847	1341	1025	1190	1209	1083	1340	1373	1172	4.72

1/ THOUSAND HEAD
2/ EXCEPT FOR PULP FOR PAPER AND PAPER AND PAPERBOARD, ALL FOREST PRODUCTS ARE EXPRESSED IN THOUSAND CUBIC METRES

ANNEX TABLE 4. (Cont.) VOLUME OF EXPORTS OF MAJOR AGRICULTURAL, FISHERY AND FOREST PRODUCTS

	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	ANNUAL RATE OF CHANGE 1975-85
	THOUSAND METRIC TONS											PERCENT
WOOD-BASED PANELS	1507	1567	1774	2061	2053	2312	2533	2088	2401	2668	2754	5.88
PULP FOR PAPER	6672	7666	7723	8132	8906	9838	9261	8531	9428	9611	9791	3.29
PAPER AND PAPERBOARD	9726	10935	11232	11124	12326	13675	13134	11931	12918	13390	13045	2.67
OCEANIA DEVELOPED												
AGRICULTURAL PRODUCTS												
WHEAT+FLOUR,WHEAT EQUIV.	8201	7875	8196	11134	6933	14955	10677	10998	8312	10647	15782	4.58
RICE MILLED	174	218	255	277	241	457	281	596	405	246	341	6.50
BARLEY	1760	2022	2157	1375	1757	3047	1650	1599	852	3231	5482	4.66
MAIZE	1	88	79	32	75	37	52	24	73	30	164	17.98
MILLET	21	20	23	15	18	14	11	25	19	18	16	-1.67
SORGHUM	856	815	829	385	516	580	463	1271	445	772	1594	3.05
POTATOES	21	25	29	20	18	23	21	23	26	21	24	.27
SUGAR,TOTAL (RAW EQUIV.)	1999	2002	2558	2481	1842	2203	2563	2502	2551	2361	2529	2.00
PULSES	37	33	42	36	45	72	64	71	106	78	100	12.52
SOYBEANS	4	32										-35.24
SOYBEAN OIL									1			
GROUNDNUTS SHELLED BASIS	2	2	4	2	2	12	4	4	8		5	-1.55
GROUNDNUT OIL								1				
OILSEED CAKE AND MEAL	1	3	2		1	1		1	1	2	1	.35
ORANGES+TANGER+CLEMEN	15	19	11	22	25	38	32	28	32	25	30	8.31
LEMONS AND LIMES	1	1	1			4	1	2	1	1	1	10.49
COCOA BEANS									1	1	1	15.53
TEA	1	1		1								-14.33
COTTON LINT	8	16	6	10	24	49	59	79	129	81	140	38.21
TOBACCO UNMANUFACTURED				1		1	1		1			-9.55
NATURAL RUBBER						1					1	-2.08
WOOL GREASY	588	750	826	630	705	650	680	642	660	659	709	-.24
BOVINE CATTLE 1/	13	33	45	71	107	74	109	121	120	96	67	16.23
SHEEP AND GOATS 1/	1456	1847	3409	4143	3898	6172	5763	6097	7035	6350	6262	15.21
PIGS 1/	1	1		1	1	2	1		1	3		2.31
TOTAL MEAT	1183	1446	1643	1664	1814	1494	1602	1493	1666	1351	1323	-.01
MILK DRY	70	67	113	125	123	157	137	157	146	153	158	8.21
TOTAL EGGS IN SHELL	2	2	1	1	1	1	1	1	3	6	2	5.56
FISHERY PRODUCTS												
FISH FRESH FROZEN	12	19	28	32	54	81	95	88	98	94	96	23.54
FISH CURED						1	1	2	1			24.59
SHELLFISH	16	15	17	20	32	56	57	70	68	78	80	22.06
FISH CANNED AND PREPARED	1	1			1	3	2	4	5	4	4	29.69
SHELLFISH CANNED+PREPAR	2	2	2	2	2	2	2	2	3	3	3	2.50
FISH BODY AND LIVER OIL	4	8	6	5	4					2	2	-33.09
FISH MEAL							1			4	4	
FOREST PRODUCTS 2/												
SAWLOGS CONIFEROUS	534	958	1027	936	1236	971	529	479	508	452	361	-8.08
SAWLOGS NONCONIFEROUS	3	1	3	2	1	4	4				1	-21.63
PULPWOOD+PARTICLE	3061	3866	5326	5074	5357	7064	6647	6240	6105	7345	7376	7.55
SAWNWOOD CONIFEROUS	160	232	295	367	509	617	546	515	401	381	489	8.75
SAWNWOOD NONCONIFEROUS	32	23	31	30	41	54	35	34	35	41	29	2.05
WOOD-BASED PANELS	61	28	32	52	104	142	138	99	113	93	79	10.96
PULP FOR PAPER	335	375	452	435	464	475	518	421	471	459	428	2.02
PAPER AND PAPERBOARD	204	269	302	332	359	418	447	340	361	342	340	4.01
AFRICA DEVELOPING												
AGRICULTURAL PRODUCTS												
WHEAT+FLOUR,WHEAT EQUIV.	27	21	20	46	31	17	19	22	2	8	1	-23.93
RICE MILLED	17	55	46	13	12	21	18	9	8	5	1	-25.08
BARLEY	5		1		2							
MAIZE	1009	472	434	652	364	69	245	380	727	382	553	-3.37
MILLET	10	79	13	31	78	46	41	36	30	20		
SORGHUM	10	2			53	12	3	15	14	1	3	3.54
POTATOES	97	91	82	58	50	55	36	30	49	62	60	-6.22
SUGAR,TOTAL (RAW EQUIV.)	1139	1365	1468	1296	1658	1586	1490	1683	1694	1594	1607	2.94
PULSES	319	410	262	150	150	220	127	166	167	66	58	-14.43
SOYBEANS	21	3	13	36	1	1	1		1			
SOYBEAN OIL		2	1	2	1			1				
GROUNDNUTS SHELLED BASIS	166	286	192	64	82	86	36	56	91	55	46	-13.86
GROUNDNUT OIL	226	290	258	94	159	90	36	159	176	92	46	-12.02
COPRA	42	60	55	52	45	32	22	20	15	12	20	-14.13
COCONUT OIL	9	11	6	9	14	15	18	21	21	30	35	16.02
PALM NUTS KERNELS	269	353	239	152	123	140	107	72	87	98	44	-15.70

1/ THOUSAND HEAD
2/ EXCEPT FOR PULP FOR PAPER AND PAPER AND PAPERBOARD, ALL FOREST PRODUCTS ARE EXPRESSED IN THOUSAND CUBIC METRES

ANNEX TABLE 4. (Cont.) VOLUME OF EXPORTS OF MAJOR AGRICULTURAL, FISHERY AND FOREST PRODUCTS

	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	ANNUAL RATE. OF CHANGE 1975-85
	THOUSAND METRIC TONS											PERCENT
PALM OIL	209	155	118	96	63	138	85	84	71	73	105	-6.96
OILSEED CAKE AND MEAL	678	760	712	456	668	478	357	487	468	312	356	-7.45
BANANAS	351	317	308	344	292	243	205	187	193	216	221	-6.03
ORANGES+TANGER+CLEMEN	592	664	744	873	672	854	715	661	591	582	602	-1.47
LEMONS AND LIMES	1	1	1	2	1	1	1	2	7	5	6	23.48
COFFEE GREEN+ROASTED	1106	1147	877	926	1015	896	964	1051	947	900	1010	-.90
COCOA BEANS	818	862	691	778	601	757	970	820	786	890	876	1.32
TEA	135	148	165	182	197	180	168	191	200	193	215	3.57
COTTON LINT	271	351	300	312	339	336	334	299	329	367	409	2.21
JUTE AND SIMILAR FIBRES					1							
TOBACCO UNMANUFACTUREO	113	141	129	139	132	172	189	148	141	175	172	3.42
NATURAL RUBBER	186	159	153	145	142	138	146	151	156	185	189	.77
WOOL GREASY	4	3	4	4	3	4	4	4	4	5	5	2.62
BOVINE CATTLE 1/	1022	1126	1125	1181	1255	1398	1446	1402	1167	1174	965	.43
SHEEP AND GOATS 1/	3515	2548	2461	3066	3047	3644	3410	3659	3085	2575	3222	.69
PIGS 1/	13	15	2	1	1	1			1			-32.44
TOTAL MEAT	102	112	118	99	97	48	44	46	52	51	52	-9.73
MILK ORY		1		2	4							
TOTAL EGGS IN SHELL	1	1	1			1				1	1	-5.12
FISHERY PRODUCTS												
FISH FRESH FROZEN	76	76	83	128	117	173	259	281	367	329	193	17.05
FISH CUREO	29	17	22	22	25	23	19	20	19	13	9	-6.93
SHELLFISH	39	43	43	48	34	34	76	90	132	136	135	15.98
FISH CANNED AND PREPARED	59	74	69	62	77	79	94	82	101	98	104	5.41
FISH BODY AND LIVER OIL	12	7	7	7	7	5	11	3	10	7		-28.86
FISH MEAL	83	43	19	39	27	29	28	20	46	31	3	-13.99
FOREST PRODUCTS 2/												
SAWLOGS CONIFEROUS	15	11	2	2	2							
SAWLOGS NONCONIFEROUS	5012	6309	6434	6211	6175	5971	4599	4723	4547	5076	4211	-3.24
PULPWOOD+PARTICLE	70	127	100	75	112	84	173	173	173	173	173	9.07
FUELWOOD	56	47	51	51	51	5				28	28	
SAWNWOOD CONIFEROUS	97	113	119	116	126	108	94	81	79	82	78	-4.11
SAWNWOOD NONCONIFEROUS	625	664	682	706	680	611	520	554	598	681	743	-.17
WOOD-BASED PANELS	206	220	241	261	236	272	283	264	287	293	300	3.47
PULP FOR PAPER	136	235	173	218	240	240	229	192	202	252	243	3.09
PAPER AND PAPERBOARD	19	22	19	16	24	21	20	9	8	12	11	-7.94
LATIN AMERICA												
AGRICULTURAL PRODUCTS												
WHEAT+FLOUR,WHEAT EQUIV.	2054	3345	6095	1833	4427	4621	3960	4043	10411	7491	9760	13.67
RICE MILLED	437	535	999	732	573	548	638	512	510	538	473	-1.98
BARLEY	28	43	130	18	58	72	32	24	59	95	82	5.77
MAIZE	5088	4560	6864	5927	5990	3557	9199	5828	7320	5720	7063	2.89
MILLET	94	124	172	196	139	63	136	101	96	54	88	-5.98
SORGHUM	2180	3499	4295	4625	3899	1544	5073	5368	5339	4252	3354	3.84
POTATOES	50	99	106	67	77	61	45	44	33	43	56	-6.64
SUGAR,TOTAL (RAW EQUIV.)	11107	10533	13050	12429	12726	12031	12698	13020	12957	12841	12180	1.21
PULSES	233	312	424	464	395	341	287	286	355	409	365	1.38
SOYBEANS	3435	3934	3441	2845	3814	4493	3909	2877	3270	5168	7197	4.35
SOYBEAN OIL	285	562	544	570	609	840	1353	1024	1369	1412	1511	16.46
GROUNDNUTS SHELLED BASIS	60	24	53	52	97	97	86	62	106	104	109	10.59
GROUNDNUT OIL	38	140	181	155	209	207	80	113	104	57	108	-1.45
COPRA	2	2			2			5				
COCONUT OIL	5	5	5	9	8	4	5	6	6	17	3	2.02
PALM NUTS KERNELS	4	2	3	9	7	5	1	4	4	1	2	-8.67
PALM OIL	3	5	3	4	5	1	5	11	14	19	36	24.18
OILSEED CAKE AND MEAL	4299	5798	7354	7676	7497	8891	10912	10498	12366	12158	13407	10.73
BANANAS	4779	4839	5231	5520	5366	5358	5472	5732	5081	5532	5493	1.13
ORANGES+TANGER+CLEMEN	190	173	224	269	314	308	318	393	427	410	462	10.11
LEMONS AND LIMES	22	25	29	47	74	53	51	34	58	62	103	12.04
COFFEE GREEN+ROASTED	2055	2032	1547	1960	2179	2199	2124	2229	2425	2524	2567	3.29
COCOA BEANS	270	209	187	211	226	183	201	247	226	211	296	1.16
TEA	23	32	34	41	39	44	35	43	53	54	50	6.84
COTTON LINT	806	607	689	903	733	641	608	600	539	480	665	-3.26
JUTE AND SIMILAR FIBRES	1	1		1	2	2		1				
TOBACCO UNMANUFACTURED	244	255	238	267	276	254	271	273	278	290	269	1.37
NATURAL RUBBER	6	7	5	6	4	4	2	3	3	2	2	-10.47
WOOL GREASY	108	92	108	107	80	105	125	108	87	79	69	-2.72

1/ THOUSAND HEAD
2/ EXCEPT FOR PULP FOR PAPER AND PAPER AND PAPERBOARD, ALL FOREST PRODUCTS ARE EXPRESSED IN THOUSAND CUBIC METRES

ANNEX TABLE 4. (Cont.) VOLUME OF EXPORTS OF MAJOR AGRICULTURAL, FISHERY AND FOREST PRODUCTS

	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	ANNUAL RATE OF CHANGE 1975-85
	THOUSAND METRIC TONS											PERCENT
BOVINE CATTLE 1/	810	985	983	1551	1277	754	762	929	1044	695	776	-2.67
SHEEP AND GOATS 1/	93	106	112	125	98	65	312	245	589	308	231	15.99
PIGS 1/	42	65	31	24	16	1			2	7	2	-34.57
TOTAL MEAT	449	775	778	840	815	747	999	1034	1002	797	823	4.19
MILK DRY	16	34	18	10	4	3	11	18	17	2		
TOTAL EGGS IN SHELL	1	3	3	2	4	12	14	6	3	4	4	11.79
FISHERY PRODUCTS												
FISH FRESH FROZEN	145	208	304	370	361	417	367	407	403	367	483	8.87
FISH CURED	5	4	7	3	6	8	5	10	4	4	5	.76
SHELLFISH	93	97	100	143	169	138	124	161	170	172	172	6.41
FISH CANNED AND PREPARED	16	29	48	72	82	144	146	103	56	64	49	10.13
SHELLFISH CANNED+PREPAR	3	3	5	2	5	4	4	4	5	6	6	8.19
FISH BODY AND LIVER OIL	148	41	49	72	110	107	76	180	25	139	182	4.97
FISH MEAL	909	846	743	845	1023	1054	960	1506	1025	1257	1892	6.87
FOREST PRODUCTS 2/												
SAWLOGS CONIFEROUS	15	23	167	689	968	1029	377	906	1024	902	1271	46.34
SAWLOGS NONCONIFEROUS	55	86	49	60	86	114	65	54	55	68	62	-.35
PULPWOOD+PARTICLE	107	115	53									
FUELWOOD	13	21	106	152	214	167	71	23	57	10	7	-11.15
SAWNWOOD CONIFEROUS	1134	1050	1429	1477	1678	1718	1319	1102	1172	1217	1033	-1.18
SAWNWOOD NONCONIFEROUS	590	629	838	727	1121	1130	994	892	851	908	908	3.67
WOOD-BASED PANELS	252	326	374	487	488	625	606	608	584	650	656	9.05
PULP FOR PAPER	332	382	443	715	1024	1318	1374	1302	1528	1487	1433	17.74
PAPER AND PAPERBOARD	155	199	226	276	351	398	497	404	651	939	778	18.36
NEAR EAST DEVELOPING												
AGRICULTURAL PRODUCTS												
WHEAT+FLOUR,WHEAT EQUIV.	15	27	640	2131	876	540	648	709	1139	992	757	35.22
RICE MILLED	130	256	276	223	211	259	159	59	44	107	30	-16.11
BARLEY	12	366	302	50	88	229	424	1026	661	320	97	20.08
MAIZE	1	14	8	43	111	155	40	53	10	6		
MILLET	4	6	3	4	2	2	3	8	2	4	1	-7.61
SORGHUM	48	75	137	66	196	286	256	423	186	25		
POTATOES	209	382	438	292	315	454	394	483	450	489	381	4.96
SUGAR,TOTAL (RAW EQUIV.)	58	48	64	55	37	45	71	219	318	591	329	27.68
PULSES	109	121	176	256	303	299	500	573	658	616	399	18.93
GROUNDNUTS SHELLED BASIS	218	312	175	111	52	51	108	101	24	44	17	-21.01
GROUNDNUT OIL	7	2	26	35	16	33	16	18	2	18	3	-3.60
COCONUT OIL			1				1					
PALM OIL								1				
OILSEED CAKE AND MEAL	452	368	252	225	214	261	145	105	104	122	42	-17.26
BANANAS	12	10	5	4	7	19	20	11	10	11	10	4.37
ORANGES+TANGER+CLEMEN	697	716	754	643	619	627	759	705	687	710	669	-.12
LEMONS AND LIMES	118	162	131	151	149	202	206	208	216	217	158	4.72
COFFEE GREEN+ROASTED	4	3	3	3	3	2	6	5	6	7	2	2.58
TEA	4	8	7	10	16	15	17	5	4	3	3	-7.20
COTTON LINT	856	1004	710	768	669	608	532	584	623	644	483	-5.14
TOBACCO UNMANUFACTURED	75	86	71	84	77	94	138	110	75	72	106	2.14
WOOL GREASY	8	7	12	9	8	7	3	6	6	5	5	-6.52
BOVINE CATTLE 1/	18	11	16	12	21	13	60	112	77	51	28	18.38
SHEEP AND GOATS 1/	720	828	680	1209	1421	2026	2858	3505	3710	3862	3295	21.78
PIGS 1/			1	1	3							
TOTAL MEAT	14	9	11	15	15	22	74	96	74	90	64	28.59
MILK DRY		1						1	1	1	1	37.39
TOTAL EGGS IN SHELL	12	1	3	7	10	13	18	27	42	71	73	40.33
FISHERY PRODUCTS												
FISH FRESH FROZEN	6	4	3	7	17	14	28	30	31	35	28	27.52
FISH CURED	12	10	4	3	2	1	1	1	1	1	1	-23.22
SHELLFISH	7	9	9	8	11	10	5	7	7	6	10	-1.41
FISH CANNED AND PREPARED	1	3	4	4	5	8	3	3	2	2	1	-6.11
SHELLFISH CANNED+PREPAR	2	2	3	1	2	3	4	5	7	8	6	15.61
FISH BODY AND LIVER OIL		1	2	1	1			1	2	5	5	24.97
FISH MEAL						1	1			1		
FOREST PRODUCTS 2/												
SAWLOGS CONIFEROUS	4	3		1	1	1	2	7	11	20	15	31.79
SAWLOGS NONCONIFEROUS	17	10	9	5	3	4	36	36	35	100	76	28.56
FUELWOOD	21	22	31	22	20	31	24	16	24	17	17	-3.07
SAWNWOOD CONIFEROUS	49	60	69	60	103	84	96	94	126	107	82	7.06
SAWNWOOD NONCONIFEROUS	1	1	1		2	3	6	12	7	8	5	33.55
WOOD-BASED PANELS	27	29	26	26	24	19	19	24	27	23	23	-1.79

1/ THOUSAND HEAD
2/ EXCEPT FOR PULP FOR PAPER AND PAPER AND PAPERBOARD, ALL FOREST PRODUCTS ARE EXPRESSED IN THOUSAND CUBIC METRES

ANNEX TABLE 4. (Cont.) VOLUME OF EXPORTS OF MAJOR AGRICULTURAL, FISHERY AND FOREST PRODUCTS

	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	ANNUAL RATE OF CHANGE 1975-85
	THOUSAND METRIC TONS											PERCENT
PULP FOR PAPER	4	2										
PAPER AND PAPERBOARD	9	10	11	10	16	21	35	35	41	71	56	24.75
FAR EAST DEVELOPING												
AGRICULTURAL PRODUCTS												
WHEAT+FLOUR,WHEAT EQUIV.	115	83	264	967	801	510	295	157	247	352	469	7.51
RICE MILLED	1862	3534	4732	3043	4965	5331	6033	6050	5495	7020	5776	9.94
BARLEY		32	39	13	73	259	275	907	252	1658	134	75.78
MAIZE	2276	2483	1768	2196	2146	2342	2721	3030	2859	3473	2904	4.54
MILLET		8	1	6	2	2	1			2	1	
SORGHUM	213	182	138	166	170	208	288	317	248	327	334	7.71
POTATOES	46	95	73	55	99	106	72	72	62	58	55	-1.17
SUGAR,TOTAL (RAW EQUIV.)	2900	3639	4511	2822	3269	2722	2930	4093	3762	3113	2957	-.40
PULSES	170	191	181	245	291	312	338	379	318	319	432	8.97
SOYBEANS	32	38	47	30	27	27	27	27	26	23	29	-4.00
SOYBEAN OIL	4	2	4	7	6	27	32	49	76	84	45	45.09
GROUNDNUTS SHELLED BASIS	86	174	69	24	40	55	113	106	84	72	72	.14
GROUNDNUT OIL	9	10	5	6	16	5	5	6	28	8	9	2.96
COPRA	834	878	683	445	193	234	172	232	77	73	143	-21.56
COCONUT OIL	760	1004	845	1112	976	1061	1192	1064	1143	779	1045	1.46
PALM NUTS KERNELS	33	33	30	13	23	45	24	15	14	13	25	-6.22
PALM OIL	1726	1897	2067	2168	2638	3303	2963	3487	3709	3951	4808	10.39
OILSEED CAKE AND MEAL	2061	3353	2871	2582	3291	3054	3011	3218	3330	2929	3165	2.21
BANANAS	872	846	738	832	921	972	924	983	684	842	829	-.15
ORANGES+TANGER+CLEMEN	137	37	113	65	89	78	50	62	74	69	60	-3.17
LEMONS AND LIMES				1	2	1	7	2	3	3	4	44.82
COFFEE GREEN+ROASTED	226	264	267	339	335	370	371	403	409	488	519	7.89
COCOA BEANS	15	18	18	24	32	41	65	88	89	120	149	28.03
TEA	502	512	499	459	445	537	546	481	483	562	558	1.00
COTTON LINT	244	218	56	128	133	396	415	329	379	207	363	10.04
JUTE AND SIMILAR FIBRES	566	646	543	467	521	467	515	453	449	430	277	-5.17
TOBACCO UNMANUFACTURED	198	210	232	224	212	198	259	238	205	197	173	-.88
NATURAL RUBBER	2737	2967	3027	3080	3179	3101	2924	2886	3205	3348	3365	1.35
WOOL GREASY	1	2		1			1	1			1	-9.23
BOVINE CATTLE 1/	74	73	98	78	66	60	36	39	66	76	78	-2.43
SHEEP AND GOATS 1/	28	80	215	70	100	120	60	26	4	23	56	-13.39
PIGS 1/	11	23	11	15	19	18	24	129	160	113	187	35.31
TOTAL MEAT	33	44	60	68	95	90	103	127	96	103	118	12.08
MILK DRY	4	5	5	7	10	13	10	10	9	11	13	11.71
TOTAL EGGS IN SHELL	5	6	10	6	5	5	11	8	6	16	20	9.65
FISHERY PRODUCTS												
FISH FRESH FROZEN	418	291	542	559	552	569	539	447	538	442	545	2.31
FISH CURED	32	30	27	32	27	28	27	29	28	37	38	1.50
SHELLFISH	228	288	293	319	362	313	328	378	384	439	472	5.98
FISH CANNED AND PREPARED	18	27	37	49	47	55	80	100	112	146	177	23.59
SHELLFISH CANNED+PREPAR	27	21	38	35	36	50	55	61	68	72	77	13.14
FISH BODY AND LIVER OIL	1	1	1	3	2	2	1	1	1	1	2	-1.63
FISH MEAL	57	84	117	141	164	153	151	141	154	157	160	7.91
FOREST PRODUCTS 2/												
SAWLOGS CONIFEROUS	356	423	394	270	396	327	291	127	109	107	38	-18.41
SAWLOGS NONCONIFEROUS	28203	35758	37017	38457	35843	31534	24005	24286	23128	19372	20789	-5.92
PULPWOOD+PARTICLE	930	697	1033	860	736	1003	1033	909	1001	605	447	-3.47
FUELWOOD	706	810	841	731	799	1181	1164	1086	1229	1208	1186	6.09
SAWNWOOD CONIFEROUS	134	251	258	425	481	410	254	197	138	186	214	-2.60
SAWNWOOD NONCONIFEROUS	3298	5551	5374	5463	7236	6415	5511	5838	7003	6469	6244	4.14
WOOD-BASED PANELS	2512	3110	3198	3342	3159	2933	3590	3428	4772	5059	5499	6.80
PULP FOR PAPER	2	3	2	2	6	6	10	8	9	15	16	25.22
PAPER AND PAPERBOARD	104	175	139	154	146	291	301	222	212	224	293	8.39
ASIAN CENT PLANNED ECON												
AGRICULTURAL PRODUCTS												
WHEAT+FLOUR,WHEAT EQUIV.	4	4	6	8	9	4	9	6	67	75	83	35.23
RICE MILLED	2324	1540	1488	2096	1836	1637	948	994	1279	1466	1050	-5.98
BARLEY	6	2		1	2	1			7		2	
MAIZE	315	430	356	230	240	104	141	96	92	1043	6391	11.78
MILLET	56	52	37	30	20	5	1	2	2	2	10	-30.31
SORGHUM					10	1		3	4	4	150	
POTATOES	50	55	53	62	81	77	80	89	78	72	61	3.75
SUGAR,TOTAL (RAW EQUIV.)	639	678	777	493	514	657	440	463	257	189	403	-9.51

1/ THOUSAND HEAD
2/ EXCEPT FOR PULP FOR PAPER AND PAPER AND PAPERBOARD, ALL FOREST PRODUCTS ARE EXPRESSED IN THOUSAND CUBIC METRES

ANNEX TABLE 4. (Cont.) VOLUME OF EXPORTS OF MAJOR AGRICULTURAL, FISHERY AND FOREST PRODUCTS

	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	ANNUAL RATE OF CHANGE 1975-85
	THOUSAND METRIC TONS											PERCENT
PULSES	83	97	89	76	90	71	111	103	141	171	236	9.25
SOYBEANS	355	199	130	113	306	140	139	160	367	843	1148	14.26
SOYBEAN OIL		1	2	6	4	4		1	2	9	1	10.13
GROUNDNUTS SHELLED BASIS	37	45	25	30	49	91	245	127	184	169	197	24.53
GROUNDNUT OIL	21	16	5	13	18	21	57	55	72	39	57	20.54
COPRA								1	2	2	11	
COCONUT OIL									4	4	7	
PALM NUTS KERNELS								1			1	
OILSEED CAKE AND MEAL	29	36	30	31	49	87	208	337	1127	937	1238	55.98
BANANAS	127	96	140	101	117	109	103	112	134	135	143	1.75
ORANGES+TANGER+CLEMEN	76	52	74	81	73	70	54	57	62	52	67	-2.00
COFFEE GREEN+ROASTED	4	12	4	5	5	4	1	10	14	13	11	8.79
TEA	77	77	104	109	126	125	107	126	148	167	157	7.38
COTTON LINT	43	65	71	33	22	2	1	17	131	218	261	11.05
JUTE AND SIMILAR FIBRES		2	3	8	20	35	41	43	36	45	49	53.93
TOBACCO UNMANUFACTURED	42	33	37	35	35	32	28	30	35	32	27	-2.74
NATURAL RUBBER	17	49	50	41	50	39	38	41	47	56	58	5.74
WOOL GREASY	24	25	21	22	24	23	21	16	16	12	11	-7.58
BOVINE CATTLE 1/	199	195	195	181	224	272	263	257	252	257	220	2.99
SHEEP AND GOATS 1/	1030	873	482	443	463	448	330	312	393	415	327	-8.99
PIGS 1/	2775	2953	3016	3129	3079	4548	3189	3256	3217	3091	3011	.82
TOTAL MEAT	205	201	155	210	246	251	250	274	270	292	300	5.24
TOTAL EGGS IN SHELL	39	38	35	42	51	54	56	57	57	60	56	5.52
FISHERY PRODUCTS												
FISH FRESH FROZEN	110	135	133	163	129	144	166	165	182	229	200	5.94
FISH CURED	5	6	4	6	10	9	6	7	6	9	9	4.59
SHELLFISH	44	75	56	64	69	66	70	71	87	99	130	7.57
FISH CANNED AND PREPARED	6	16	13	22	32	42	32	38	42	37	38	16.64
SHELLFISH CANNED+PREPAR	7	11	10	14	10	10	11	9	11	13	13	2.98
FISH MEAL	1	1		1	1	1	1		1	2	1	8.80
FOREST PRODUCTS 2/												
SAWLOGS CONIFEROUS	177	128	63	32	27	21	33	29	38	35	5	-20.05
SAWLOGS NONCONIFEROUS	17	12	33	42	45	45	33	35	36	59	39	9.66
SAWNWOOD CONIFEROUS	95	103	19	28	19	10	12	13	13	12	12	-18.30
SAWNWOOD NONCONIFEROUS	133	136	85	103	48	34	26	56	55	53	56	-9.69
WOOD-BASED PANELS	770	872	949	1244	1096	885	957	834	884	614	565	-3.66
PULP FOR PAPER	33	33	33	44	46	49	86	81	64	30	68	6.76
PAPER AND PAPERBOARD	132	122	119	116	89	149	174	165	139	217	250	6.90

1/ THOUSAND HEAD
2/ EXCEPT FOR PULP FOR PAPER AND PAPER AND PAPERBOARD, ALL FOREST PRODUCTS ARE EXPRESSED IN THOUSAND CUBIC METRES

ANNEX TABLE 5. WORLD AVERAGE EXPORT UNIT VALUES OF SELECTED AGRICULTURAL, FISHERY AND FOREST PRODUCTS

	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	ANNUAL RATE OF CHANGE 1975-85
	US $ PER METRIC TON											PERCENT
AGRICULTURAL PRODUCTS												
WHEAT	169	153	125	131	163	186	188	173	162	157	145	.71
WHEAT FLOUR	237	215	191	199	225	284	294	245	197	215	209	.14
RICE MILLED	374	277	263	346	324	383	444	344	302	290	271	-.64
BARLEY	140	138	132	137	145	175	175	161	143	147	121	.23
MAIZE	136	123	111	117	128	150	154	128	143	149	125	1.38
POTATOES	149	246	197	157	188	185	178	186	168	210	124	-1.57
SUGAR CENTRIFUGAL RAW	555	376	295	341	355	537	504	402	419	418	383	.27
SOYBEANS	225	216	272	250	271	264	282	243	256	277	217	.57
SOYBEAN OIL	695	456	586	617	675	625	542	483	498	715	639	.17
GROUNDNUTS SHELLED	514	467	596	661	679	698	965	666	622	740	617	2.99
GROUNDNUT OIL	801	723	814	946	964	777	996	646	601	1005	888	.18
COPRA	237	183	314	369	569	393	306	260	350	579	352	5.20
COCONUT OIL	418	361	552	627	938	650	536	463	555	1018	601	4.48
PALM NUTS KERNELS	178	160	266	262	357	267	235	229	263	330	247	3.53
PALM OIL	462	362	514	554	617	563	529	441	441	661	502	1.61
PALM KERNEL OIL	458	393	554	617	896	662	540	449	575	900	537	2.84
OLIVE OIL	1856	1314	1259	1363	1649	1958	1774	1748	1509	1333	1192	-.94
CASTOR BEANS	207	251	334	332	345	364	351	304	298	376	300	2.75
CASTOR BEAN OIL	575	557	883	801	803	970	856	824	907	1113	707	3.71
COTTONSEED	135	147	168	177	183	179	196	143	145	186	137	.21
COTTONSEED OIL	675	555	599	607	682	628	627	534	548	748	653	.39
LINSEED	336	291	273	216	281	311	326	286	273	285	265	-.52
LINSEED OIL	762	520	500	379	542	611	662	533	416	526	620	-.60
BANANAS	128	138	144	157	168	186	200	206	214	210	220	5.92
ORANGES	206	201	222	268	349	359	347	332	328	304	329	5.23
APPLES	316	274	350	410	399	435	411	437	339	332	329	.94
RAISINS	716	677	965	1080	1563	1675	1479	1208	1079	887	921	2.62
DATES	246	240	320	387	414	418	609	653	703	717	818	13.75
COFFEE GREEN	1180	2264	4229	3168	3153	3319	2258	2312	2335	2558	2528	1.42
COCOA BEANS	1404	1509	2800	3138	3283	2663	1771	1590	1636	2103	2126	-.17
TEA	1269	1240	2204	2055	1934	2053	1907	1788	2008	2645	2202	4.85
COTTON LINT	1120	1294	1536	1358	1527	1620	1714	1440	1503	1641	1437	2.17
JUTE	237	267	277	337	383	378	312	285	269	323	545	3.97
JUTE-LIKE FIBRES	203	210	250	245	248	260	189	234	236	305	3000	14.01
SISAL	468	341	375	375	479	593	553	501	445	417	408	1.24
TOBACCO UNMANUFACTURED	2079	2180	2361	2632	2741	2823	2952	3230	3127	2968	2976	4.04
NATURAL RUBBER	556	749	806	919	1214	1304	1125	817	988	1017	831	3.26
RUBBER NATURAL DRY	547	723	796	916	1180	1312	1066	799	963	965	781	2.89
WOOL GREASY	1765	1797	2160	2221	2463	2825	2959	2921	2517	2594	2495	4.07
CATTLE 1/	307	290	308	355	416	440	424	399	383	359	378	2.58
BEEF AND VEAL	1726	1638	1861	2160	2390	2514	2378	2443	2249	1959	1898	1.84
MUTTON AND LAMB	1072	1009	1143	1390	1592	1761	1863	1809	1596	1513	1416	4.37
PIGS 1/	90	90	100	104	111	106	108	113	99	93	88	.13
BACON HAM OF SWINE	2072	1985	1859	2242	2636	2903	2752	2649	2356	2236	2244	1.80
MEAT CHIKENS	1129	1175	1224	1295	1361	1431	1338	1161	1029	1078	1032	-1.40
MEAT PREPARATIONS	1491	1523	1512	1602	2126	2578	2449	2160	2098	1919	1871	3.50
EVAP COND WHOLE COW MILK	661	626	647	746	846	905	902	920	885	770	761	2.72
MILK OF COWS SKIMMED DRY	992	812	637	742	844	1047	1106	1057	864	785	782	.52
BUTTER OF COWMILK	1729	1677	1733	2246	2280	2468	2631	2704	2404	2021	1702	1.99
CHEESE OF WHOLE COWMILK	2013	1959	2134	2550	2803	3013	2743	2655	2529	2311	2322	1.78
FISHERY PRODUCTS												
FISH FRESH FROZEN	748	888	1039	1139	1255	1270	1311	1251	1150	1201	1198	3.80
FISH CURED	1300	1521	1691	1835	2095	2405	2537	2179	1968	1810	1888	3.28
SHELLFISH	2094	2512	2851	3374	3718	3932	3821	3766	3706	3463	3376	4.37
FISH CANNED AND PREPARED	1330	1456	1730	2046	2274	2329	2448	2296	2402	2264	2312	5.43
SHELLFISH CANNED+PREPAR	2861	3147	3254	3801	4525	4678	4346	4188	4342	4079	3983	3.43
FISH BODY AND LIVER OIL	338	362	433	435	427	432	399	340	345	349	310	-1.65
FISH MEAL	243	323	427	984	400	466	473	370	427	391	304	.08
FOREST PRODUCTS												
SAWLOGS CONIFEROUS 2/	51	52	59	62	83	89	81	73	63	63	61	2.00
SAWLOGS NONCONIFEROUS 2/	39	50	54	57	93	105	88	87	85	71	70	6.06
PULPWOOD+PARTICLE 2/	25	23	24	25	27	36	40	34	30	29	29	3.18
FUELWOOD 2/	20	23	21	21	27	34	34	29	26	25	25	2.71
SAWNWOOD CONIFEROUS 2/	89	93	101	108	131	138	127	114	114	110	105	1.77
SAWNWOOD NONCONIF. 2/	128	134	152	164	216	245	223	209	215	201	195	4.89
WOOD-BASED PANELS 2/	183	197	211	226	283	316	294	280	268	249	240	3.19
PULP FOR PAPER	351	335	313	282	361	444	451	411	357	416	377	2.38
PAPER AND PAPERBOARD	411	406	421	455	505	572	567	556	504	519	536	3.11

1/ U.S. DOLLARS PER HEAD
2/ U.S. DOLLARS PER CUBIC METRE

ANNEX TABLE 6. VOLUME OF IMPORTS OF MAJOR AGRICULTURAL, FISHERY AND FOREST PRODUCTS

	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	ANNUAL RATE OF CHANGE 1975-85
	.....	.....	.....	.....	THOUSAND METRIC TONS	.....	.....	.....	.....	.....	.....	PERCENT
WORLD												
AGRICULTURAL PRODUCTS												
WHEAT+FLOUR,WHEAT EQUIV.	73950	72258	70922	80087	85540	97876	103020	107775	106010	116653	102605	5.16
RICE MILLED	7553	9158	9955	10164	12165	12933	13794	11472	12066	11478	11875	3.81
BARLEY	12512	13703	12355	14749	14767	15011	18633	18670	17691	22726	20080	5.77
MAIZE	51708	61873	55050	67879	74971	79204	80186	69276	69293	67726	68572	2.37
MILLET	319	314	359	346	331	263	202	229	217	178	179	-7.00
SORGHUM	9339	10605	10928	10432	10208	11014	13751	13500	10998	12875	11793	2.56
POTATOES	3758	4329	4724	3906	4569	4678	4713	5135	4758	4771	5197	2.40
SUGAR,TOTAL (RAW EQUIV.)	22090	22660	27511	24525	26480	27107	28372	29534	28135	28185	27141	2.22
PULSES	1864	1876	2054	2066	2355	2921	3192	2946	3045	3424	3767	7.66
SOYBEANS	16313	19983	19623	23411	26125	27048	26294	28533	26785	24704	25419	4.08
SOYBEAN OIL	1374	1616	2078	2404	2873	3244	3252	3698	3721	4144	3426	10.59
GROUNDNUTS SHELLED BASIS	889	1030	815	805	777	709	720	814	762	747	805	-1.84
GROUNDNUT OIL	428	512	596	475	474	513	358	413	507	321	348	-3.52
COPRA	1033	1215	919	804	458	465	393	477	252	311	364	-13.34
COCONUT OIL	955	1412	1096	1255	1198	1125	1399	1292	1295	1049	1156	.44
PALM NUTS KERNELS	278	349	292	169	161	182	161	123	127	124	98	-10.77
PALM OIL	1884	2018	2471	2318	2701	3411	3225	3694	3910	3968	4877	9.46
OILSEED CAKE AND MEAL	14911	18475	19221	21972	23854	25376	27069	28436	33112	29334	31998	7.49
BANANAS	6311	6346	6582	6875	7039	6735	6781	6760	6067	6586	7087	.38
ORANGES+TANGER+CLEMEN	4991	5188	5288	4971	5067	5241	5023	5160	5155	5237	4929	-.03
LEMONS AND LIMES	830	936	912	961	965	991	969	1049	1004	1001	1008	1.57
COFFEE GREEN+ROASTED	3677	3777	3126	3435	3912	3790	3815	3880	4006	4049	4237	1.79
COCOA BEANS	1192	1160	1006	1096	1026	1068	1242	1270	1262	1324	1459	2.49
TEA	806	846	901	832	891	923	884	891	914	1035	1013	1.94
COTTON LINT	4083	4106	4037	4503	4521	5069	4419	4502	4354	4496	4519	.98
JUTE AND SIMILAR FIBRES	579	682	563	492	572	574	534	575	509	387	360	-4.18
TOBACCO UNMANUFACTURED	1301	1298	1258	1424	1394	1405	1442	1409	1381	1432	1410	.99
NATURAL RUBBER	3129	3274	3388	3351	3493	3391	3281	3132	3425	3706	3667	1.03
WOOL GREASY	844	1034	870	883	919	853	872	834	842	818	947	-.57
BOVINE CATTLE 1/	6194	6581	6667	7216	7216	6664	6919	7286	7013	6774	6699	.58
PIGS 1/	6375	6802	6688	7749	8084	10498	9715	9022	9324	9928	9968	4.87
TOTAL MEAT	5541	6041	6617	6944	7569	7892	8397	8662	8669	8508	8949	4.77
MILK DRY	272	345	475	473	516	590	590	574	520	589	585	6.34
TOTAL EGGS IN SHELL	529	516	573	636	674	742	766	824	821	821	772	5.10
FISHERY PRODUCTS												
FISH FRESH FROZEN	2833	2989	3064	3385	3664	4239	4436	4472	4675	4810	4955	6.29
FISH CURED	377	367	305	329	365	400	397	362	414	415	408	1.91
SHELLFISH	825	945	894	1070	1217	1120	1138	1242	1364	1517	1573	6.20
FISH CANNED AND PREPARED	733	889	797	875	922	1017	1062	959	894	907	961	1.93
SHELLFISH CANNED+PREPAR	129	146	154	159	160	172	183	200	221	229	238	6.10
FISH BODY AND LIVER OIL	631	613	569	653	763	752	737	796	729	894	1032	4.72
FISH MEAL	2288	2199	2239	2090	2469	2266	2051	2518	2287	2275	2631	.99
FOREST PRODUCTS 2/												
SAWLOGS CONIFEROUS	24330	27708	29302	29858	31516	28054	23839	26398	30398	31127	33231	1.47
SAWLOGS NONCONIFEROUS	35772	44190	46214	47651	48228	42216	35096	32778	33529	30949	29842	-3.89
PULPWOOD+PARTICLE	31445	32398	36670	34187	39249	43086	41366	36452	37634	41357	41752	2.44
FUELWOOD	3015	2921	3082	2769	2908	3112	2533	3118	3481	3860	4026	2.79
SAWNWOOD CONIFEROUS	42394	54302	60767	65298	67388	63311	58325	59664	67629	70117	72391	3.42
SAWNWOOD NONCONIFEROUS	7982	10400	11240	11669	13257	12662	11264	10847	11941	12340	12222	2.47
WOOD-BASED PANELS	12380	14559	14548	15866	16789	15657	16637	15468	16885	17865	18801	3.04
PULP FOR PAPER	13666	15497	15533	17563	18799	19316	18517	17299	19567	20419	20839	3.57
PAPER AND PAPERBOARD	23005	26572	27816	30466	32283	33601	34024	33613	35541	39156	40529	5.00
WESTERN EUROPE												
AGRICULTURAL PRODUCTS												
WHEAT+FLOUR,WHEAT EQUIV.	12459	13184	12602	13384	12981	14127	13336	13964	10586	12624	15529	.47
RICE MILLED	793	1212	1294	1461	1299	1291	1490	1687	1559	1703	1894	6.27
BARLEY	5477	6329	6136	6567	5105	5247	5966	6194	6665	5119	4560	-1.33
MAIZE	25301	26440	26733	24757	25117	23455	21740	21103	18873	15992	15025	-5.42
MILLET	112	90	182	195	150	98	109	122	110	99	126	-1.65
SORGHUM	2767	3017	2216	1453	1196	1273	1103	2149	685	1145	246	-15.71
POTATOES	2372	3150	2999	2565	2808	3051	3026	3228	3167	3235	3630	2.70
SUGAR,TOTAL (RAW EQUIV.)	5275	4608	4235	3521	3459	3139	3074	3195	3148	3789	3119	-4.11
PULSES	795	821	888	907	1054	1014	924	1067	1306	1429	1867	7.38
SOYBEANS	10524	11719	11612	14201	15311	16249	14414	16454	15009	13575	13780	2.71

1/ THOUSAND HEAD
2/ EXCEPT FOR PULP FOR PAPER AND PAPER AND PAPERBOARD, ALL FOREST PRODUCTS ARE EXPRESSED IN THOUSAND CUBIC METRES

ANNEX TABLE 6. (Cont.) VOLUME OF IMPORTS OF MAJOR AGRICULTURAL, FISHERY AND FOREST PRODUCTS

	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	ANNUAL RATE OF CHANGE 1975-85
	THOUSAND METRIC TONS											PERCENT
SOYBEAN OIL	575	532	502	559	580	675	643	681	743	702	683	3.36
GROUNDNUTS SHELLED BASIS	603	726	558	541	528	414	389	431	385	396	423	-5.37
GROUNDNUT OIL	338	351	355	325	407	446	297	349	396	255	274	-1.95
COPRA	816	961	670	515	294	253	184	280	113	132	133	-19.61
COCONUT OIL	281	427	331	395	390	414	561	537	512	372	420	3.46
PALM NUTS KERNELS	260	327	271	153	137	147	140	106	96	100	79	-12.32
PALM OIL	797	860	829	781	856	833	723	735	859	718	832	-.63
OILSEED CAKE AND MEAL	10102	12778	12863	15320	16704	17397	18205	19297	21471	19780	22424	7.37
BANANAS	2332	2256	2430	2525	2460	2221	2172	2178	2018	2183	2305	-1.06
ORANGES+TANGER+CLEMEN	3198	3245	3322	3143	3227	3229	2969	3185	3118	3298	3010	-.44
LEMONS AND LIMES	398	432	408	428	432	429	416	452	451	431	449	.89
COFFEE GREEN+ROASTED	1747	1811	1543	1703	1955	1930	1999	1997	2061	1998	2098	2.32
COCOA BEANS	564	566	561	590	569	616	664	721	649	738	793	3.48
TEA	289	297	336	250	278	297	244	287	266	306	277	-.59
COTTON LINT	1189	1320	1154	1216	1150	1259	1017	1147	1246	1241	1342	.32
JUTE AND SIMILAR FIBRES	177	232	208	157	182	132	120	97	85	88	54	-11.84
TOBACCO UNMANUFACTURED	677	695	677	785	743	701	679	670	682	670	678	-.47
NATURAL RUBBER	875	941	950	861	925	892	838	844	830	865	935	-.50
WOOL GREASY	391	528	418	437	444	399	394	353	316	395	422	-1.96
BOVINE CATTLE 1/	3445	3306	3175	3472	3529	3404	3210	3478	3401	3336	3725	.49
PIGS 1/	3314	3629	3284	3875	4382	5202	5496	4680	4889	4879	4977	4.66
TOTAL MEAT	3106	3333	3461	3776	3790	3761	3500	3778	3889	3835	4197	2.15
MILK DRY	97	125	108	115	137	156	132	145	147	145	135	3.33
TOTAL EGGS IN SHELL	311	307	327	366	399	431	431	445	441	467	466	4.71
FISHERY PRODUCTS												
FISH FRESH FROZEN	1147	1130	1230	1335	1474	1599	1613	1710	1568	1621	1660	4.27
FISH CURED	158	156	158	165	191	196	174	172	210	209	207	3.11
SHELLFISH	295	333	277	349	372	416	414	478	520	598	635	8.33
FISH CANNED AND PREPARED	273	310	296	286	312	335	337	317	350	361	365	2.62
SHELLFISH CANNED+PREPAR	60	64	68	73	80	87	86	90	97	97	101	5.40
FISH BODY AND LIVER OIL	558	538	511	584	666	666	637	706	613	813	889	4.53
FISH MEAL	1204	1187	1115	1104	1245	1182	1027	1288	1250	1165	1230	.45
FOREST PRODUCTS 2/												
SAWLOGS CONIFEROUS	3221	4417	4890	4094	4547	5103	4507	4660	4495	4356	4756	1.73
SAWLOGS NONCONIFEROUS	6985	8858	8793	7715	8044	8424	6889	6139	6174	6337	6032	-3.35
PULPWOOD+PARTICLE	17920	17252	16718	15037	17463	20877	22039	19447	19125	22488	23729	3.34
FUELWOOD	1963	1956	1940	1673	1784	2016	1539	1851	2216	2490	2631	2.66
SAWNWOOD CONIFEROUS	17176	23111	22096	23684	27274	25507	21507	22714	23839	22948	21753	.97
SAWNWOOD NONCONIFEROUS	3620	5435	5521	5620	6724	6088	4933	4891	5386	5322	5516	1.24
WOOD-BASED PANELS	6076	7564	7524	8440	9652	8951	8956	8462	8980	9491	9930	3.54
PULP FOR PAPER	7293	8441	8270	9435	10034	10013	9531	8807	9581	10057	10293	2.46
PAPER AND PAPERBOARD	9907	12368	12631	13602	15046	15107	15728	15742	17318	18745	19002	5.80
USSR AND EASTERN EUROPE												
AGRICULTURAL PRODUCTS												
WHEAT+FLOUR,WHEAT EQUIV.	13457	13099	11996	13101	16167	21293	24583	27256	26829	31340	23559	10.10
RICE MILLED	543	647	725	710	940	994	1599	1127	601	490	585	.13
BARLEY	3283	4118	2225	4137	4559	4311	6007	3247	3531	3326	5911	3.01
MAIZE	9131	17664	7493	17809	20175	18863	22075	14959	7837	13415	18059	2.01
MILLET				1	1	1	1	1	1		1	
SORGHUM	310	1041	705	830	229	1567	3967	2709	2078	1990	1452	18.61
POTATOES	514	368	664	301	512	297	330	481	158	136	210	-10.54
SUGAR,TOTAL (RAW EQUIV.)	3949	4596	5634	4667	4933	5825	6426	8146	7028	6935	5515	4.99
PULSES	59	39	33	39	41	62	85	60	35	77	42	2.59
SOYBEANS	520	2089	1544	1409	2360	1707	1653	1906	1938	1205	1122	2.37
SOYBEAN OIL	31	72	94	103	126	154	198	316	256	199	387	22.62
GROUNDNUTS SHELLED BASIS	59	54	59	57	46	54	61	67	54	68	72	1.98
GROUNDNUT OIL	4	2	2		2	1		1	1		1	-14.57
COPRA	29	25	38	26	18	20	10	14	14	5		
COCONUT OIL	42	93	48	66	58	89	77	99	79	69	60	2.88
PALM NUTS KERNELS	4	4	4	4	3	4						
PALM OIL	17	28	67	58	113	112	184	384	329	292	250	33.56
OILSEED CAKE AND MEAL	3541	3592	3704	3699	4033	4599	5331	5069	6685	4156	4447	4.08
BANANAS	267	224	281	299	298	269	232	155	167	200	217	-4.12
ORANGES+TANGER+CLEMEN	715	693	727	719	690	748	688	645	640	610	691	-1.17
LEMONS AND LIMES	310	330	314	326	309	333	308	363	291	286	284	-.93
COFFEE GREEN+ROASTED	205	199	201	178	201	228	203	207	214	236	260	2.19
COCOA BEANS	280	256	175	202	198	201	199	178	243	246	248	-.03
TEA	88	82	80	71	79	102	116	107	110	129	151	6.25
COTTON LINT	769	679	720	681	718	743	638	693	764	841	829	1.21

1/ THOUSAND HEAD
2/ EXCEPT FOR PULP FOR PAPER AND PAPER AND PAPERBOARD, ALL FOREST PRODUCTS ARE EXPRESSED IN THOUSAND CUBIC METRES

ANNEX TABLE 6. (Cont.) VOLUME OF IMPORTS OF MAJOR AGRICULTURAL, FISHERY AND FOREST PRODUCTS

	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	ANNUAL RATE OF CHANGE 1975-85
	.....	.....	.....	.....	THOUSAND METRIC TONS	.....	.....	.....	.....	.....	.....	PERCENT
JUTE AND SIMILAR FIBRES	83	80	68	70	79	93	111	122	93	45	52	-2.05
TOBACCO UNMANUFACTURED	147	126	133	135	133	178	196	201	189	202	184	4.89
NATURAL RUBBER	473	485	409	433	437	441	418	360	446	435	358	-1.79
WOOL GREASY	162	162	161	182	188	182	174	173	219	135	160	-.02
BOVINE CATTLE 1/	506	195	224	84	176	180	169	167	190	216	173	-3.68
PIGS 1/	185	59	291	507	442	479	844	565	637	519	532	16.95
TOTAL MEAT	545	416	757	267	646	956	1228	1091	1132	916	825	9.41
MILK DRY	23	28	43	29	42	71	78	90	47	58	70	11.10
TOTAL EGGS IN SHELL	52	37	43	43	47	43	34	36	31	28	21	-6.43
FISHERY PRODUCTS												
FISH FRESH FROZEN	141	180	138	202	210	251	145	115	382	468	551	11.70
FISH CURED	24	28	18	17	15	20	26	20	40	30	36	5.32
FISH CANNED AND PREPARED	41	52	41	39	34	38	39	37	34	32	47	-1.55
FISH BODY AND LIVER OIL	34	4	7	6	5	22	13	25	16	23	46	14.82
FISH MEAL	498	445	407	384	476	310	233	291	218	214	250	-8.28
FOREST PRODUCTS 2/												
SAWLOGS CONIFEROUS	830	787	885	960	720	1050	960	498	655	629	606	-3.92
SAWLOGS NONCONIFEROUS	588	556	556	442	416	454	487	385	367	375	405	-4.29
PULPWOOD+PARTICLE	1722	1548	1440	1345	1446	1583	1390	1248	1286	1323	1248	-2.48
FUELWOOD	32	31	31	27	25	25	25	20	25	25	12	-6.25
SAWNWOOD CONIFEROUS	3599	2702	3157	3228	2644	2665	2884	2774	2642	2862	3199	-1.00
SAWNWOOD NONCONIFEROUS	442	366	363	326	268	274	331	213	226	222	214	-6.74
WOOD-BASED PANELS	1245	1386	1314	1132	1045	1137	1115	942	826	762	812	-5.50
PULP FOR PAPER	1106	1040	1027	1053	1021	1173	1093	1031	1101	1067	1253	.88
PAPER AND PAPERBOARD	1713	1706	1712	1709	1784	2044	1968	1965	1729	1689	1763	.46
NORTH AMERICA DEVELOPED												
AGRICULTURAL PRODUCTS												
WHEAT+FLOUR,WHEAT EQUIV.	17	23	35	1	5	6	1	57	53	101	272	29.48
RICE MILLED	74	80	80	82	91	94	106	126	128	141	174	8.51
BARLEY	307	195	180	108	157	140	127	198	141	146	105	-5.51
MAIZE	818	838	623	476	849	1228	1276	807	352	541	567	-3.42
MILLET			1									-2.65
SORGHUM				1				2		7		22.69
POTATOES	208	213	301	235	242	212	340	344	278	303	330	4.27
SUGAR,TOTAL (RAW EQUIV.)	4492	5054	6383	4835	5406	4595	5459	3471	3665	4163	3672	-3.66
PULSES	44	34	53	43	39	43	61	47	48	55	51	2.76
SOYBEANS	385	422	318	325	351	483	382	468	315	285	247	-2.70
SOYBEAN OIL	23	31	28	35	22	12	9	4	35	17	42	-3.63
GROUNDNUTS SHELLED BASIS	61	62	55	66	63	55	72	61	67	70	69	1.52
GROUNDNUT OIL	7	8	7	6	5	5	4	4	6	5	4	-5.82
COCONUT OIL	435	603	495	503	527	422	476	427	475	400	474	-1.59
PALM OIL	483	416	282	173	163	137	138	132	168	161	251	-8.12
OILSEED CAKE AND MEAL	301	386	374	426	491	431	443	457	525	690	750	7.49
BANANAS	2179	2411	2410	2543	2659	2669	2794	2935	2708	2942	3352	3.36
ORANGES+TANGER+CLEMEN	264	339	380	303	294	320	333	317	329	307	299	
LEMONS AND LIMES	23	24	27	34	36	38	43	38	40	51	66	9.43
COFFEE GREEN+ROASTED	1324	1290	986	1195	1277	1190	1104	1150	1089	1178	1233	-.59
COCOA BEANS	248	252	186	226	179	162	264	213	233	218	292	1.11
TEA	96	106	117	91	101	107	107	103	97	109	97	-.06
COTTON LINT	61	73	53	59	61	65	63	52	61	59	57	-.92
JUTE AND SIMILAR FIBRES	23	25	14	17	23	10	18	18	16	11	16	-4.43
TOBACCO UNMANUFACTURED	177	161	142	173	188	191	176	167	163	214	202	1.91
NATURAL RUBBER	747	818	903	846	862	695	759	713	772	906	923	.48
WOOL GREASY	13	17	12	15	11	14	20	16	20	22	17	4.24
BOVINE CATTLE 1/	516	1183	1184	1337	758	731	816	1085	1004	792	893	.27
PIGS 1/	30	46	44	204	137	248	147	295	448	1322	1227	43.43
TOTAL MEAT	718	862	755	875	912	854	766	866	808	866	1010	1.59
TOTAL EGGS IN SHELL	12	13	19	18	21	12	12	11	22	30	18	4.08
FISHERY PRODUCTS												
FISH FRESH FROZEN	611	709	727	800	776	699	735	676	700	688	760	.42
FISH CURED	30	37	30	34	31	26	35	33	32	33	32	.10
SHELLFISH	139	157	158	146	155	146	156	175	213	222	235	4.92
FISH CANNED AND PREPARED	82	103	78	89	95	99	104	112	126	153	187	7.29
SHELLFISH CANNED+PREPAR	27	35	41	40	41	39	47	54	69	73	84	10.48
FISH BODY AND LIVER OIL	7	11	8	9	9	12	10	8	9	8	10	.18
FISH MEAL	108	128	74	40	82	45	56	79	68	81	234	2.52

1/ THOUSAND HEAD
2/ EXCEPT FOR PULP FOR PAPER AND PAPER AND PAPERBOARD, ALL FOREST PRODUCTS ARE EXPRESSED IN THOUSAND CUBIC METRES

ANNEX TABLE 6. (Cont.) VOLUME OF IMPORTS OF MAJOR AGRICULTURAL, FISHERY AND FOREST PRODUCTS

	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	ANNUAL RATE OF CHANGE 1975-85
	.....	.....	.....	.....	THOUSAND METRIC TONS	.....	.....	.....	.....	.....	.....	PERCENT
FOREST PRODUCTS 2/												
SAWLOGS CONIFEROUS	1728	2025	2174	2043	2458	2146	1674	1772	2683	2887	2837	3.57
SAWLOGS NONCONIFEROUS	318	291	294	409	502	471	415	335	424	585	576	5.86
PULPWOOD+PARTICLE	1859	2039	2273	2516	2504	2249	2348	2000	2409	2173	1917	.06
FUELWOOD	209	181	303	352	377	268	137	113	113	161	160	-7.09
SAWNWOOD CONIFEROUS	14175	19583	25061	28675	26582	22839	22542	21694	28483	31316	34407	5.58
SAWNWOOD NONCONIFEROUS	963	1287	1351	1431	1571	1422	1557	912	1246	1407	1432	1.09
WOOD-BASED PANELS	3147	3645	3546	3956	3336	2378	2851	2283	3366	3548	3956	-.34
PULP FOR PAPER	2712	3271	3393	3522	3857	3528	3563	3245	3645	4085	4069	2.66
PAPER AND PAPERBOARD	6165	6982	7017	8387	8322	8118	7595	7303	8291	10235	10631	4.07
OCEANIA DEVELOPED												
AGRICULTURAL PRODUCTS												
WHEAT+FLOUR,WHEAT EQUIV.	134	112			32	54	53	51	71	126	67	31.28
RICE MILLED	7	6	9	8	8	8	9	10	12	15	19	9.31
MAIZE	1	1	2	3	3	4	5	11	14	9	11	32.18
MILLET					1	1	1	1	1	1	1	
SORGHUM								4				
POTATOES										1		
SUGAR,TOTAL (RAW EQUIV.)	192	174	185	166	172	151	120	147	157	169	172	-1.55
PULSES	20	13	12	13	12	14	13	16	16	22	12	.82
SOYBEANS	16	10	21	15		13	41	10	23	36	38	16.33
SOYBEAN OIL	18	38	33	29	26	32	29	45	53	48	31	5.76
GROUNDNUTS SHELLED BASIS	4	8	5	12	4	5	9	12	6	13	8	5.90
GROUNDNUT OIL	4	2	4	2	3		1	1	1	1	1	-14.79
COPRA	12	10	11	5	7	4	6	6	4			
COCONUT OIL	11	18	20	18	19	17	16	20	20	22	20	3.49
PALM OIL	16	17	23	23	28	26	24	20	4	7	9	-10.58
OILSEED CAKE AND MEAL	15	3	6	30	7	12	19	10	52	11	38	13.91
BANANAS	43	29	35	38	35	37	36	36	40	30	60	1.92
ORANGES+TANGER+CLEMEN	18	15	17	18	14	16	16	17	18	24	21	2.32
LEMONS AND LIMES					1	1	1	1	3	3	4	32.20
COFFEE GREEN+ROASTED	35	32	34	26	35	41	38	42	39	37	37	2.17
COCOA BEANS	25	16	20	17	15	14	15	13	13	10	7	-8.77
TEA	35	33	35	30	30	32	28	30	28	28	27	-2.53
COTTON LINT	4	4	5	4	2	2	2	1	1	1	3	-12.83
JUTE AND SIMILAR FIBRES	17	14	12	11	12	9	11	8	8	6	8	-8.23
TOBACCO UNMANUFACTURED	17	17	13	16	13	15	15	14	14	14	23	.87
NATURAL RUBBER	53	61	55	52	53	54	50	48	41	40	45	-3.25
WOOL GREASY	1	1	1	1	1							-9.04
BOVINE CATTLE 1/	1	1	2	1	1	1				1	2	-6.26
TOTAL MEAT	2	2	2	1	2	4	4	4	5	8	7	17.25
MILK DRY	1	1	1	1			1		1		1	-4.15
FISHERY PRODUCTS												
FISH FRESH FROZEN	19	19	20	21	22	29	33	33	29	45	48	9.88
FISH CURED	4	4	5	3	5	4	4	4	4	5	5	2.21
SHELLFISH	1	3	3	2	4	4	6	6	8	12	12	22.53
FISH CANNED AND PREPARED	23	19	25	26	22	27	27	28	25	21	22	.62
SHELLFISH CANNED+PREPAR	5	7	7	7	6	5	7	8	8	4	4	-3.07
FISH BODY AND LIVER OIL	1	1	1	1	1			1				-9.09
FISH MEAL	24	13	8	3	4	14	8	8	11	8	8	-2.81
FOREST PRODUCTS 2/												
SAWLOGS CONIFEROUS		5	2	2					1			
SAWLOGS NONCONIFEROUS	41	46	26	17	11	2	1	7	1	1	1	-37.18
FUELWOOD	9	4	2	2	2	1	1	1	1			
SAWNWOOD CONIFEROUS	637	693	754	638	682	697	781	881	642	823	1113	3.49
SAWNWOOD NONCONIFEROUS	282	346	445	311	304	317	306	290	210	282	317	-2.35
WOOD-BASED PANELS	123	137	121	89	99	88	104	111	79	102	112	-2.23
PULP FOR PAPER	302	234	277	239	280	281	286	262	220	243	208	-1.98
PAPER AND PAPERBOARD	683	470	652	584	671	739	736	794	558	670	899	2.80
AFRICA DEVELOPING												
AGRICULTURAL PRODUCTS												
WHEAT+FLOUR,WHEAT EQUIV.	5367	5350	6362	7946	7744	9076	9059	9433	9351	10480	11795	7.82
RICE MILLED	602	887	1584	1885	2246	2267	2542	2837	2781	2495	2462	13.37
BARLEY	173	68	219	647	419	302	459	680	393	771	575	17.43
MAIZE	864	685	880	1154	1287	2321	2395	2302	1732	2965	2602	15.04
MILLET	137	123	112	83	101	106	35	41	41	31	2	-25.85

1/ THOUSAND HEAD
2/ EXCEPT FOR PULP FOR PAPER AND PAPER AND PAPERBOARD, ALL FOREST PRODUCTS ARE EXPRESSED IN THOUSAND CUBIC METRES

ANNEX TABLE 6. (Cont.) VOLUME OF IMPORTS OF MAJOR AGRICULTURAL, FISHERY AND FOREST PRODUCTS

	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	ANNUAL RATE OF CHANGE 1975-85
	THOUSAND METRIC TONS											PERCENT
SORGHUM	42	118	99	149	132	106	153	157	241	412	375	18.68
POTATOES	189	149	211	233	307	245	217	272	451	350	422	9.20
SUGAR,TOTAL (RAW EQUIV.)	1329	1496	1888	2043	2105	2245	2360	2156	2373	2234	2260	4.81
PULSES	89	77	91	118	209	217	145	157	214	232	246	11.77
SOYBEANS	9	16	50	22	31	25	11	35	16	13	23	-.11
SOYBEAN OIL	156	121	256	312	357	336	336	448	392	367	312	9.38
GROUNDNUTS SHELLED BASIS	35	17	25	27	12	16	9	12	8	6	40	-7.70
GROUNDNUT OIL	8	30	22	10	10	16	16	18	19	10	18	.72
COPRA	3	3	3	4	4	3	2	2	3	5	3	-.70
COCONUT OIL	9	18	20	10	9	7	14	12	10	17	13	.57
PALM NUTS KERNELS	1											
PALM OIL	29	68	81	106	98	165	244	293	261	189	211	20.37
OILSEED CAKE AND MEAL	58	54	102	122	157	188	242	260	225	298	277	18.90
BANANAS	38	41	47	31	17	18	28	59	24	28	10	-7.24
ORANGES+TANGER+CLEMEN	12	10	12	12	12	10	9	9	9	8	7	-4.13
LEMONS AND LIMES			1	1		1	1	1	1	1	1	3.72
COFFEE GREEN+ROASTED	65	78	59	83	76	80	103	69	114	98	102	4.75
COCOA BEANS	2	1	3	1	1	1	1	1	5	1	2	1.58
TEA	45	42	46	56	70	57	69	57	58	62	68	4.07
COTTON LINT	54	46	51	42	48	44	65	86	92	98	89	8.47
JUTE AND SIMILAR FIBRES	80	61	73	58	58	64	52	51	55	39	41	-5.74
TOBACCO UNMANUFACTURED	53	46	49	62	62	53	49	49	51	46	49	-.91
NATURAL RUBBER	17	18	22	21	20	21	26	23	23	26	26	3.86
WOOL GREASY	1	3	3	4	3	2	2	1	2	1	3	-3.61
BOVINE CATTLE 1/	577	632	697	776	835	824	895	846	962	1075	756	4.34
PIGS 1/	1	1	1	1	1	1	2	2	3	4	2	16.56
TOTAL MEAT	57	84	110	139	137	142	149	214	188	206	235	12.78
MILK DRY	21	23	23	25	23	32	30	26	30	35	39	5.58
TOTAL EGGS IN SHELL	8	13	21	44	35	50	52	71	78	49	47	19.38
FISHERY PRODUCTS												
FISH FRESH FROZEN	340	346	250	287	329	891	966	866	866	733	586	12.29
FISH CURED	46	58	21	33	44	58	72	43	46	29	38	-.26
SHELLFISH	14	16	17	19	6	8	4	5	23	23	1	-11.12
FISH CANNED AND PREPARED	82	139	114	152	145	132	137	111	69	54	51	-7.30
SHELLFISH CANNED+PREPAR							3	2	1			10.06
FISH BODY AND LIVER OIL	1	3	2	3	2		1	1				-31.49
FISH MEAL	12	13	17	27	24	24	25	32	35	48	28	11.67
FOREST PRODUCTS 2/												
SAWLOGS CONIFEROUS	38	43	31	32	73	94	84	110	169	171	171	20.72
SAWLOGS NONCONIFEROUS	153	172	286	197	204	326	225	241	321	318	310	6.40
FUELWOOD	26						1	1				
SAWNWOOD CONIFEROUS	764	829	1251	763	1019	905	1409	1531	1827	1790	1486	8.78
SAWNWOOD NONCONIFEROUS	153	168	155	202	203	194	232	193	183	183	163	1.09
WOOD-BASED PANELS	183	192	310	263	316	359	321	258	290	198	199	.29
PULP FOR PAPER	56	95	97	102	104	120	135	116	149	143	136	7.42
PAPER AND PAPERBOARD	460	456	496	519	529	537	671	579	561	532	550	2.16
LATIN AMERICA												
AGRICULTURAL PRODUCTS												
WHEAT+FLOUR,WHEAT EQUIV.	7162	8981	8152	10777	10718	12039	11977	11037	11789	12091	11273	4.39
RICE MILLED	563	489	428	432	1339	1059	789	607	948	616	1034	6.08
BARLEY	262	207	203	358	323	479	413	351	474	505	515	9.22
MAIZE	3897	2438	3590	4714	3954	8887	7032	3330	8129	5462	4029	5.34
MILLET	4	6	2	4	6	3	2	3	4			
SORGHUM	1348	554	1440	1442	1902	2943	3641	3162	3825	3158	3429	16.48
POTATOES	196	173	198	205	252	341	208	195	165	184	136	-2.15
SUGAR,TOTAL (RAW EQUIV.)	113	286	646	882	717	1567	1489	1353	1742	1204	371	15.92
PULSES	308	299	400	291	284	816	876	520	369	501	488	5.99
SOYBEANS	127	444	628	971	952	1205	2235	2030	1298	1806	1835	23.79
SOYBEAN OIL	141	243	245	351	372	430	432	587	541	707	562	14.33
GROUNDNUTS SHELLED BASIS	46	38	8	14	11	13	14	18	9	20	17	-5.50
GROUNDNUT OIL	41	64	136	85	9	2	4	1	2	1	2	-38.15
COPRA	21	1										
COCONUT OIL	40	88	26	39	15	25	19	23	16	15	18	-11.62
PALM NUTS KERNELS	2	2	1		2	1	1	1	3	1		
PALM OIL	3	16	16	8	6	16	12	11	5	5	6	-3.43
OILSEED CAKE AND MEAL	340	413	593	647	710	968	957	1092	1196	1221	1292	14.04
BANANAS	233	184	228	287	391	434	446	316	227	227	227	.94
ORANGES+TANGER+CLEMEN	17	19	26	22	44	57	36	25	20	17	13	-2.14
LEMONS AND LIMES	2	3	4	6	4	2	3	2	2	2	1	-7.00

1/ THOUSAND HEAD
2/ EXCEPT FOR PULP FOR PAPER AND PAPER AND PAPERBOARD, ALL FOREST PRODUCTS ARE EXPRESSED IN THOUSAND CUBIC METRES

ANNEX TABLE 6. (Cont.) VOLUME OF IMPORTS OF MAJOR AGRICULTURAL, FISHERY AND FOREST PRODUCTS

	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	ANNUAL RATE OF CHANGE 1975-85
	THOUSAND METRIC TONS											PERCENT
COFFEE GREEN+ROASTED	82	86	54	58	93	49	64	59	67	70	68	-1.32
COCOA BEANS	15	7	3	3	2	3	10	13	3	6	9	1.08
TEA	10	13	14	16	19	16	14	13	14	13	15	1.43
COTTON LINT	69	56	85	71	91	79	93	79	77	118	101	4.42
JUTE AND SIMILAR FIBRES	45	30	15	12	18	36	34	14	14	11	14	-7.66
TOBACCO UNMANUFACTURED	15	17	18	16	17	28	24	20	19	15	21	1.94
NATURAL RUBBER	144	165	170	182	182	187	184	162	165	204	202	2.05
WOOL GREASY	6	8	6	7	9	13	12	13	9	9	12	6.54
BOVINE CATTLE 1/	397	516	490	583	928	419	464	436	375	369	388	-3.16
PIGS 1/	47	59	36	32	21	10	26	57	17	9	9	-13.89
TOTAL MEAT	160	183	197	373	365	335	413	338	267	303	380	6.76
MILK DRY	50	73	181	138	120	153	156	139	118	153	111	5.56
TOTAL EGGS IN SHELL	7	9	14	11	17	19	18	30	15	10	9	3.64
FISHERY PRODUCTS												
FISH FRESH FROZEN	126	98	90	109	133	111	96	97	83	70	84	-3.69
FISH CURED	67	54	48	46	47	56	52	52	47	46	40	-2.64
SHELLFISH	7	4	5	5	9	8	10	9	7	4	6	1.36
FISH CANNED AND PREPARED	41	43	49	60	74	92	87	79	43	39	62	1.78
SHELLFISH CANNED+PREPAR	1	1	1	1	2	2	2	1		1		-7.09
FISH BODY AND LIVER OIL	20	43	27	35	67	43	68	35	68	13	37	.99
FISH MEAL	143	75	66	108	138	163	126	108	63	101	64	-2.79
FOREST PRODUCTS 2/												
SAWLOGS CONIFEROUS	7	43	26	34	54	128	156	162	160	144	143	31.13
SAWLOGS NONCONIFEROUS	134	73	69	105	65	57	30	29	30	75	88	-6.80
PULPWOOD+PARTICLE					31	35	24	16	16	8	8	
FUELWOOD	9	6	12	4	4	5	7	5	3	4	6	-7.30
SAWNWOOD CONIFEROUS	1235	1467	1486	1715	1524	2184	1874	1477	1666	1709	1854	2.67
SAWNWOOD NONCONIFEROUS	742	427	520	679	692	917	642	652	597	753	696	2.03
WOOD-BASED PANELS	169	184	234	304	401	493	499	482	519	454	430	11.34
PULP FOR PAPER	544	536	462	530	653	740	762	735	645	766	773	4.66
PAPER AND PAPERBOARD	1650	1756	2162	1869	1856	2395	2437	2278	1958	1796	1726	.63
NEAR EAST DEVELOPING												
AGRICULTURAL PRODUCTS												
WHEAT+FLOUR,WHEAT EQUIV.	8758	7658	9207	10320	10703	12767	13999	14127	16726	20758	17687	9.71
RICE MILLED	939	1106	1456	1548	1887	1790	2020	1991	2247	2477	2188	8.85
BARLEY	473	465	991	852	1493	2361	3290	5002	3879	8940	5789	34.71
MAIZE	791	1009	1492	1850	2369	2685	3745	3805	4124	4294	4664	19.52
MILLET	3	10	6	4	4	2	2	3	4	4	5	-2.78
SORGHUM	91	197	189	254	109	101	132	339	59	52	34	-11.15
POTATOES	168	164	230	231	282	353	426	422	375	413	336	9.76
SUGAR,TOTAL (RAW EQUIV.)	2098	1694	2266	2400	3463	3353	3499	3898	3560	3736	3442	7.52
PULSES	243	234	202	213	258	257	359	332	314	320	305	4.59
SOYBEANS	28	29	63	138	180	99	116	108	94	161	128	14.33
SOYBEAN OIL	270	332	233	281	381	442	504	519	715	676	617	11.37
GROUNDNUTS SHELLED BASIS	9	8	15	6	8	16	9	7	5	7	6	-4.75
GROUNDNUT OIL	1	2	2	1	1	3	1	1	1			-19.65
COPRA	8	7		1								
COCONUT OIL	22	31	8	7	4	14	12	16	14	11	17	-.64
PALM NUTS KERNELS	1	5										
PALM OIL	137	76	148	164	187	148	291	376	418	456	522	18.95
OILSEED CAKE AND MEAL	100	237	379	459	442	406	543	674	845	1048	1138	21.53
BANANAS	255	308	277	289	319	300	316	263	255	222	167	-3.48
ORANGES+TANGER+CLEMEN	532	636	555	472	512	546	619	625	636	626	520	.89
LEMONS AND LIMES	32	54	52	45	77	79	77	80	87	96	77	8.80
COFFEE GREEN+ROASTED	49	51	53	42	40	46	56	74	77	63	68	4.75
COCOA BEANS	4	4	2	4	1	1	5	5	6	4	5	6.98
TEA	132	157	150	205	188	183	171	168	195	223	221	3.97
COTTON LINT	26	7	37	21	41	22	24	27	27	27	62	7.99
JUTE AND SIMILAR FIBRES	31	40	31	24	41	20	25	37	44	23	29	-1.05
TOBACCO UNMANUFACTURED	44	45	45	52	60	47	61	75	79	81	69	6.61
NATURAL RUBBER	51	50	49	46	37	40	50	65	96	82	84	6.99
WOOL GREASY	26	27	32	17	18	18	19	13	18	18	22	-3.99
BOVINE CATTLE 1/	160	184	389	390	386	503	736	713	594	549	341	10.80
PIGS 1/			5									
TOTAL MEAT	251	334	482	582	673	980	1302	1294	1266	1241	1163	17.85
MILK DRY	3	5	10	11	20	14	24	28	24	24	21	21.97
TOTAL EGGS IN SHELL	81	77	83	84	75	108	139	149	153	146	121	7.72

1/ THOUSAND HEAD
2/ EXCEPT FOR PULP FOR PAPER AND PAPER AND PAPERBOARD, ALL FOREST PRODUCTS ARE EXPRESSED IN THOUSAND CUBIC METRES

ANNEX TABLE 6. (Cont.) VOLUME OF IMPORTS OF MAJOR AGRICULTURAL, FISHERY AND FOREST PRODUCTS

	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	ANNUAL RATE OF CHANGE 1975-85
	THOUSAND METRIC TONS											PERCENT
FISHERY PRODUCTS												
FISH FRESH FROZEN	41	60	55	70	55	76	107	112	133	153	134	13.45
FISH CURED	3	4	2	3	3	4	6	5	4	4	7	7.82
SHELLFISH	1	1	2	1	2	2	2	2	2	1	4	11.35
FISH CANNED AND PREPARED	33	42	46	55	51	70	64	64	63	50	49	3.78
SHELLFISH CANNED+PREPAR					1	1	2	3	2	2	1	42.53
FISH BODY AND LIVER OIL	2	2	2	1	1	1	1	1		1		-18.22
FISH MEAL	27	51	136	56	52	80	146	113	106	89	149	11.95
FOREST PRODUCTS 2/												
SAWLOGS CONIFEROUS	167	196	231	176	126	173	202	273	317	279	393	7.54
SAWLOGS NONCONIFEROUS	66	86	55	68	42	57	46	5	6	11	11	-23.34
PULPWOOD+PARTICLE	8	9	13	36	40	14	4	9	9	4	4	-11.92
FUELWOOD	172	180	159	163	119	126	146	183	169	167	122	-1.25
SAWNWOOD CONIFEROUS	1744	2202	3063	2441	2689	3242	3498	3938	4179	4563	4097	8.86
SAWNWOOD NONCONIFEROUS	294	406	659	620	469	630	550	630	758	811	679	7.12
WOOD-BASED PANELS	465	597	749	804	931	1072	1425	1588	1324	1442	1485	12.37
PULP FOR PAPER	136	159	135	127	113	121	111	110	178	171	201	2.59
PAPER AND PAPERBOARD	696	725	866	889	905	975	1042	1008	1006	1204	1623	6.67
FAR EAST DEVELOPING												
AGRICULTURAL PRODUCTS												
WHEAT+FLOUR,WHEAT EQUIV.	15063	13644	7213	8060	8808	8887	7792	9707	11531	10772	9264	-1.55
RICE MILLED	3023	3698	3848	3465	3392	4497	4384	2089	3225	2468	2641	-3.20
BARLEY	539	8	327	107	106	206	270	916	450	1624	313	25.39
MAIZE	1440	1971	2517	3125	4114	3888	4491	4851	6275	4879	5562	13.67
MILLET	13	29	10	1	2	3	3	6	4	5	2	-11.75
SORGHUM	204	398	19	49	144	62	178	445	223	420	388	15.00
POTATOES	87	93	104	117	143	155	145	170	138	125	111	3.71
SUGAR,TOTAL (RAW EQUIV.)	1127	1116	1435	1866	1935	2607	2807	2310	2127	2317	4295	11.11
PULSES	93	90	91	167	207	207	377	381	366	461	476	21.19
SOYBEANS	153	433	370	489	728	874	1093	1219	1137	1355	1443	21.47
SOYBEAN OIL	87	194	529	583	841	1004	981	976	922	1353	720	21.22
GROUNDNUTS SHELLED BASIS	18	43	23	28	39	67	93	152	144	81	104	21.08
GROUNDNUT OIL	23	48	64	42	36	38	34	36	55	37	44	1.32
COPRA	55	96	99	163	74	115	110	81	47	88	136	.89
COCONUT OIL	34	55	87	158	91	58	149	83	89	86	73	4.54
PALM NUTS KERNELS	4	5	5	6	10	15	6	3	12	5	4	1.25
PALM OIL	277	372	842	847	1058	1757	1436	1561	1677	1943	2533	21.34
OILSEED CAKE AND MEAL	333	533	717	804	965	1005	1026	1339	1524	1737	1205	14.09
BANANAS	56	45	48	57	69	59	49	59	50	71	68	2.51
ORANGES+TANGER+CLEMEN	208	199	215	222	208	238	273	249	286	251	250	2.94
LEMONS AND LIMES				4	6	7	8	8	9	10	13	70.59
COFFEE GREEN+ROASTED	31	42	32	19	27	19	36	51	72	96	94	12.99
COCOA BEANS	9	9	8	12	17	27	45	60	61	50	58	27.08
TEA	64	70	81	77	84	86	97	94	110	127	114	6.24
COTTON LINT	790	794	843	860	827	888	775	788	863	991	960	1.55
JUTE AND SIMILAR FIBRES	80	123	57	64	80	119	109	165	142	124	112	6.28
TOBACCO UNMANUFACTURED	53	59	69	64	69	82	88	70	63	68	64	1.61
NATURAL RUBBER	123	142	160	193	215	182	208	226	198	277	250	6.73
WOOL GREASY	26	27	32	29	30	33	39	34	36	34	50	4.82
BOVINE CATTLE 1/	286	279	293	324	356	343	362	367	352	301	271	.76
PIGS 1/	2796	3004	3023	3123	3095	4552	3194	3414	3323	3188	3214	1.31
TOTAL MEAT	149	173	212	279	297	227	266	352	360	330	316	7.80
MILK DRY	68	84	99	143	159	152	153	130	139	158	194	8.05
TOTAL EGGS IN SHELL	58	57	64	68	75	76	75	80	78	88	87	4.36
FISHERY PRODUCTS												
FISH FRESH FROZEN	148	156	162	185	229	210	258	280	294	367	437	11.09
FISH CURED	32	21	18	21	21	28	22	26	26	54	40	6.03
SHELLFISH	68	89	95	119	180	122	115	132	139	151	164	6.91
FISH CANNED AND PREPARED	114	112	84	83	79	96	78	92	51	48	47	-8.00
SHELLFISH CANNED+PREPAR	14	16	15	16	14	18	16	21	22	21	17	3.73
FISH BODY AND LIVER OIL	2	7	4	4	4	2	2	3	3	5	22	7.30
FISH MEAL	99	84	93	131	164	148	158	251	171	173	187	8.70
FOREST PRODUCTS 2/												
SAWLOGS CONIFEROUS	461	750	1200	2426	2128	1536	1186	1548	2116	2073	2217	11.66
SAWLOGS NONCONIFEROUS	6180	7505	8558	9371	9355	6526	5985	5415	5789	4986	4331	-5.42
PULPWOOD+PARTICLE	61		1		2	2	1		3	117	118	
FUELWOOD	473	462	546	489	519	560	588	741	749	727	770	5.75
SAWNWOOD CONIFEROUS	179	214	228	235	80	87	72	45	46	49	37	-18.14

1/ THOUSAND HEAD
2/ EXCEPT FOR PULP FOR PAPER AND PAPER AND PAPERBOARD, ALL FOREST PRODUCTS ARE EXPRESSED IN THOUSAND CUBIC METRES

ANNEX TABLE 6. (Cont.) VOLUME OF IMPORTS OF MAJOR AGRICULTURAL, FISHERY AND FOREST PRODUCTS

	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	ANNUAL RATE OF CHANGE 1975-85
	.....	.....	.....	.....	THOUSAND METRIC TONS	.....	.....	.....	.....	.....	.....	PERCENT
SAWNWOOD NONCONIFEROUS	981	1463	1741	1829	2345	1850	1762	1910	1840	1774	1372	2.22
WOOD-BASED PANELS	392	472	495	575	610	724	821	680	794	652	584	4.97
PULP FOR PAPER	286	423	555	696	735	728	815	791	1090	1042	1110	12.31
PAPER AND PAPERBOARD	1133	1459	1495	1830	1995	2072	2247	2349	2313	2533	2481	7.60
ASIAN CENT PLANNED ECON												
AGRICULTURAL PRODUCTS												
WHEAT+FLOUR,WHEAT EQUIV.	5287	3798	9164	10271	11756	13243	15688	15565	12643	11234	6649	7.12
RICE MILLED	737	784	214	250	619	593	459	566	174	497	487	-2.86
BARLEY	174	333	265	336	704	402	354	509	481	430	369	6.29
MAIZE	1729	2150	2222	3064	5412	4438	3287	4117	5569	3015	3107	6.70
SORGHUM	152	255	394	473	517	417	840	767	534	597	564	11.86
SUGAR,TOTAL (RAW EQUIV.)	760	952	1895	1587	1368	1114	1294	2373	2130	1456	2091	7.41
PULSES	33	39	49	68	58	72	91	124	88	91	83	10.88
SOYBEANS	854	829	985	1172	1696	1529	1682	1516	1420	1345	1470	5.85
SOYBEAN OIL	42	27	149	137	143	136	56	63	36	25	43	-6.04
GROUNDNUTS SHELLED BASIS				2	1			6				
GROUNDNUT OIL									20	1		
COPRA					1	3	3	7	1	3	7	
COCONUT OIL	47	29	22	19	27	31	26	31	26	27	29	-1.09
PALM NUTS KERNELS							2	1				
PALM OIL	12	3	30	14	48	63	26	24	18	21	73	15.45
OILSEED CAKE AND MEAL	1	29	41	55	1	9	14	15	33	61	73	24.30
BANANAS	10	15										
ORANGES+TANGER+CLEMEN				1		2	1	1	5	2	3	
COFFEE GREEN+ROASTED		7	6	6	5	6	7	17	30	16	11	32.26
COCOA BEANS	8	11	12	15	17	17	4	23	10	12	6	-1.74
TEA	6	5	5	6	5	5	4	4	5	6	6	-.64
COTTON LINT	412	428	422	818	835	1235	1021	824	521	369	360	-.38
JUTE AND SIMILAR FIBRES	22	27	34	39	36	47	25	44	36	25	21	-.49
TOBACCO UNMANUFACTURED	11	13	15	19	22	32	54	46	21	28	45	13.17
NATURAL RUBBER	298	248	316	300	333	358	220	225	326	309	261	-.62
WOOL GREASY	13	22	22	28	51	60	94	112	116	85	145	26.35
BOVINE CATTLE 1/	8	1				2		1	1	4	10	
PIGS 1/		2	1	4	3	3	5	3	3	2	2	14.24
TOTAL MEAT	29	10	4	11	18	16	23	27	28	31	35	12.83
FISHERY PRODUCTS												
FISH FRESH FROZEN	4	4	6	4	4	2	3	3	3	4	4	-3.20
FISH CURED	7	1	1	1	1	1	1					-38.60
SHELLFISH	4	3	4	9	14	20	2	5	4	2	2	-6.79
FISH CANNED AND PREPARED	2	5	1	1	1	2	2	2	2	3	3	3.04
SHELLFISH CANNED+PREPAR						1	1		1	1	1	16.99
FISH BODY AND LIVER OIL	3	2	2	3	3	2	2	2	2	5	3	2.57
FISH MEAL	95	136	124	142	168	154	160	226	205	262	309	10.43
FOREST PRODUCTS 2/												
SAWLOGS CONIFEROUS	614	618	419	389	422	630	1181	3115	5391	6776	7576	37.45
SAWLOGS NONCONIFEROUS	3887	4437	6236	7127	6760	6481	5491	4837	5975	4704	4630	
PULPWOOD+PARTICLE	88	711	711	728	1069	843	1957	1192	2005	1563	1626	22.64
SAWNWOOD CONIFEROUS	21	29	29	29	29	31	10	6	11	15	9	-11.68
SAWNWOOD NONCONIFEROUS	23	30	38	56	96	139	197	293	423	519	529	41.54
WOOD-BASED PANELS	3	12	13	24	36	51	260	287	314	710	551	70.49
PULP FOR PAPER	219	235	175	208	210	427	525	440	683	672	670	15.97
PAPER AND PAPERBOARD	174	217	297	411	427	650	662	510	678	634	731	14.40

1/ THOUSAND HEAD
2/ EXCEPT FOR PULP FOR PAPER AND PAPER AND PAPERBOARD, ALL FOREST PRODUCTS ARE EXPRESSED IN THOUSAND CUBIC METRES

ANNEX TABLE 7. INDICES OF VALUE OF EXPORTS OF AGRICULTURAL, FISHERY AND FOREST PRODUCTS

	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	ANNUAL RATE OF CHANGE 1975-85
	1979-81=100											PERCENT
WORLD												
AGRICULTURAL PRODUCTS	58	61	70	77	91	105	105	94	92	97	89	5.04
FOOD	61	59	64	75	88	105	108	95	92	96	88	5.09
FEED	37	54	67	73	86	101	113	105	116	101	82	8.57
RAW MATERIALS	57	68	78	83	95	104	100	90	91	97	87	3.87
BEVERAGES	44	67	97	93	105	110	85	88	91	103	105	5.20
FISHERY PRODUCTS	41	53	63	86	94	101	105	101	104	106		
FOREST PRODUCTS	50	60	65	73	94	107	98	89	91	96	96	6.26
DEVELOPED COUNTRIES												
AGRICULTURAL PRODUCTS	57	58	63	74	88	105	107	96	92	93	84	5.33
FOOD	58	58	61	73	87	105	108	96	91	92	83	5.18
FEED	38	50	59	74	88	103	109	103	115	96	81	8.74
RAW MATERIALS	56	63	79	81	95	104	102	96	90	97	88	4.51
BEVERAGES	47	54	69	79	101	103	96	96	93	98	106	7.26
FISHERY PRODUCTS	45	55	65	93	95	102	103	97	100	98		
FOREST PRODUCTS	52	61	66	74	93	107	100	91	92	99	100	6.22
WESTERN EUROPE												
AGRICULTURAL PRODUCTS	53	54	62	75	91	106	103	96	93	94	94	6.49
FOOD	54	54	61	75	89	106	104	96	92	92	92	6.28
FEED	36	46	57	70	87	97	116	119	132	119	104	12.58
RAW MATERIALS	65	75	74	95	113	99	88	88	92	102	96	3.10
BEVERAGES	46	53	65	78	101	103	96	95	93	98	109	7.79
FISHERY PRODUCTS	46	55	67	101	94	104	102	92	96	92		
FOREST PRODUCTS	50	59	63	72	93	109	98	89	89	96	100	6.45
USSR AND EASTERN EUROPE												
AGRICULTURAL PRODUCTS	74	73	88	84	98	103	100	94	84	80	75	-.53
FOOD	77	72	86	82	98	103	100	90	79	80	74	-.11
FEED	58	134	134	117	113	96	91	109	91	71	78	-2.31
RAW MATERIALS	68	74	96	89	95	102	103	105	93	77	73	-.73
BEVERAGES	67	65	78	90	104	105	94	97	103	95	91	3.63
FISHERY PRODUCTS	74	76	70	82	105	105	90	89	114	110		
FOREST PRODUCTS	69	74	84	86	97	104	99	96	99	99	99	3.39
NORTH AMERICA DEVELOPED												
AGRICULTURAL PRODUCTS	57	59	60	73	85	104	110	94	94	98	73	5.06
FOOD	60	60	58	71	84	104	112	95	94	98	72	4.87
FEED	37	51	58	75	88	107	105	93	106	83	67	6.83
RAW MATERIALS	51	54	71	81	92	108	100	91	86	102	84	5.65
BEVERAGES	27	49	111	75	94	110	95	91	79	91	88	7.24
FISHERY PRODUCTS	33	44	57	85	98	94	108	105	102	97		
FOREST PRODUCTS	58	62	66	74	93	105	102	91	96	104	100	6.66
OCEANIA DEVELOPED												
AGRICULTURAL PRODUCTS	89	81	89	87	81	106	113	104	89	91	95	5.59
FOOD	82	81	83	85	77	109	114	104	87	90	93	5.54
FEED	81	55	125	119	127	74	100	103	95	73	60	-.50
RAW MATERIALS	91	83	84	71	90	100	110	103	92	95	100	5.88
BEVERAGES	85	87	83	86	74	94	132	139	157	177	158	12.65
FISHERY PRODUCTS	86	98	93	86	83	103	114	120	134	152		
FOREST PRODUCTS	70	45	54	59	83	106	111	94	83	89	81	8.23

ANNEX TABLE 7. (Cont.) INDICES OF VALUE OF EXPORTS OF AGRICULTURAL, FISHERY AND FOREST PRODUCTS

	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	ANNUAL RATE OF CHANGE 1975-85
	1979-81=100											PERCENT
DEVELOPING COUNTRIES												
AGRICULTURAL PRODUCTS	59	67	82	84	95	104	101	90	94	103	98	4.53
FOOD	68	63	73	79	91	102	107	93	94	105	100	4.86
FEED	37	58	76	73	84	98	118	106	116	106	84	8.42
RAW MATERIALS	59	73	78	85	96	105	99	84	91	96	87	3.20
BEVERAGES	42	74	112	100	107	113	80	84	89	106	105	4.30
FISHERY PRODUCTS	36	49	59	76	93	99	108	108	111	118		
FOREST PRODUCTS	37	54	59	66	101	110	89	82	88	82	79	6.59
AFRICA DEVELOPING												
AGRICULTURAL PRODUCTS	66	78	102	99	105	105	90	83	78	89	90	.76
FOOD	76	76	90	102	102	106	92	80	72	83	84	-.32
FEED	78	97	124	76	129	94	77	80	83	56	49	-5.45
RAW MATERIALS	61	76	78	78	89	100	110	92	97	110	102	4.95
BEVERAGES	51	82	129	102	115	105	80	84	82	93	97	1.46
FISHERY PRODUCTS	46	47	49	63	79	95	126	122	141	139		
FOREST PRODUCTS	50	68	71	78	91	124	85	70	67	69	66	.95
LATIN AMERICA												
AGRICULTURAL PRODUCTS	58	66	82	85	94	104	101	90	98	102	100	4.75
FOOD	69	63	73	76	91	102	108	90	100	103	103	4.97
FEED	32	52	76	71	79	95	125	104	122	109	84	9.90
RAW MATERIALS	62	70	84	98	95	101	104	91	82	85	82	1.86
BEVERAGES	38	78	105	102	107	116	77	85	90	102	103	4.53
FISHERY PRODUCTS	35	46	53	78	91	107	102	108	105	112		
FOREST PRODUCTS	32	32	40	48	81	111	109	90	95	114	97	14.30
NEAR EAST DEVELOPING												
AGRICULTURAL PRODUCTS	65	79	80	86	90	98	112	109	103	105	87	3.72
FOOD	45	56	64	78	84	97	119	122	112	110	89	8.57
FEED	125	115	113	78	94	121	85	62	49	65	25	-11.52
RAW MATERIALS	96	118	108	101	99	100	102	90	90	100	86	-1.76
BEVERAGES	36	48	68	79	104	85	111	74	63	58	41	.99
FISHERY PRODUCTS	49	55	76	68	87	94	119	134	139	157		
FOREST PRODUCTS	41	49	56	46	78	86	136	152	164	211	161	18.65
FAR EAST DEVELOPING												
AGRICULTURAL PRODUCTS	52	59	73	74	91	105	103	90	91	109	93	6.18
FOOD	59	58	68	67	88	101	112	99	91	117	98	6.83
FEED	41	66	72	79	91	103	106	109	97	96	78	5.98
RAW MATERIALS	44	60	65	76	96	109	95	73	88	88	76	4.73
BEVERAGES	45	59	115	95	95	113	90	81	98	139	124	7.19
FISHERY PRODUCTS	38	49	69	76	100	93	107	109	111	117		
FOREST PRODUCTS	34	57	62	67	110	108	82	80	88	74	76	5.65
ASIAN CENT PLANNED ECON												
AGRICULTURAL PRODUCTS	83	71	69	83	94	100	100	99	111	127	151	6.72
FOOD	94	74	65	82	91	107	102	92	94	110	140	4.69
FEED	11	16	14	15	23	95	182	188	349	255	297	51.22
RAW MATERIALS	87	82	89	95	113	105	82	116	156	178	179	9.34
BEVERAGES	58	43	81	93	106	105	89	127	116	146	143	12.24
FISHERY PRODUCTS	24	56	52	84	92	99	109	103	111	127		
FOREST PRODUCTS	42	55	62	62	101	98	105	87	93	85	79	5.79

ANNEX TABLE 8. INDICES OF VOLUME OF EXPORTS OF AGRICULTURAL, FISHERY AND FOREST PRODUCTS

	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	ANNUAL RATE OF CHANGE 1975-85
	1979-81=100											PERCENT
WORLD												
AGRICULTURAL PRODUCTS	77	83	85	91	95	101	105	104	106	109	109	3.58
FOOD	74	80	84	90	94	101	106	105	106	109	108	3.90
FEED	54	71	73	88	89	100	111	115	125	116	123	8.04
RAW MATERIALS	88	94	95	100	99	102	99	98	99	101	100	.90
BEVERAGES	89	92	83	90	100	99	101	104	107	114	118	3.08
FISHERY PRODUCTS	70	78	85	91	97	99	104	107	110	114		
FOREST PRODUCTS	73	87	90	96	101	102	97	93	103	107	109	2.87
DEVELOPED COUNTRIES												
AGRICULTURAL PRODUCTS	72	78	81	88	93	102	105	103	104	107	105	3.98
FOOD	72	77	80	88	92	102	106	104	103	107	105	4.12
FEED	54	67	65	86	91	102	106	112	123	108	110	7.57
RAW MATERIALS	80	87	94	96	99	103	98	98	96	99	95	1.31
BEVERAGES	76	82	87	83	99	98	103	104	108	118	123	4.69
FISHERY PRODUCTS	75	82	85	90	97	99	105	105	107	111		
FOREST PRODUCTS	72	86	88	94	100	102	98	95	105	110	112	3.42
WESTERN EUROPE												
AGRICULTURAL PRODUCTS	73	77	78	85	94	100	107	107	112	118	123	5.61
FOOD	72	76	78	85	93	100	107	106	111	117	122	5.60
FEED	52	61	61	82	90	95	114	134	149	143	152	12.25
RAW MATERIALS	89	95	85	102	107	97	96	99	107	116	113	2.34
BEVERAGES	76	83	85	83	99	97	104	106	111	121	128	5.03
FISHERY PRODUCTS	80	86	87	89	97	98	105	106	114	120		
FOREST PRODUCTS	67	83	84	93	101	100	99	97	107	116	119	4.65
USSR AND EASTERN EUROPE												
AGRICULTURAL PRODUCTS	99	96	107	96	100	100	100	102	97	99	99	-.04
FOOD	101	96	108	96	101	99	100	100	96	103	105	.15
FEED	71	138	117	115	112	96	92	108	67	66	91	-3.32
RAW MATERIALS	98	103	111	99	96	101	103	109	95	80	80	-1.98
BEVERAGES	80	80	91	93	98	100	102	104	114	114	107	3.50
FISHERY PRODUCTS	114	113	106	101	104	106	90	80	104	103		
FOREST PRODUCTS	100	106	108	112	103	100	97	97	102	103	103	-.40
NORTH AMERICA DEVELOPED												
AGRICULTURAL PRODUCTS	65	72	75	89	91	104	104	101	98	99	83	3.32
FOOD	66	73	74	88	91	103	106	103	99	100	82	3.46
FEED	54	68	64	87	90	108	102	98	109	88	85	4.94
RAW MATERIALS	71	69	82	97	98	110	93	93	85	95	83	1.85
BEVERAGES	58	70	105	75	94	107	99	89	75	88	90	2.27
FISHERY PRODUCTS	47	54	76	90	94	97	109	107	106	103		
FOREST PRODUCTS	72	84	88	91	99	103	98	92	103	106	106	3.05
OCEANIA DEVELOPED												
AGRICULTURAL PRODUCTS	76	89	99	96	94	106	100	99	98	97	114	2.23
FOOD	75	85	96	99	92	109	99	99	96	95	114	2.38
FEED	80	120	142	137	151	66	83	107	105	68	76	-4.01
RAW MATERIALS	78	100	107	88	100	97	102	99	104	102	114	1.91
BEVERAGES	96	100	89	83	84	98	118	117	142	151	150	5.89
FISHERY PRODUCTS	53	51	63	66	85	104	110	128	132	139		
FOREST PRODUCTS	55	67	79	81	94	105	101	87	88	89	87	3.64

ANNEX TABLE 8. (Cont.) INDICES OF VOLUME OF EXPORTS OF AGRICULTURAL, FISHERY AND FOREST PRODUCTS

	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	ANNUAL RATE OF CHANGE 1975-85
	1979-81=100											PERCENT
DEVELOPING COUNTRIES												
AGRICULTURAL PRODUCTS	85	93	93	95	98	98	104	106	110	112	117	2.91
FOOD	81	90	97	94	97	97	106	108	112	114	118	3.37
FEED	53	75	83	90	86	97	116	118	127	126	139	8.53
RAW MATERIALS	96	103	96	104	99	100	100	97	103	103	105	.49
BEVERAGES	96	97	81	93	101	100	99	103	107	111	115	2.30
FISHERY PRODUCTS	63	73	85	92	97	100	103	109	113	120		
FOREST PRODUCTS	77	97	98	104	107	102	91	86	94	93	92	.02
AFRICA DEVELOPING												
AGRICULTURAL PRODUCTS	112	116	100	101	99	98	104	103	97	98	103	-1.01
FOOD	115	119	106	103	95	99	106	102	97	98	99	-1.55
FEED	115	135	137	93	132	96	72	92	99	64	73	-6.08
RAW MATERIALS	88	100	88	93	94	101	105	93	94	109	114	1.75
BEVERAGES	115	116	94	99	106	94	101	109	98	95	106	-.89
FISHERY PRODUCTS	63	68	71	83	84	90	126	133	173	159		
FOREST PRODUCTS	86	109	107	107	108	106	86	84	84	93	85	-1.93
LATIN AMERICA												
AGRICULTURAL PRODUCTS	80	86	92	97	100	96	104	103	113	111	118	3.43
FOOD	76	86	100	98	101	93	105	104	114	110	119	3.47
FEED	47	66	82	85	82	97	120	115	134	131	143	10.21
RAW MATERIALS	100	91	97	119	102	98	100	92	88	83	94	-1.37
BEVERAGES	94	93	72	91	102	101	97	102	111	115	118	3.22
FISHERY PRODUCTS	72	73	79	87	96	107	97	110	95	102		
FOREST PRODUCTS	46	49	59	71	92	105	103	94	113	127	118	10.71
NEAR EAST DEVELOPING												
AGRICULTURAL PRODUCTS	90	109	98	106	95	95	110	118	115	116	93	1.13
FOOD	71	91	94	102	90	92	118	130	125	127	99	4.25
FEED	55	82	68	74	95	122	84	52	53	53	22	-7.02
RAW MATERIALS	123	142	106	113	102	99	99	101	101	101	86	-3.15
BEVERAGES	51	64	74	77	100	85	114	81	71	61	47	-.46
FISHERY PRODUCTS	78	60	94	83	101	92	107	126	133	148		
FOREST PRODUCTS	59	66	69	59	90	85	124	138	163	224	178	14.69
FAR EAST DEVELOPING												
AGRICULTURAL PRODUCTS	74	88	89	87	93	101	106	110	108	117	117	4.24
FOOD	67	83	88	79	92	100	108	118	113	125	120	5.89
FEED	57	85	83	105	92	98	110	124	99	111	119	5.38
RAW MATERIALS	88	96	93	96	97	102	101	97	105	104	107	1.55
BEVERAGES	82	88	87	92	90	105	105	102	103	120	124	3.92
FISHERY PRODUCTS	60	71	93	97	103	97	100	108	115	121		
FOREST PRODUCTS	83	108	108	111	112	102	86	83	90	82	86	-2.08
ASIAN CENT PLANNED ECON												
AGRICULTURAL PRODUCTS	97	92	86	95	100	103	96	106	127	143	178	5.71
FOOD	105	92	84	94	99	105	95	98	108	126	173	4.23
FEED	43	53	13	11	26	89	186	196	436	351	457	41.03
RAW MATERIALS	87	109	110	112	113	96	91	122	168	182	175	6.35
BEVERAGES	65	69	87	93	107	105	89	115	137	152	140	8.15
FISHERY PRODUCTS	55	88	85	103	91	98	111	106	118	139		
FOREST PRODUCTS	94	99	98	126	107	92	101	93	96	85	83	-1.76

ANNEX TABLE 9. INDICES OF VALUE OF IMPORTS OF AGRICULTURAL, FISHERY AND FOREST PRODUCTS

	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	ANNUAL RATE OF CHANGE 1975-85
	1979-81=100											PERCENT
WORLD												
AGRICULTURAL PRODUCTS	58	61	69	77	91	105	105	95	92	96	91	5.10
FOOD	61	59	64	74	88	104	108	97	92	95	90	5.24
FEED	40	53	68	72	88	100	112	106	115	100	86	8.39
RAW MATERIALS	59	68	77	84	96	106	98	87	89	97	90	3.76
BEVERAGES	45	63	97	93	103	109	88	87	89	99	101	4.92
FISHERY PRODUCTS	44	55	64	78	96	100	104	105	105	105		
FOREST PRODUCTS	50	60	67	75	95	108	97	94	91	96	95	6.14
DEVELOPED COUNTRIES												
AGRICULTURAL PRODUCTS	61	65	74	81	95	105	101	92	90	94	91	4.03
FOOD	66	65	68	79	93	104	103	93	88	92	90	3.89
FEED	41	55	68	72	88	100	112	104	112	94	82	7.51
RAW MATERIALS	63	74	81	87	99	105	96	87	90	98	92	3.02
BEVERAGES	45	64	98	93	104	110	86	87	88	98	101	4.78
FISHERY PRODUCTS	45	56	67	79	99	99	102	104	107	108		
FOREST PRODUCTS	52	62	68	76	98	108	94	91	88	94	94	5.41
WESTERN EUROPE												
AGRICULTURAL PRODUCTS	61	65	77	86	99	106	95	92	87	87	88	3.23
FOOD	67	65	73	85	98	106	96	92	86	84	86	2.64
FEED	39	53	66	72	89	101	109	106	107	95	83	8.10
RAW MATERIALS	62	76	82	91	101	106	93	86	87	96	97	2.88
BEVERAGES	44	61	96	91	104	110	86	86	86	92	95	4.56
FISHERY PRODUCTS	46	52	62	75	94	108	98	96	93	90		
FOREST PRODUCTS	50	62	67	72	94	110	96	89	84	88	88	5.05
USSR AND EASTERN EUROPE												
AGRICULTURAL PRODUCTS	56	60	61	66	83	102	115	98	93	96	88	6.14
FOOD	53	58	52	61	80	101	119	100	90	97	88	7.11
FEED	53	57	73	69	82	94	124	100	134	81	68	5.30
RAW MATERIALS	72	71	82	80	97	107	97	88	98	94	89	2.72
BEVERAGES	56	68	99	89	96	112	92	91	94	101	103	4.16
FISHERY PRODUCTS	77	90	92	94	104	107	89	85	99	89		
FOREST PRODUCTS	87	78	83	84	86	106	107	101	90	89	96	1.72
NORTH AMERICA DEVELOPED												
AGRICULTURAL PRODUCTS	60	69	81	88	99	104	98	86	91	105	105	4.41
FOOD	70	69	72	81	95	102	104	87	92	104	106	4.33
FEED	54	73	82	88	104	93	102	91	108	132	111	6.44
RAW MATERIALS	55	73	76	83	102	99	99	78	91	114	93	4.43
BEVERAGES	44	68	100	101	106	109	85	89	88	104	106	4.90
FISHERY PRODUCTS	50	68	75	80	96	96	108	113	130	133		
FOREST PRODUCTS	53	66	77	96	103	97	100	102	115	134	135	8.28
OCEANIA DEVELOPED												
AGRICULTURAL PRODUCTS	70	63	80	92	90	107	104	109	95	114	116	5.52
FOOD	82	65	75	89	91	103	107	125	104	126	118	5.88
FEED	92	24	43	186	48	87	164	75	339	107	193	14.96
RAW MATERIALS	66	74	76	86	87	109	104	91	76	89	105	3.10
BEVERAGES	50	49	94	100	90	114	96	92	87	111	120	7.01
FISHERY PRODUCTS	54	52	69	73	81	96	123	119	108	125		
FOREST PRODUCTS	65	58	73	70	85	104	110	122	83	103	117	6.60

ANNEX TABLE 9. (Cont.) INDICES OF VALUE OF IMPORTS OF AGRICULTURAL, FISHERY AND FOREST PRODUCTS

	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	ANNUAL RATE OF CHANGE 1975-85
	.....	.....	.....	.....	1979-81=100	.....	.....	.....	.....	.....	.....	PERCENT
DEVELOPING COUNTRIES												
AGRICULTURAL PRODUCTS	51	49	57	66	80	105	115	102	98	103	90	8.17
FOOD	53	48	54	64	78	105	117	104	99	103	89	8.45
FEED	30	40	67	71	82	99	119	122	140	160	122	16.01
RAW MATERIALS	46	54	68	76	88	108	104	89	86	93	86	6.13
BEVERAGES	47	60	86	93	101	100	99	86	96	108	106	6.20
FISHERY PRODUCTS	39	45	49	70	81	104	115	111	97	88		
FOREST PRODUCTS	41	49	63	69	84	104	112	107	104	106	101	9.80
AFRICA DEVELOPING												
AGRICULTURAL PRODUCTS	54	48	60	71	80	106	114	100	93	94	95	7.32
FOOD	54	46	56	69	78	106	115	102	94	94	96	7.95
FEED	20	23	47	60	79	98	123	118	92	124	112	18.97
RAW MATERIALS	66	63	78	84	97	101	102	104	103	107	106	5.44
BEVERAGES	55	70	101	98	92	104	104	72	84	75	73	.59
FISHERY PRODUCTS	33	43	37	67	67	106	127	90	74	48		
FOREST PRODUCTS	56	58	73	71	82	94	124	108	110	97	89	6.47
LATIN AMERICA												
AGRICULTURAL PRODUCTS	47	48	52	63	78	110	112	87	86	88	76	6.97
FOOD	47	47	49	62	74	111	115	88	87	87	75	7.07
FEED	29	37	64	62	81	102	116	116	125	126	100	14.47
RAW MATERIALS	47	52	65	73	95	108	98	81	79	104	87	6.27
BEVERAGES	41	55	68	67	128	87	86	63	57	58	58	.86
FISHERY PRODUCTS	53	45	50	71	91	103	106	105	76	54		
FOREST PRODUCTS	49	54	63	63	74	111	115	114	89	84	82	6.60
NEAR EAST DEVELOPING												
AGRICULTURAL PRODUCTS	49	44	53	62	74	102	124	117	114	129	109	11.99
FOOD	49	42	49	58	73	102	126	118	112	127	106	12.28
FEED	19	42	74	83	84	87	129	136	190	211	201	22.57
RAW MATERIALS	69	72	91	86	88	93	119	109	140	131	135	7.38
BEVERAGES	42	52	83	113	93	107	100	102	113	139	131	9.89
FISHERY PRODUCTS	24	33	52	68	65	104	131	116	112	101		
FOREST PRODUCTS	46	54	78	75	78	103	119	116	107	112	113	9.23
FAR EAST DEVELOPING												
AGRICULTURAL PRODUCTS	63	62	65	73	85	102	113	98	102	114	98	6.42
FOOD	67	62	61	70	83	103	114	98	102	110	94	6.17
FEED	38	43	69	71	86	103	111	122	137	169	100	13.19
RAW MATERIALS	52	65	82	81	92	102	106	93	94	114	101	5.96
BEVERAGES	51	68	92	83	95	97	108	112	136	181	193	12.05
FISHERY PRODUCTS	45	52	59	73	90	101	109	136	126	136		
FOREST PRODUCTS	35	47	56	71	99	101	100	96	95	99	92	9.56
ASIAN CENT PLANNED ECON												
AGRICULTURAL PRODUCTS	40	37	54	64	86	106	108	101	82	69	57	6.22
FOOD	45	37	56	63	88	101	111	110	89	73	57	6.29
FEED	40	60	86	118	42	94	164	120	150	203	148	14.04
RAW MATERIALS	31	37	47	67	80	118	101	81	65	58	55	5.90
BEVERAGES	17	51	115	77	96	96	109	69	121	89	84	9.67
FISHERY PRODUCTS	33	42	47	78	96	107	97	105	110	132		
FOREST PRODUCTS	21	32	49	67	77	110	114	109	144	156	145	20.74

ANNEX TABLE 10. INOICES OF VOLUME OF IMPORTS OF AGRICULTURAL, FISHERY ANO FOREST PROOUCTS

	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	ANNUAL RATE OF CHANGE 1975-85
	1979-81=100											PERCENT
WORLO												
AGRICULTURAL PROOUCTS	78	84	85	90	96	100	104	105	106	109	110	3.58
FOOO	75	81	84	89	95	100	105	107	107	110	110	3.97
FEEO	57	71	76	88	93	98	109	119	129	117	129	7.96
RAW MATERIALS	91	95	93	99	100	102	98	97	98	102	103	.95
BEVERAGES	90	93	84	89	100	99	101	102	105	109	114	2.50
FISHERY PROOUCTS	76	84	84	90	98	98	103	107	111	114		
FOREST PROOUCTS	72	86	90	96	102	101	96	94	101	106	108	2.89
OEVELOPEO COUNTRIES												
AGRICULTURAL PROOUCTS	85	92	90	94	99	99	102	104	104	107	110	2.39
FOOO	84	91	90	93	98	99	103	105	104	108	109	2.47
FEEO	58	73	76	89	93	98	109	117	127	111	124	7.18
RAW MATERIALS	98	104	98	103	103	101	97	97	99	104	106	.17
BEVERAGES	91	93	83	89	100	100	100	102	103	108	113	2.39
FISHERY PROOUCTS	78	87	86	91	100	98	103	108	114	117		
FOREST PROOUCTS	75	89	91	97	104	101	94	92	99	105	108	2.38
WESTERN EUROPE												
AGRICULTURAL PROOUCTS	88	94	92	97	100	100	99	104	103	104	111	1.87
FOOO	89	95	95	99	101	101	99	104	103	103	109	1.52
FEEO	55	70	74	90	94	98	108	119	119	114	128	7.86
RAW MATERIALS	97	109	102	106	104	101	94	94	96	101	107	-.31
BEVERAGES	89	90	84	87	100	98	102	103	105	105	112	2.54
FISHERY PROOUCTS	77	79	80	85	96	103	101	108	110	116		
FOREST PROOUCTS	69	86	87	92	103	101	96	94	102	106	107	3.24
USSR ANO EASTERN EUROPE												
AGRICULTURAL PROOUCTS	73	79	75	77	89	99	112	110	104	106	101	4.42
FOOO	66	75	70	73	87	98	115	113	100	107	100	5.33
FEEO	71	73	78	78	85	100	115	115	160	90	97	5.23
RAW MATERIALS	99	92	91	93	98	103	99	99	110	105	102	1.25
BEVERAGES	101	97	93	84	92	106	102	98	100	109	115	1.54
FISHERY PROOUCTS	136	149	123	102	109	104	87	87	111	119		
FOREST PROOUCTS	101	94	97	96	92	105	103	97	90	90	97	-.49
NORTH AMERICA OEVELOPEO												
AGRICULTURAL PROOUCTS	92	102	95	101	103	97	100	97	101	110	117	1.38
FOOO	91	106	104	103	103	95	101	96	102	109	119	1.11
FEEO	75	91	88	102	107	94	98	99	110	143	154	5.52
RAW MATERIALS	94	101	101	102	105	95	100	91	98	115	114	1.00
BEVERAGES	95	95	79	97	103	100	97	101	100	109	113	1.95
FISHERY PROOUCTS	88	107	99	100	103	95	102	107	122	127		
FOREST PROOUCTS	76	91	96	109	107	97	96	87	107	123	129	3.30
OCEANIA OEVELOPEO												
AGRICULTURAL PROOUCTS	110	101	102	97	96	103	101	119	116	123	130	2.32
FOOO	115	95	102	99	97	101	102	133	134	142	138	3.68
FEEO	140	36	52	218	56	95	150	83	371	83	275	11.15
RAW MATERIALS	112	126	105	109	97	104	99	96	86	94	123	-1.39
BEVERAGES	96	91	98	81	95	105	100	111	101	112	119	2.47
FISHERY PROOUCTS	81	80	94	89	88	99	114	121	113	135		
FOREST PROOUCTS	97	83	100	86	96	100	104	113	83	100	125	1.84

ANNEX TABLE 10. (Cont.) INDICES OF VOLUME OF IMPORTS OF AGRICULTURAL, FISHERY AND FOREST PRODUCTS

	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	ANNUAL RATE OF CHANGE 1975-85
	1979-81=100											PERCENT
DEVELOPING COUNTRIES												
AGRICULTURAL PRODUCTS	59	63	72	81	89	102	109	109	112	115	111	7.19
FOOD	57	60	70	80	88	102	110	110	113	116	111	7.78
FEED	43	51	70	81	87	101	112	134	148	173	173	14.92
RAW MATERIALS	70	71	79	89	92	106	102	97	96	98	97	3.52
BEVERAGES	80	93	93	93	102	93	105	101	117	119	118	3.51
FISHERY PRODUCTS	65	68	69	81	88	103	108	105	99	94		
FOREST PRODUCTS	63	72	85	89	93	101	106	104	111	112	110	5.46
AFRICA DEVELOPING												
AGRICULTURAL PRODUCTS	58	62	78	89	90	102	108	111	111	113	120	7.26
FOOD	54	57	74	89	89	102	108	112	111	113	121	8.17
FEED	22	28	49	60	82	96	122	130	107	144	145	20.06
RAW MATERIALS	96	88	95	99	101	97	102	107	113	117	112	2.40
BEVERAGES	93	104	118	96	89	94	116	92	115	108	111	1.02
FISHERY PRODUCTS	47	64	49	63	70	110	121	89	80	57		
FOREST PRODUCTS	70	75	91	83	90	93	117	105	115	105	96	4.03
LATIN AMERICA												
AGRICULTURAL PRODUCTS	55	61	68	81	86	107	107	93	99	96	91	5.54
FOOD	53	59	67	80	83	109	108	93	100	95	89	5.82
FEED	43	51	68	75	84	109	107	126	134	135	143	12.78
RAW MATERIALS	73	75	85	88	97	103	99	91	87	110	105	3.24
BEVERAGES	75	83	70	75	129	79	92	75	75	77	78	-.20
FISHERY PRODUCTS	86	69	64	78	98	102	100	87	69	60		
FOREST PRODUCTS	78	77	86	81	84	110	106	99	88	83	82	1.18
NEAR EAST DEVELOPING												
AGRICULTURAL PRODUCTS	51	55	67	74	85	99	116	121	127	144	131	11.24
FOOD	48	52	64	72	84	99	117	122	126	144	129	11.92
FEED	25	49	78	88	91	89	119	146	177	208	235	20.70
RAW MATERIALS	100	96	102	84	91	88	121	115	149	130	135	4.38
BEVERAGES	75	90	89	106	97	101	102	114	124	131	132	5.15
FISHERY PRODUCTS	39	49	71	73	75	103	122	117	113	102		
FOREST PRODUCTS	58	70	88	83	86	101	112	121	122	135	136	8.36
FAR EAST DEVELOPING												
AGRICULTURAL PRODUCTS	79	84	79	85	92	102	106	107	116	121	123	5.02
FOOD	80	84	75	83	90	103	107	106	116	117	120	4.98
FEED	55	58	73	86	93	101	106	136	153	192	174	13.38
RAW MATERIALS	81	86	96	97	97	101	101	103	109	124	119	3.67
BEVERAGES	79	94	95	83	95	93	112	123	155	183	174	8.58
FISHERY PRODUCTS	81	79	94	102	99	101	100	127	130	142		
FOREST PRODUCTS	57	75	85	101	108	95	97	96	103	103	100	4.11
ASIAN CENT PLANNED ECON												
AGRICULTURAL PRODUCTS	47	45	65	79	94	103	103	108	93	78	72	5.76
FOOD	47	44	72	79	98	98	105	116	102	87	76	6.64
FEED	68	65	76	125	48	91	161	130	161	208	192	12.95
RAW MATERIALS	46	47	51	79	85	116	99	89	71	56	62	3.29
BEVERAGES	23	70	68	64	95	99	105	147	233	81	28	6.68
FISHERY PRODUCTS	69	62	68	90	111	92	96	127	110	136		
FOREST PRODUCTS	48	56	71	86	86	103	111	106	146	152	150	12.02

ANNEX TABLE 11. THE IMPORTANCE OF AGRICULTURE IN THE ECONOMY

COUNTRY	AGRICULTURAL GDP AS % TOTAL GDP 1984	AGRIC.POPULATION AS % TOTAL POPULATION 1985	AGRIC.EXPORTS AS % TOTAL EXPORTS 1985	AGRIC.IMPORTS AS % TOTAL IMPORTS 1985	SHARE OF TOTAL IMPORTS FINANCED BY AGR.EXPORTS % 1985
ALGERIA	8	26		22	1
ANGOLA		72	7	36	9
BENIN	45	66	81	10	8
BOTSWANA	6	67	7	17	8
BURKINA FASO	44	86	86	35	29
BURUNDI		92	82	17	52
CAMEROON	22	66	49	14	51
CAPE VERDE	23	47	17	36	1
CENTRAL AFRICAN REPUBLIC	39	68	54	30	60
CHAD		79	78	34	124
COMOROS		81	79	22	40
CONGO	7	61	1	14	2
COTE D'IVOIRE	26	61	77	19	127
DJIBOUTI		79		34	
EGYPT	20	43	18	37	7
EQUATORIAL GUINEA		61	60	13	44
ETHIOPIA		77	66	34	29
GABON	6	72		17	1
GAMBIA	28	83	47	41	21
GHANA	52	53	62	17	52
GUINEA	42	78	5	17	6
GUINEA-BISSAU		81	57	29	17
KENYA	31	79	71	12	47
LESOTHO		83	60	28	4
LIBERIA	36	72	30	24	29
LIBYA	2	14		16	
MADAGASCAR		79	85	17	63
MALAWI		80	95	6	83
MALI	56	83	91	23	53
MAURITANIA	28	67	10	44	16
MAURITIUS	14	25	41	20	36
MOROCCO	17	41	17	21	9
MOZAMBIQUE		83	49	25	8
NAMIBIA		39			
NIGER	53	89	19	29	18
NIGERIA	31	66	3	15	4
REUNION		14	99	24	9
RWANDA		92	82	18	26
SAO TOME AND PRINCIPE	37	69	61	24	42
SENEGAL	17	80	14	27	8
SEYCHELLES		79	5	18	2
SIERRA LEONE	44	66	47	34	38
SOMALIA		73	90	35	29
SOUTH AFRICA		18	6	5	6
SUDAN	27	66	66	27	28
SWAZILAND		70	44	12	29
TANZANIA		82	75	10	33
TOGO	32	71	42	37	28
TUNISIA	16	29	8	15	5
UGANDA		84	92	4	117
ZAIRE		69	17	29	25
ZAMBIA	15	71	2	9	2
ZIMBABWE		71	41	4	51
BARBADOS	7	8	11	17	6
BELIZE		36	54	32	48
BERMUDA		3	1	18	
CANADA	3	4	8	6	9
COSTA RICA	22	28	67	8	58
CUBA		21	86	13	65
DOMINICA	33	31	57	21	29
DOMINICAN REPUBLIC	15	41	59	16	34
EL SALVADOR	21	41	58	11	45
GRENADA		31	66	19	21
GUADELOUPE		12	79	22	9
GUATEMALA		54	65	10	62
HAITI		63	47	25	16
HONDURAS	27	60	71	8	55
JAMAICA	6	32	27	20	13
MARTINIQUE		10	56	22	15
MEXICO	8	33	7	15	11
NICARAGUA	24	42	81	12	30
PANAMA		28	47	10	12
TRINIDAD AND TOBAGO		9	2	24	3
UNITED STATES		3	15	6	9
ARGENTINA		12	67	6	136
BOLIVIA	25	44	5	19	5
BRAZIL		28	36	9	67
CHILE		15	15	9	19
COLOMBIA	20	31	69	12	63
ECUADOR	15	35	22	7	26
FRENCH GUIANA		29	4	18	1
GUYANA	25	24	41	6	16
PARAGUAY		49	95	9	59

ANNEX TABLE 11. (Cont.) THE IMPORTANCE OF AGRICULTURE IN THE ECONOMY

COUNTRY	AGRICULTURAL GDP AS % TOTAL GDP 1984	AGRIC.POPULATION AS % TOTAL POPULATION 1985	AGRIC.EXPORTS AS % TOTAL EXPORTS 1985	AGRIC.IMPORTS AS % TOTAL IMPORTS 1985	SHARE OF TOTAL IMPORTS FINANCED BY AGR.EXPORTS % 1985
PERU		39	9	16	16
SURINAME		18	12	13	11
URUGUAY	12	15	57	9	68
VENEZUELA	7	13	1	22	3
AFGHANISTAN		58	23	9	19
BANGLADESH	55	72	22	25	9
BHUTAN		92			
BRUNEI DARUSSALAM		56		17	
BURMA	47	50	41	12	44
CHINA (EXC TAIWAN)	36	71	19	6	14
CYPRUS	10	23	38	15	14
HONG KONG	1	2	5	12	5
INDIA	33	65	29	11	18
INDONESIA	26	49	14	9	26
IRAN		30	1	20	1
IRAQ		24		16	
ISRAEL	4	5	13	10	10
JAPAN		8		13	1
JORDAN	8	8	15	21	5
KAMPUCHEA,DEMOCRATIC		72	63	10	7
KOREA DPR		38	2	7	1
KOREA REP	14	28	2	10	2
KUWAIT	1	2	1	14	2
LAOS		74	21	10	11
LEBANON		12	13	15	4
MALAYSIA		35	25	12	30
MALDIVES		66		11	
MONGOLIA		35	29	9	24
NEPAL		92	6	11	4
OMAN		45	1	14	1
PAKISTAN	24	55	28	20	12
PHILIPPINES	25	49	24	9	19
QATAR		2		19	
SAUDI ARABIA KINGDOM OF	2	44		14	
SINGAPORE	1	1	8	9	7
SRI LANKA	29	53	50	17	35
SYRIA	20	27	13	19	5
THAILAND	19	64	45	6	35
TURKEY	20	49	27	6	19
UNITED ARAB EMIRATES	1	3		12	1
VIET NAM		64	42	22	20
YEMEN ARAB REPUBLIC	21	66	22	45	1
YEMEN DEMOCRATIC	11	36	1	14	
AUSTRIA	4	6	5	7	4
BELGIUM-LUXEMBOURG	3	2	11	12	11
BULGARIA		14	9	8	9
CZECHOSLOVAKIA		11	3	10	3
DENMARK	5	6	27	10	26
FINLAND	7	10	5	6	5
FRANCE	4	6	17	12	15
GERMAN DEMOCRATIC REP.		9	2	7	2
GERMANY, FED. REP. OF	2	4	5	13	6
GREECE	18	24	30	14	13
HUNGARY	17	15	22	9	23
ICELAND		7	3	11	2
IRELAND		15	25	13	26
ITALY	5	8	8	16	7
MALTA	5	4	6	16	3
NETHERLANDS		5	21	15	22
NORWAY	4	7	1	6	2
POLAND		22	8	12	8
PORTUGAL	9	21	8	17	6
ROMANIA	18	22	8	7	11
SPAIN		13	14	11	11
SWEDEN		5	3	7	3
SWITZERLAND		4	4	9	3
UNITED KINGDOM	2	2	7	12	6
USSR		16	2	22	3
YUGOSLAVIA	15	25	10	9	9
AUSTRALIA	5	6	34	5	35
FIJI	18	42	48	18	25
FRENCH POLYNESIA		16	13	17	1
KIRIBATI		17	53	21	18
NEW CALEDONIA		48		19	
NEW ZEALAND		10	57	7	54
PAPUA NEW GUINEA		72	35	14	36
SOLOMON ISLANDS		49	43	17	43
TOKELAU		17			
TONGA		17	62	27	11
VANUATU		49	54	10	23

ANNEX TABLE 12. RESOURCES AND THEIR USE IN AGRICULTURE

COUNTRY	ARABLE LAND AS % OF TOTAL LAND 1984	IRRIGATED LAND AS % OF ARABLE LAND 1984	FOREST LAND AS % OF TOTAL LAND 1984	AGRIC.POPULATION PER HA OF ARABLE LAND 1984	AGRIC.LAB.FORCE AS % OF AGRIC.POPULATION 1985
ALGERIA	3	4	2	.8	23
ANGOLA	3		43	1.8	42
BENIN	16	1	34	1.4	49
BOTSWANA	2	1	2	.5	34
BURKINA FASO	10		25	2.2	54
BURUNDI	51		2	3.2	53
CAMEROON	15		54	.9	40
CAPE VERDE	10	5		3.9	37
CENTRAL AFRICAN REPUBLIC	3		58	.9	50
CHAD	3		10	1.2	36
COMOROS	43		16	3.7	46
CONGO	2	1	62	1.5	41
COTE D'IVOIRE	13	2	25	1.4	41
DJIBOUTI					45
EGYPT	2	100		8.1	27
EQUATORIAL GUINEA	8		46	1.0	43
ETHIOPIA	13	1	25	2.4	44
GABON	2		78	1.8	45
GAMBIA	16	20	19	3.2	48
GHANA	12		37	2.5	36
GUINEA	6	4	42	2.9	47
GUINEA-BISSAU	10		38	2.4	48
KENYA	4	2	7	6.7	41
LESOTHO	10			4.2	48
LIBERIA	4	1	39	4.2	37
LIBYA	1	11		.2	25
MADAGASCAR	5	33	26	2.6	45
MALAWI	25	1	49	2.3	44
MALI	2	17	7	3.2	32
MAURITANIA		4	15	6.3	31
MAURITIUS	58	16	31	2.5	37
MOROCCO	19	6	12	1.1	31
MOZAMBIQUE	4	3	19	3.7	55
NAMIBIA	1	1	22	.9	31
NIGER	3		2	1.4	52
NIGERIA	34	4	17	2.0	38
REUNION	22	9	35	1.4	39
RWANDA	40	1	20	5.4	50
SAO TOME AND PRINCIPE	38			1.8	40
SENEGAL	27	3	31	1.0	45
SEYCHELLES	26		19	8.4	45
SIERRA LEONE	25	1	29	1.3	38
SOMALIA	2	16	14	3.1	43
SOUTH AFRICA	11	9	4	.4	30
SUDAN	5	14	20	1.1	32
SWAZILAND	8	42	6	3.1	42
TANZANIA	6	3	48	3.5	49
TOGO	26		28	1.4	42
TUNISIA	30	4	4	.4	31
UGANDA	33		29	1.9	46
ZAIRE	3		78	3.1	39
ZAMBIA	7		40	.9	34
ZIMBABWE	7	6	62	2.2	39
BARBADOS	77			.6	50
BELIZE	2	4	44	1.1	33
BERMUDA			20		49
CANADA	5	1	35		50
COSTA RICA	13	13	31	1.1	34
CUBA	29	32	17	.7	40
DOMINICA	23		41	1.4	42
DOMINICAN REPUBLIC	30	13	13	1.7	30
EL SALVADOR	35	15	6	3.1	32
GRENADA	41		9	2.5	41
GUADELOUPE	23	5	40	1.0	44
GUATEMALA	17	4	39	2.3	28
HAITI	33	8	2	4.5	45
HONDURAS	16	5	33	1.4	29
JAMAICA	25	13	18	2.8	43
MARTINIQUE	19	30	26	1.8	45
MEXICO	13	20	24	1.1	33
NICARAGUA	11	7	34	1.1	31
PANAMA	7	5	53	1.1	35
TRINIDAD AND TOBAGO	23	18	44	.9	38
UNITED STATES	21	10	29		44
ARGENTINA	13	5	22	.1	36
BOLIVIA	3	5	52	.8	31
BRAZIL	9	3	67	.5	37
CHILE	7	23	21	.3	35
COLOMBIA	5	6	48	1.6	32
ECUADOR	9	21	51	1.3	30
FRENCH GUIANA			82	3.9	35
GUYANA	3	26	83	.5	35
PARAGUAY	5	3	51	.8	32

ANNEX TABLE 12. (Cont.) RESOURCES AND THEIR USE IN AGRICULTURE

COUNTRY	ARABLE LAND AS % OF TOTAL LAND 1984	IRRIGATED LAND AS % OF ARABLE LAND 1984	FOREST LAND AS % OF TOTAL LAND 1984	AGRIC.POPULATION PER HA OF ARABLE LAND 1984	AGRIC.LAB.FORCE AS % OF AGRIC.POPULATION 1985
PERU	3	33	55	2.1	30
SURINAME		78	97	1.2	31
URUGUAY	8	6	4	.3	39
VENEZUELA	4	9	36	.6	35
AFGHANISTAN	12	33	3	1.2	30
BANGLADESH	68	21	16	7.8	29
BHUTAN	2		70	12.7	45
BRUNEI DARUSSALAM	1	14	54	18.0	42
BURMA	15	11	49	1.8	45
CHINA (EXC TAIWAN)	11	44	14	7.4	58
CYPRUS	47	22	19	.4	47
HONG KONG	8	38	12	11.4	52
INDIA	57	24	23	2.9	41
INDONESIA	12	26	67	3.9	41
IRAN	9	39	11	.9	30
IRAQ	13	32	4	.7	27
ISRAEL	21	64	5	.5	38
JAPAN	13	68	67	2.1	52
JORDAN	4	9		.7	23
KAMPUCHEA,DEMOCRATIC	17	3	76	1.7	49
KOREA DPR	19	46	74	3.4	45
KOREA REP	22	55	67	5.4	45
KUWAIT		33		9.7	37
LAOS	4	13	58	3.4	49
LEBANON	29	29	8	1.1	29
MALAYSIA	13	8	62	1.2	42
MALDIVES	10		3	39.4	36
MONGOLIA	1	3	10	.5	47
NEPAL	17	28	17	6.4	42
OMAN		87		11.6	29
PAKISTAN	26	76	4	2.7	28
PHILIPPINES	26	18	39	3.3	37
QATAR				1.7	46
SAUDI ARABIA KINGDOM OF	1	35	1	4.3	29
SINGAPORE	11		5	5.5	48
SRI LANKA	34	25	37	3.8	37
SYRIA	31	11	3	.5	25
THAILAND	38	18	30	1.7	55
TURKEY	36	8	26	.9	47
UNITED ARAB EMIRATES		31		2.9	51
VIET NAM	21	26	40	5.6	48
YEMEN ARAB REPUBLIC	7	18	8	3.3	24
YEMEN DEMOCRATIC	1	37	5	4.6	26
AUSTRIA	18		39	.3	54
BELGIUM-LUXEMBOURG	25		21	.3	40
BULGARIA	37	29	35	.3	51
CZECHOSLOVAKIA	41	4	37	.3	53
DENMARK	62	15	12	.1	54
FINLAND	8	3	76	.2	50
FRANCE	35	6	27	.2	48
GERMAN DEMOCRATIC REP.	47	3	28	.3	57
GERMANY, FED. REP. OF	30	4	30	.3	56
GREECE	30	26	20	.6	43
HUNGARY	57	4	18	.3	47
ICELAND			1	2.2	61
IRELAND	14		5	.6	39
ITALY	42	24	22	.4	46
MALTA	41	8		1.3	36
NETHERLANDS	26	59	9	.8	40
NORWAY	3	10	27	.4	47
POLAND	49	1	29	.6	59
PORTUGAL	30	23	40	.8	42
ROMANIA	46	25	28	.5	56
SPAIN	41	16	32	.3	37
SWEDEN	7	2	64	.2	45
SWITZERLAND	10	6	26	.7	58
UNITED KINGDOM	29	2	9	.2	49
USSR	10	8	42	.2	51
YUGOSLAVIA	30	2	37	.8	50
AUSTRALIA	6	3	14		47
FIJI	13		65	1.2	33
FRENCH POLYNESIA	20		31	.4	33
KIRIBATI	52		3	.3	36
NEW CALEDONIA	1		38	3.7	32
NEW ZEALAND	2	48	39	.7	44
PAPUA NEW GUINEA	1		85	6.6	48
SOLOMON ISLANDS	2		93	2.4	32
TOKELAU					36
TONGA	81		12	.3	32
VANUATU	6		1	.7	32

ANNEX TABLE 12/B. RESOURCES AND THEIR USE IN AGRICULTURE

COUNTRY	AGRICULTURAL GFCF $ PER HA ARABLE LAND 1984	AGRICULTURAL GFCF $ PER CAPUT OF AGRIC.LAB.FORCE 1984	FERTILIZER USE PER HA ARAB.LAND KG/HA 1984	NOS. OF TRACTORS PER 000 HA ARABLE LAND 1984	OFFICIAL COMMITM. TO AGRICULTURE $ PER CAPUT 1985
ALGERIA			29	8	3.0
ANGOLA			2	3	.5
BENIN			4		6.1
BOTSWANA	2.8	16.8	1	2	19.7
BURKINA FASO	.1	.1	4		7.5
BURUNDI			1		13.4
CAMEROON			7		7.6
CENTRAL AFRICAN REPUBLIC			1		10.8
CHAD			2		7.0
COMOROS					2.8
CONGO			4	1	12.5
COTE D'IVOIRE			10	1	7.0
EGYPT	314.5	148.4	344	17	3.8
ETHIOPIA			2		3.0
GABON	48.1	57.3	6	3	
GAMBIA			13		11.6
GHANA			3	1	6.6
GUINEA					11.8
GUINEA-BISSAU					12.6
KENYA	32.0	11.6	34	3	3.8
LESOTHO	48.7	24.5	15	5	10.5
LIBERIA			3	1	9.1
LIBYA	400.0	6197.8	55	13	
MADAGASCAR			2	1	7.7
MALAWI			25	1	15.8
MALI			11		10.1
MAURITANIA			2	2	26.9
MAURITIUS	75.7	84.4	253	3	2.8
MOROCCO			30	4	12.9
MOZAMBIQUE			1	2	3.5
NAMIBIA				4	
NIGER					8.2
NIGERIA			9		
REUNION			127	31	
RWANDA			2		6.4
SAO TOME AND PRINCIPE				3	
SENEGAL			4		9.6
SEYCHELLES				5	
SIERRA LEONE			1		1.6
SOMALIA			4	2	19.1
SOUTH AFRICA	32.2	263.1	73	14	
SUDAN			4	1	7.1
SWAZILAND	104.2	80.9	59	26	15.3
TANZANIA	8.3	4.8	7	4	3.6
TOGO			6		2.3
TUNISIA	67.5	485.0	18	6	25.3
UGANDA				1	4.3
ZAIRE			2		3.0
ZAMBIA			11	1	16.8
ZIMBABWE	45.5	52.9	54	8	9.7
BARBADOS			200	18	
BELIZE			37	17	
CANADA	67.4	5690.8	51	14	
COSTA RICA	92.3	241.0	149	10	20.8
CUBA			179	20	
DOMINICA			147	5	
DOMINICAN REPUBLIC			40	2	2.8
EL SALVADOR	12.7	13.2	76	5	15.7
GRENADA				2	
GUADELOUPE			202	25	
GUATEMALA	41.5	62.7	50	2	1.9
HAITI			4	1	3.9
HONDURAS			21	2	9.7
JAMAICA			86	11	29.7
MARTINIQUE			530	50	
MEXICO			67	6	5.9
NICARAGUA			38	2	4.1
PANAMA			50	7	18.3
TRINIDAD AND TOBAGO			52	22	.9
UNITED STATES	87.7	4736.6	104	25	
ARGENTINA			4	6	3.7
BOLIVIA			2		4.4
BRAZIL			45	10	3.4
CHILE			33	6	
COLOMBIA			64	5	.1
ECUADOR			29	3	19.8
FRENCH GUIANA			117	32	
GUYANA			30	7	20.2
PARAGUAY			4	4	15.8
PERU			21	5	3.4
SURINAME			199	28	
URUGUAY			37	23	.2
VENEZUELA	63.7	305.5	71	11	2.0

ANNEX TABLE 12/B. (Cont.) RESOURCES AND THEIR USE IN AGRICULTURE

COUNTRY	AGRICULTURAL GFCF $ PER HA ARABLE LAND 1984	AGRICULTURAL GFCF $ PER CAPUT OF AGRIC.LAB.FORCE 1984	FERTILIZER USE PER HA ARAB.LAND KG/HA 1984	NOS. OF TRACTORS PER 000 HA ARABLE LAND 1984	OFFICIAL COMMITM. TO AGRICULTURE $ PER CAPUT 1985
AFGHANISTAN			9		
BANGLADESH			65	1	4.3
BHUTAN			2		2.6
BRUNEI DARUSSALAM				10	
BURMA			19	1	4.1
CHINA (EXC TAIWAN)			194	9	.4
CYPRUS	128.7	761.6	41	26	11.4
HONG KONG				1	
INDIA	42.7	37.1	47	3	1.5
INDONESIA			90	1	6.1
IRAN	156.1	526.8	62	7	
IRAQ	358.4	1834.1	22	7	
ISRAEL	258.2	1272.9	229	64	
JAPAN	146.1	126.3	440	345	
JORDAN			36	12	15.3
KAMPUCHEA,DEMOCRATIC			1		
KOREA DPR			335	29	
KOREA REP	651.1	275.5	359	4	.6
KUWAIT			150	9	
LAOS				1	
LEBANON			170	10	
MALAYSIA	104.4	205.8	140	2	8.1
MONGOLIA			13	8	
NEPAL			18	1	7.3
OMAN			20	2	8.0
PAKISTAN	30.4	40.6	61	7	4.9
PHILIPPINES			33	2	2.4
QATAR			151	21	
SAUDI ARABIA KINGDOM OF			190	1	
SINGAPORE			833	9	
SRI LANKA			87	12	12.8
SYRIA	93.0	738.6	39	7	1.9
THAILAND	30.0	33.3	24	6	2.4
TURKEY			56	20	7.2
UNITED ARAB EMIRATES	10893.0	6808.3	235		
VIET NAM			60	6	
YEMEN ARAB REPUBLIC	85.6	110.4	13	2	9.8
YEMEN DEMOCRATIC			14	7	13.0
AUSTRIA	470.9	2719.1	256	214	
BELGIUM-LUXEMBOURG	394.0	3102.9	517	146	
BULGARIA			233	14	
CZECHOSLOVAKIA			339	26	
DENMARK	209.0	3020.2	251	65	
FINLAND	397.4	3653.5	217	102	
FRANCE	177.1	1915.3	307	81	
GERMAN DEMOCRATIC REP.			314	31	
GERMANY, FED. REP. OF	418.2	2242.2	427	199	
GREECE	90.4	337.7	168	43	
HUNGARY			288	10	
ICELAND	5462.5	53972.7	3330	1750	
IRELAND	325.8	1420.2	697	159	
ITALY	304.3	1698.9	171	98	
MALTA	250.8	543.3	86	34	
NETHERLANDS	1117.3	3607.4	786	217	
NORWAY	691.5	4192.9	295	171	
POLAND			222	54	
PORTUGAL			78	29	6.4
ROMANIA			159	16	
SPAIN			80	30	
SWEDEN	235.4	3438.5	152	63	
SWITZERLAND			437	251	
UNITED KINGDOM	211.9	2293.3	370	77	
USSR			99	12	
YUGOSLAVIA	108.2	238.3	125	74	1.7
AUSTRALIA			26	7	
FIJI			66	20	43.8
FRENCH POLYNESIA			24	2	
NEW CALEDONIA			25	62	
NEW ZEALAND	1121.0	3578.1	1042	152	
PAPUA NEW GUINEA			18	3	16.1
TONGA	77.4	683.3	2	1	
VANUATU				1	

ANNEX TABLE 13. MEASURES OF OUTPUT AND PRODUCTIVITY IN AGRICULTURE

COUNTRY	AGRICULTURAL GDP $ PER CAPUT AGRIC.POPULATION 1984	AGRICULTURAL GDP GROWTH RATE 1975-84 %	INDEX OF FOOD PRODUC.PER CAPUT 1979-81=100 1984-86	INDEX OF TOT.AGR. PRODUC.PER CAPUT 1979-81=100 1984-86	PER CAPUT DIETARY ENERGY SUPPLIES AS % OF REQUIREM. 1984	INDEX OF VALUE OF AGRIC.EXPORTS 1979-81=100 1983-85
ALGERIA	693	12.9	114	98	112	103
ANGOLA			102	89	84	110
BENIN	154	8.8	133	118	94	118
BOTSWANA	87		97	80	96	126
BURKINA FASO	62	5.5	127	113	81	106
BURUNDI	118	10.2	109	94	91	101
CAMEROON	252	7.9	111	97	90	98
CAPE VERDE	125	6.0	96	87	112	92
CENTRAL AFRICAN REPUBLIC	126	4.9	106	95	91	114
CHAD	56		112	99	63	299
COMOROS			113	97	90	80
CONGO	138	4.1	106	93	115	132
COTE D'IVOIRE	302	6.0	121	94	108	75
DJIBOUTI						134
EGYPT	439	7.6	117	100	130	137
EQUATORIAL GUINEA						72
ETHIOPIA	59	5.8	97	87	72	255
GABON	256	6.3	106	98	104	111
GAMBIA	90	5.2	129	116	93	116
GHANA	568	20.5	134	113	76	92
GUINEA	185	4.3	104	93	75	87
GUINEA-BISSAU			143	130	84	59
KENYA	102	4.6	101	91	93	119
LESOTHO	68	4.0	94	84	103	119
LIBERIA	228	6.8	117	99	100	97
LIBYA	1416	12.3	162	133	153	100
MADAGASCAR	131	6.1	113	98	109	69
MALAWI	75	6.0	106	93	106	66
MALI	85	2.2	114	100	76	167
MAURITANIA	150	6.8	101	87	90	129
MAURITIUS	443		110	103	121	78
MOROCCO	223	3.2	125	111	111	84
MOZAMBIQUE			99	85	72	134
NAMIBIA			98	84	83	105
NIGER	112	3.9	96	83	96	89
NIGERIA	369	11.5	116	98	86	72
REUNION			90	85	129	90
RWANDA			102	88	83	133
SAO TOME AND PRINCIPE	132		79	70	104	81
SENEGAL	80		115	101	98	102
SEYCHELLES						90
SIERRA LEONE	167	9.0	107	96	79	59
SOMALIA			105	90	90	103
SOUTH AFRICA	630	4.5	95	84	122	160
SUDAN	164	1.6	110	98	74	93
SWAZILAND			112	96	111	119
TANZANIA	150	13.4	111	91	101	95
TOGO	103	1.9	103	91	97	126
TUNISIA	529	4.2	119	107	119	94
UGANDA			135	115	89	53
ZAIRE	78	3.3	115	100	97	95
ZAMBIA	87	3.6	112	95	93	62
ZIMBABWE	105	4.0	114	103	86	157
BARBADOS	3309	6.6	88	87	129	89
BELIZE			102	91	114	76
BERMUDA						112
CANADA	9771	5.6	115	109	129	95
COSTA RICA	1037	4.5	99	92	125	82
CUBA			113	110	135	104
DOMINICA	893		124	119	109	112
DOMINICAN REPUBLIC	606	7.1	113	101	109	98
EL SALVADOR	421	5.5	103	79	94	94
GRENADA	464		93	88	98	89
GUADELOUPE			122	119	111	86
GUATEMALA			108	86	105	73
HAITI			105	93	82	98
HONDURAS	300	10.1	108	92	98	52
JAMAICA	179		112	104	115	108
MARTINIQUE			128	127	116	85
MEXICO	567	5.4	110	96	136	88
NICARAGUA	831	10.0	89	77	108	119
PANAMA	673	7.9	111	102	105	108
TRINIDAD AND TOBAGO	2296	13.3	95	87	124	114
UNITED STATES			104	98	139	101
ARGENTINA	2365	157.6	107	99	122	47
BOLIVIA	735	15.2	107	93	90	95
BRAZIL	637	5.7	119	105	110	60
CHILE	992	10.3	109	100	107	58
COLOMBIA	767	9.3	106	93	111	106
ECUADOR	563	9.7	113	99	90	134
FRENCH GUIANA						92
GUYANA	388		96	87	110	56
PARAGUAY	777	13.8	114	102	121	80

ANNEX TABLE 13. (Cont.) MEASURES OF OUTPUT AND PRODUCTIVITY IN AGRICULTURE

COUNTRY	AGRICULTURAL GOP $ PER CAPUT AGRIC.POPULATION 1984	AGRICULTURAL GOP GROWTH RATE 1975-84 %	INDEX OF FOOD PRODUC.PER CAPUT 1979-81=100 1984-86	INDEX OF TOT.AGR. PRODUC.PER CAPUT 1979-81=100 1984-86	PER CAPUT DIETARY ENERGY SUPPLIES AS % OF REQUIREM. 1984	INDEX OF VALUE OF AGRIC.EXPORTS 1979-81=100 1983-85
PERU	294		114	98	92	76
SURINAME	1039	9.6	122	116	119	103
URUGUAY	1208	5.9	104	102	101	52
VENEZUELA	1532	11.7	103	90	105	94
AFGHANISTAN			102	97	91	80
BANGLADESH	95	2.4	113	99	86	115
BHUTAN	70		113	102		143
BRUNEI DARUSSALAM			123	99	126	135
BURMA	165	7.2	136	122	118	68
CHINA (EXC TAIWAN)	136	9.8	130	125	110	56
CYPRUS	1236	6.1	99	93	140	109
HONG KONG	1762	4.4	127	115	118	106
INDIA	110	7.1	122	111	99	132
INDONESIA	258	8.9	120	108	117	77
IRAN			109	95	130	125
IRAQ			125	105	121	111
ISRAEL	3452	4.0	113	100	119	88
JAPAN			110	104	122	96
JORDAN	1031	14.4	123	102	120	113
KAMPUCHEA,DEMOCRATIC			161	144	95	30
KOREA DPR			120	106	135	59
KOREA REP	980	6.9	114	104	121	87
KUWAIT	4312	18.2				107
LAOS			139	124	100	25
LEBANON			120	118	121	87
MALAYSIA			123	104	120	117
MALDIVES			125	106	92	87
MONGOLIA			109	93	116	69
NEPAL			115	101	92	129
OMAN	473	20.8				163
PAKISTAN	122	8.9	118	104	93	131
PHILIPPINES	317	7.3	106	94	104	104
QATAR						116
SAUDI ARABIA KINGDOM OF	543	25.3	215	171	129	112
SINGAPORE	4999	6.2	104	98	120	122
SRI LANKA	188	8.2	97	90	107	85
SYRIA	1322	18.1	112	95	128	141
THAILAND	251	7.6	120	109	111	105
TURKEY	382		111	100	126	193
UNITED ARAB EMIRATES	8039	18.2				92
VIET NAM			128	116	104	45
YEMEN ARAB REPUBLIC	157	9.0	123	107	93	101
YEMEN DEMOCRATIC	105	4.0	100	88	97	105
AUSTRIA	4869	2.6	107	107	134	86
BELGIUM-LUXEMBOURG	7705	1.0	103	103	140	91
BULGARIA			101	99	147	125
CZECHOSLOVAKIA			119	118	140	75
DENMARK	9208	4.4	126	126	132	86
FINLAND	7457	5.2	113	110	112	72
FRANCE	5292	2.2	109	107	133	85
GERMAN DEMOCRATIC REP.			108	109	145	93
GERMANY, FED. REP. OF	5108	.4	113	114	130	88
GREECE	2131	5.9	103	101	149	120
HUNGARY	2061	7.4	108	109	132	68
ICELAND			98	92	116	88
IRELAND			110	103	153	81
ITALY	3838	4.4	101	100	140	93
MALTA	2400	6.8	114	109	103	76
NETHERLANDS			109	106	124	94
NORWAY	6803	3.1	109	107	121	73
POLAND			110	105	125	46
PORTUGAL	797		101	98	129	93
ROMANIA	1339	9.1	116	113	128	48
SPAIN			107	104	136	89
SWEDEN			107	106	115	81
SWITZERLAND			109	107	128	87
UNITED KINGDOM	6005	5.9	110	110	124	81
USSR			112	106	134	105
YUGOSLAVIA	972	4.3	101	98	142	71
AUSTRALIA	8945	6.1	108	104	127	107
FIJI	685	3.6	110	100	110	97
FRENCH POLYNESIA			101	90	109	99
KIRIBATI						68
NEW CALEDONIA			108	96	110	82
NEW ZEALAND			111	105	128	112
PAPUA NEW GUINEA			112	97	82	79
SOLOMON ISLANDS			128	107	80	111
TONGA	1408	7.4	95	85	108	104
VANUATU			109	89	88	86

ANNEX TABLE 14. CARRY-OVER STOCKS OF SELECTED AGRICULTURAL PRODUCTS

	CROP YEAR ENDING IN						
	1981	1982	1983	1984	1985	1986[A]	1987[B]
	MILLION TONS						
CEREALS							
DEVELOPED COUNTRIES	147.7	187.9	234.8	156.8	202.7	286.9	328.2
CANADA	14.0	16.2	18.5	13.3	12.2	14.8	23.6
UNITED STATES	71.8	111.2	152.2	79.5	98.8	181.1	211.7
AUSTRALIA	2.6	5.3	2.5	8.1	8.8	6.1	3.9
EEC	20.8	18.2	22.8	15.6	33.6	35.9	28.6
JAPAN	8.8	7.1	5.2	4.8	5.2	5.6	6.3
USSR	15.0	13.0	18.0	23.0	29.0	31.0	40.0
DEVELOPING COUNTRIES	102.3	108.8	106.0	123.4	133.5	130.2	123.2
FAR EAST	76.8	78.2	78.3	97.3	106.9	98.2	89.1
BANGLADESH	1.3	0.7	0.6	0.8	1.0	1.0	0.9
CHINA	48.0	46.0	51.0	58.0	64.0	52.0	46.0
INDIA	7.1	7.7	7.6	12.8	18.1	17.0	14.4
PAKISTAN	1.5	2.2	2.2	2.2	1.5	1.8	2.3
NEAR EAST	10.1	12.8	11.9	14.0	13.4	13.7	14.1
TURKEY	0.5	1.1	1.0	0.3	0.7	0.5	0.6
AFRICA	3.4	4.7	4.6	3.1	2.9	6.1	8.3
LATIN AMERICA	11.9	13.2	11.2	9.0	10.2	12.1	11.6
ARGENTINA	1.0	1.5	1.8	1.7	1.0	0.9	1.2
BRAZIL	2.8	3.3	3.1	1.5	2.0	3.4	4.3
WORLD TOTAL							
OF WHICH:	250.0	296.7	340.8	280.2	336.2	417.0	451.4
WHEAT	98.6	105.7	122.0	134.4	152.9	159.2	164.7
RICE (MILLED BASIS)	43.9	45.8	42.8	47.7	53.9	54.8	49.6
COARSE GRAINS	107.5	145.2	176.0	98.0	129.3	203.0	237.1
SUGAR (RAW VALUE)							
WORLD TOTAL 1 SEPT.	25.5	33.3	39.1	39.9	40.3	37.4	...
COFFEE[C]	2.50	2.97	3.26	3.08	3.05	2.59	...
DRIED SKIM MILK	THOUSAND TONS						
UNITED STATES	404	582	628	566	459	312	...
EEC	368	670	996	664	597	821	...
TOTAL OF ABOVE	772	1 252	1 624	1 280	1 056	1 133	...

[A] ESTIMATE.
[B] FORECAST.
[C] GROSS OPENING STOCKS AT THE COMMENCING OF THE COFFEE YEARS, 1 OCTOBER.

SOURCE: FAO, COMMODITIES AND TRADE DIVISION.

ANNEX TABLE 15. ANNUAL CHANGES IN CONSUMER PRICES: ALL ITEMS AND FOOD

REGION AND COUNTRY	ALL ITEMS				FOOD			
	1970 TO 1975	1975 TO 1980	1980 TO 1985	1984 TO 1985	1970 TO 1975	1975 TO 1980	1980 TO 1985	1984 TO 1985
	%/YEAR							
DEVELOPED COUNTRIES								
WESTERN EUROPE								
AUSTRIA	7.4	3.8	4.8	3.2	6.7	4.4	4.1	2.2
BELGIUM	8.3	6.4	13.3	4.8	4.6	7.5	7.5	3.5
DENMARK	9.5	10.4	7.9	4.7	10.7	...	8.1	4.2
FINLAND	2.0	10.6	8.5	5.8	12.4	10.8	9.3	7.7
FRANCE	8.8	10.4	9.6	5.8	9.6	10.0	9.7	4.9
GERMANY, FED. REP.	6.2	4.0	3.8	2.2	5.6	3.3	3.2	0.8
GREECE	13.1	16.3	20.5	19.3	14.7	17.6	20.6	19.5
ICELAND	24.8	42.0	50.5	32.3	28.3	41.0	53.1	37.5
IRELAND	13.0	84.9	12.1	5.3	14.3	13.7	10.0	3.8
ITALY	11.4	3.0	13.8	9.2	11.6	15.6	12.5	8.7
NETHERLANDS	8.6	6.1	4.0	2.2	6.9	...	3.3	0.8
NORWAY	8.3	8.4	8.9	5.7	8.3	7.4	6.6	...
PORTUGAL	15.3	...	23.9	19.3	16.3	21.0	24.2	17.7
SPAIN	12.0	18.6	12.3	8.8	12.1	16.0	12.3	9.5
SWEDEN	7.8	10.5	8.9	7.4	7.9	10.7	11.7	7.4
SWITZERLAND	7.9	2.4	4.1	3.4	7.3	2.9	4.9	3.0
UNITED KINGDOM	12.3	14.4	6.8	6.1	15.1	13.9	5.5	3.1
YUGOSLAVIA	19.3	18.2	45.7	73.5	19.1	19.4	47.1	70.4
NORTH AMERICA								
CANADA	7.4	8.4	7.3	4.0	11.1	9.9	5.9	2.9
UNITED STATES	6.7	8.9	5.2	3.6	9.5	7.6	3.8	2.4
OCEANIA								
AUSTRALIA	10.2	10.6	8.4	6.7	9.8	12.0	7.8	6.2
NEW ZEALAND	9.8	14.8	11.3	15.5	9.4	16.8	9.6	14.7
OTHER DEVELOPED COUNTRIES								
ISRAEL	23.9	60.0	193.7	304.7	25.1	65.0	192.9	316.5
JAPAN	12.0	6.5	2.6	2.0	13.0	5.5	2.6	1.7
SOUTH AFRICA	9.3	12.0	13.7	16.2	11.7	13.0	12.9	11.9
DEVELOPING COUNTRIES								
LATIN AMERICA								
ARGENTINA	59.5	100.0	207.9	672.2	58.0	...	327.0	624.1
BAHAMAS	9.5	6.9	5.5	4.6	11.8	7.7	5.1	5.6
BARBADOS	18.6	10.0	6.1	3.9	21.0	9.1	6.1	5.2
BOLIVIA	23.7	17.0	51.6[A]	1 168.0	27.2	16.4	...	1 128.0
BRAZIL	23.5[B]	46.0	133.7	201.6	25.9[B]	49.0	142.8	210.3
CHILE	225.4	70.0	41.0	30.7	245.5	70.0	18.0	28.3
COLOMBIA	19.5	23.0	21.9	25.3	24.0	25.0	22.5	32.9
COSTA RICA	13.7	8.1	36.3	14.5	3.7	9.6	38.5	12.3
DOMINICAN REPUBLIC	11.1	8.3	10.6[A]	...	13.3	3.4	8.6[A]	..
ECUADOR	13.7	11.7	27.2	28.0	18.4	11.2	35.6[A]	30.7
EL SALVADOR	8.4	...	14.0	22.3	8.8	...	14.3	18.9
GUATEMALA	2.9	10.7	...	18.7	3.3	9.4	...	20.5
GUYANA	8.2	12.8	19.6[A]	...	12.2	14.1	26.5[A]	...
HAITI	13.7	8.0	8.8	10.8	15.5	9.3	6.6	11.7
HONDURAS	6.5	9.2	7.1	1.8	8.0	9.6	4.2	1.7
JAMAICA	14.9	22.0	...	25.8	17.2	24.0	15.7	25.6
MEXICO	12.4	21.0	18.9	57.7	13.9	19.5	63.7	59.7
PANAMA	7.8	6.9	9.6	1.0	9.9	6.6	3.6	0.3
PARAGUAY	12.6	14.7	3.1	...	15.4	14.9	...	...
PERU	12.1	37.0	100.2	163.3	13.9	50.0	87.8	...
PUERTO RICO	8.8	5.6	2.9	0.4	12.6	5.5	2.8	0.4
SURINAME	8.2	11.5	6.4	10.9	9.5	12.2	4.8	9.9
TRINIDAD & TOBAGO	13.7	12.9	13.1	7.7	17.1	11.1	14.8	8.5
URUGUAY	73.4	55.0	43.7	72.2	76.0	55.0	43.1	63.0
VENEZUELA	5.5	11.4	10.5	11.9	8.5	15.7	13.6	20.8
FAR EAST								
BANGLADESH	39.0[C]	7.6	10.1	9.0	42.0[C]	5.0	10.9	8.6
BURMA	17.8	3.8	4.5	6.7	21.0	2.6	4.2	9.8
INDIA	13.2	1.3	6.9	3.3	14.2	0.8	6.7	2.7
INDONESIA	21.3	...	10.1	4.7	25.2	...	8.4	2.4
KOREA, REP. OF	14.3	17.2	6.3	2.5	16.8	17.2	5.4	3.7
MALAYSIA	6.7	4.6	4.5	0.3	10.4	3.7	2.5	−2.5
NEPAL	10.3	6.7	11.6	27.6	9.8	6.1	4.1	−0.4
PAKISTAN	15.2	9.0	7.6	7.2	16.6	8.0	7.5	5.8
PHILIPPINES	18.7	12.0	20.6	23.1	20.1	11.0	20.2	22.3
SRI LANKA	8.0	9.9	12.6	1.5	9.1	10.7	12.6	0.1
THAILAND	9.8	10.4	4.6	3.2	11.9	10.6	3.0	−2.0

ANNEX TABLE 15. (Cont.) ANNUAL CHANGES IN CONSUMER PRICES: ALL ITEMS AND FOOD

REGION AND COUNTRY	ALL ITEMS				FOOD			
	1970 TO 1975	1975 TO 1980	1980 TO 1985	1984 TO 1985	1970 TO 1975	1975 TO 1980	1980 TO 1985	1984 TO 1985
	%/YEAR							
AFRICA								
ALGERIA	5.1	12.4	7.1[A]	...	7.2	15.7	4.0[A]	...
BOTSWANA	...	12.4	8.5	8.1	...	13.8	...	9.6
BURUNDI	...	18.3	8.9	3.8	...	16.2	9.4	7.8
CAMEROON	10.2	10.7	11.6	11.1	11.5	11.8	...	...
ETHIOPIA	3.7	15.7	6.6	19.4	2.7	19.2	6.8	26.4
GABON	11.4	12.9	10.1	7.4	2.7	...	...	...
GAMBIA	10.5	10.2	12.0	17.3	12.8	9.7	13.4	18.2
GHANA	17.4	70.0	118.5	10.4	20.3	45.0	51.3	−11.1
COTE D'IVOIRE	8.2	16.7	11.7	1.8	9.3	19.3	4.2	1.6
KENYA	13.9[C]	9.8	15.3	11.3	14.7[C]	10.2	12.9	13.8
LESOTHO	14.7[C]	15.1	13.7	16.1	16.4[C]	18.6	13.1	11.3
LIBERIA	12.1	8.8	3.4	−1.0	13.7	8.1	2.1	−3.6
MADAGASCAR	9.7	9.2	20.0	10.6	12.0	9.0	19.8	12.6
MALAWI	8.9	9.2	...	18.7	10.7	9.5	...	9.1
MAURITIUS	13.1	16.9	...	6.7	14.7	16.3	...	7.2
MOROCCO	5.4	9.7	9.7	7.7	7.2	9.3	10.3	7.6
NIGER	7.9	14.6	6.8	−1.0	10.6	14.8	8.4	−2.5
NIGERIA	11.5	14.4	19.9	5.5	13.1	20.0	21.3	3.9
SENEGAL	13.0	6.8	12.3	13.1	16.5	6.4	11.5	9.1
SIERRA LEONE	8.4	13.8	45.0[A]	...	11.0	12.9	43.1[A]	...
SWAZILAND	9.3	13.2	13.9	18.2	9.8	14.0	13.7	12.9
TANZANIA	13.1	14.5	12.9	33.3	17.7	13.4	30.5	29.3
TOGO	8.9	8.1	6.3	−1.8	9.7	9.9	5.3	−8.3
TUNISIA	4.8	...	10.2[A]	7.8	5.2	...	10.8[A]	9.2
ZAIRE	18.6	...	...	...	21.2	...	...	...
ZAMBIA	7.1	15.2	19.4	36.2	7.4	13.7	19.9	36.2
ZIMBABWE	...	9.8	15.9	8.5	...	8.4	17.8	6.6
NEAR EAST								
CYPRUS	8.0	...	6.4	5.0	10.2	...	7.2	4.6
EGYPT	5.8	12.9	14.9	14.1	8.6	14.4	15.9	...
IRAN	9.6	16.1	16.1	4.4	10.0	18.9	15.4	5.2
IRAQ	11.3	...	14.5	...	18.1	...	...	5.7
JORDAN	6.0	11.6	...	3.0	9.2	9.8	...	2.2
KUWAIT	10.1	7.1	4.6	1.5	15.4	6.1	2.6	−0.1
SAUDI ARABIA	...	11.3	−0.1	−3.0	...	9.5	0.9	−2.8
SUDAN	11.6	16.8	27.2[A]	...	12.0	14.2	26.6[A]	...
SYRIA	16.7	10.9	12.0	17.5	18.2	...	11.2	18.9
TURKEY	6.2	50.0	42.6[D]	44.9	7.7	47.0	...	40.7

[A] 1980-84
[B] 1972-75
[C] 1973-75
[D] 1982-85

SOURCE: ILO, *BULLETIN OF LABOUR STATISTICS*, 1986-4.

ANNEX TABLE 16. PER CAPUT DIETARY ENERGY SUPPLIES IN SELECTED DEVELOPED AND DEVELOPING COUNTRIES

COUNTRY	1969-71	1974-76	1977-79	1980-82	1983-85
	CALORIES PER CAPUT PER DAY				
ALGERIA	1825	2168	2433	2662	2710
ANGOLA	2033	1972	2159	2109	1947
BENIN	2078	2019	2197	2089	2136
BOTSWANA	2138	2117	2123	2163	2164
BURKINA FASO	1968	1961	2002	2037	1961
BURUNDI	2363	2275	2377	2385	2217
CAMEROON	2185	2270	2218	2127	2074
CAPE VERDE	1894	2166	2490	2540	2614
CENTRAL AFRICAN REPUBLIC	2159	2240	2135	2116	2045
CHAD	2139	1755	1828	1703	1575
COMOROS	2219	2091	2021	2102	2090
CONGO	2174	2274	2370	2487	2532
EGYPT	2499	2692	2851	3122	3262
ETHIOPIA	1702	1575	1655	1768	1692
GABON	1895	2016	2138	2284	2434
GAMBIA	2249	2124	2179	2211	2229
GHANA	2199	2165	1917	1702	1679
GUINEA	1907	1933	1883	1747	1724
GUINEA-BISSAU	1926	1793	1792	1939	1979
COTE D'IVOIRE	2369	2310	2421	2603	2448
KENYA	2245	2250	2240	2186	2162
LESOTHO	2020	2080	2341	2341	2346
LIBERIA	2209	2280	2393	2374	2342
LIBYA	2367	3468	3595	3670	3619
MADAGASCAR	2494	2533	2486	2508	2467
MALAWI	2323	2478	2515	2462	2429
MALI	1836	1766	1763	1766	1793
MAURITANIA	1988	1803	1918	2056	2076
MAURITIUS	2300	2556	2705	2720	2721
MOROCCO	2424	2573	2732	2725	2687
MOZAMBIQUE	2075	1937	1850	1775	1664
NAMIBIA	1961	1935	1945	1930	1875
NIGER	2002	1958	2275	2362	2265
NIGERIA	2131	2083	2198	2250	2060
REUNION	2519	2729	2815	2928	2916
RWANDA	1967	1923	2009	2104	2013
SAO TOME AND PRINCIPE	2152	1953	2251	2434	2435
SENEGAL	2371	2269	2336	2381	2339
SEYCHELLES	1993	2151	2271	2304	2289
SIERRA LEONE	1956	1941	2016	2031	1834
SOMALIA	2181	1975	2015	2062	2059
SOUTH AFRICA	2718	2908	2889	2942	2945
SUDAN	2115	2102	2263	2312	2003
SWAZILAND	2224	2456	2465	2518	2562
TANZANIA	1949	2257	2386	2410	2314
TOGO	2194	2085	2080	2227	2202
TUNISIA	2271	2610	2729	2774	2827
UGANDA	2282	2253	2205	2229	2291
ZAIRE	2253	2291	2164	2144	2154
ZAMBIA	2192	2320	2267	2164	2123
ZIMBABWE	2115	2105	2151	2087	2094
ANTIGUA AND BARBUDA	2293	2074	1989	2180	2105
BAHAMAS	2640	2306	2241	2606	2703
BARBADOS	2889	2947	3025	3131	3129
BELIZE	2463	2621	2702	2655	2546
BERMUDA	2934	2615	2531	2541	2530
CANADA	3349	3373	3376	3404	3442
COSTA RICA	2404	2561	2605	2633	2772
CUBA	2573	2647	2736	2902	3094
DOMINICA	2174	2196	2320	2474	2615
DOMINICAN REPUBLIC	2083	2234	2275	2339	2468
EL SALVADOR	1854	2058	2134	2153	2148
GRENADA	2347	2140	2209	2339	2371
GUADELOUPE	2333	2423	2434	2560	2672
GUATEMALA	2101	2158	2179	2248	2298
HAITI	1920	1940	1912	1899	1838
HONDURAS	2151	2110	2170	2191	2208
JAMAICA	2531	2661	2639	2555	2576
MARTINIQUE	2360	2500	2603	2711	2830
MEXICO	2703	2827	2931	3102	3147
NETHERLANDS ANTILLES	2449	2571	2726	2792	2850
NICARAGUA	2432	2381	2382	2328	2423
PANAMA	2346	2341	2311	2366	2420
ST KITTS AND NEVIS	2123	2236	2251	2271	2233
SAINT LUCIA	2132	2128	2232	2353	2421
ST VINCENT GRENADINES	2252	2243	2276	2541	2684
TRINIDAD AND TOBAGO	2567	2631	2743	2894	2967
UNITED STATES	3467	3477	3554	3604	3652
ARGENTINA	3318	3263	3250	3221	3195
BOLIVIA	1971	2015	2050	2115	2114
BRAZIL	2472	2497	2555	2631	2636
CHILE	2674	2582	2575	2644	2589
COLOMBIA	2158	2346	2452	2540	2578
ECUADOR	1957	2035	2053	2058	2031
FRENCH GUIANA	2619	2514	2624	2660	2783
GUYANA	2292	2305	2390	2426	2492
PARAGUAY	2753	2730	2779	2781	2813

ANNEX TABLE 16. (Cont.) PER CAPUT DIETARY ENERGY SUPPLIES IN SELECTED DEVELOPED AND DEVELOPING COUNTRIES

COUNTRY	1969-71	1974-76	1977-79	1980-82	1983-85
	CALORIES PER CAPUT PER DAY				
PERU	2289	2272	2196	2188	2144
SURINAME	2340	2304	2447	2578	2666
URUGUAY	3002	2931	2751	2840	2720
VENEZUELA	2412	2445	2652	2645	2550
AFGHANISTAN	2185	2207	2225	2225	2196
BANGLADESH	2013	1861	1845	1878	1859
BRUNEI DARUSSALAM	2339	2546	2716	2798	2790
BURMA	2069	2134	2242	2420	2517
CHINA	1974	2055	2187	2345	2564
CYPRUS	3066	3006	3195	3344	3497
HONG KONG	2659	2650	2692	2738	2715
INDIA	2021	1986	2117	2075	2161
INDONESIA	2012	2191	2327	2462	2504
IRAN	2216	2766	2832	2951	3115
IRAQ	2249	2353	2540	2813	2901
ISRAEL	3018	3069	3036	3014	3049
JAPAN	2751	2782	2826	2855	2804
JORDAN	2617	2366	2563	2843	2962
KAMPUCHEA,DEMOCRATIC	2286	1882	1822	1910	2115
KOREA DPR	2501	2766	2954	3081	3131
KOREA REP	2528	2757	2816	2817	2822
KUWAIT	2777	2781	3092	3162	3135
LAOS	2025	1808	1883	2129	2242
LEBANON	2477	2578	2758	2932	3014
MACAU	2155	2196	2131	2079	2109
MALAYSIA	2409	2535	2587	2611	2634
MALDIVES	1684	1679	1852	1994	1992
MONGOLIA	2385	2510	2690	2717	2811
NEPAL	1996	1925	1951	2009	2048
PAKISTAN	2027	2112	2164	2240	2186
PHILIPPINES	2053	2135	2292	2344	2313
SAUDI ARABIA KINGDOM OF	1887	1992	2526	2916	3093
SINGAPORE	2587	2639	2648	2678	2728
SRI LANKA	2260	2145	2329	2185	2410
SYRIA	2355	2498	2662	3000	3198
THAILAND	2258	2378	2394	2406	2440
TURKEY	2819	2951	3054	3122	3180
UNITED ARAB EMIRATES	3130	3559	3657	3620	3644
VIET NAM	2170	2008	2017	2110	2234
YEMEN ARAB REPUBLIC	1841	2037	2146	2218	2254
YEMEN DEMOCRATIC	2078	1910	2010	2282	2293
ALBANIA	2556	2583	2714	2757	2740
AUSTRIA	3303	3318	3366	3483	3484
BELGIUM-LUXEMBOURG	3483	3524	3516	3640	3700
BULGARIA	3500	3530	3559	3648	3626
CZECHOSLOVAKIA	3417	3435	3411	3477	3479
DENMARK	3394	3346	3442	3611	3529
FINLAND	3141	3142	3049	3097	3008
FRANCE	3257	3252	3282	3339	3337
GERMAN DEMOCRATIC REP.	3348	3470	3570	3678	3768
GERMANY, FED. REP. OF	3273	3280	3372	3433	3475
GREECE	3189	3531	3501	3629	3660
HUNGARY	3338	3428	3491	3515	3522
ICELAND	2920	2969	3052	3139	3041
IRELAND	3508	3565	3616	3761	3795
ITALY	3422	3452	3546	3561	3486
MALTA	3057	2878	2814	2709	2590
NETHERLANDS	3247	3285	3306	3350	3355
NORWAY	3078	3097	3299	3348	3203
POLAND	3333	3469	3493	3338	3253
PORTUGAL	3008	2960	3013	3104	3135
ROMANIA	3068	3310	3406	3335	3394
SPAIN	2868	3265	3326	3346	3335
SWEDEN	2924	3014	3016	3077	3053
SWITZERLAND	3495	3325	3476	3501	3440
UNITED KINGDOM	3337	3219	3217	3144	3130
USSR	3348	3388	3397	3387	3403
YUGOSLAVIA	3327	3508	3518	3613	3599
AUSTRALIA	3285	3314	3421	3358	3343
FIJI	2708	2485	2664	2818	2932
FRENCH POLYNESIA	2840	2707	2800	2860	2860
KIRIBATI	2189	2449	2560	2676	2616
NEW CALEDONIA	2871	2848	2893	2940	2909
NEW ZEALAND	3411	3453	3408	3424	3402
PAPUA NEW GUINEA	2042	2086	2111	2178	2157
SAMOA	2070	2215	2366	2403	2373
SOLOMON ISLANDS	2146	2102	2132	2112	2085
TONGA	2524	2743	2814	2863	2870
VANUATU	2586	2570	2432	2384	2331

ANNEX TABLE 17. ANNUAL AGRICULTURAL SHARES OF TOTAL OFFICIAL COMMITMENTS TO ALL SECTORS (BROAD DEFINITION), BY MULTILATERAL AND BILATERAL SOURCES, 1978-85

	1978	1979	1980	1981	1982	1983	1984	1985[A]
	%							
CONCESSIONAL AND NON-CONCESSIONAL COMMITMENTS								
MULTILATERAL AGENCIES[B]	39	36	38	36	35	35	29	31
WORLD BANK[C]	41	37	35	32	32	38	27	28
REGIONAL DEVELOPMENT BANKS[C]	31	33	45	44	43	27	30	33
OPEC MULTILATERAL[C]	30	7	16	16	17	21	22	28
BILATERAL SOURCES	9	..	..	..	..	..	..	..
DAC/EEC	11	12	11	11	11	11	11	11
OPEC BILATERAL	3	..	..	..	..	..	..	..
ALL SOURCES (MULTILATERAL + BILATERAL)	17	..	..	..	..	..	..	..
CONCESSIONAL COMMITMENTS ONLY (ODA)								
MULTILATERAL AGENCIES[B]	49	49	49	53	49	47	47	53
WORLD BANK[C]	52	52	45	58	43	51	48	54
REGIONAL DEVELOPMENT BANKS[C]	48	53	62	65	57	39	33	47
OPEC MULTILATERAL[C]	29	7	15	14	30	26	46	65
BILATERAL SOURCES	13	16	13	14	16	15	15	14
DAC/EEC	17	18	16	18	17	17	17	15
OPEC BILATERAL	3	7	1	4	12	5	3	5
ALL SOURCES (MULTILATERAL + BILATERAL)	19	21	19	21	22	20	20	21

[A] PRELIMINARY.
[B] INCLUDING UNDP, CGIAR, FAO/TF, FAO/TCP, AND IFAD (FROM 1978).
[C] EXCLUDING COMMITMENTS TO CGIAR.

SOURCES: FAO AND OECD.

ANNEX TABLE 18. PERCENTAGE DISTRIBUTION OF OFFICIAL COMMITMENTS TO AGRICULTURE (BROAD DEFINITION), BY MULTILATERAL AND BILATERAL, SOURCES, 1978-85

	1978	1979	1980	1981	1982	1983	1984	1985[A]
					%			
CONCESSIONAL AND NON-CONCESSIONAL COMMITMENTS								
MULTILATERAL AGENCIES	58	52	59	58	59	63	55	61
WORLD BANK[B]	43	34	35	34	35	44	29	38
REGIONAL DEVELOPMENT BANKS[B]	10	12	15	17	15	11	17	15
OPEC MULTILATERAL[B]	2	–	1	1	2	2	2	2
OTHER[C]	3	6	8	6	7	6	6	6
BILATERAL SOURCES	42	48	41	42	41	37	45	39
DAC/EEC	40	44	40	40	35	35	44	37
OPEC BILATERAL	2	4	1	2	6	2	1	2
ALL SOURCES (MULTILATERAL + BILATERAL)	100	100	100	100	100	100	100	100
CONCESSIONAL COMMITMENTS ONLY (ODA)								
MULTILATERAL AGENCIES	41	37	45	43	40	41	36	43
WORLD BANK[B]	26	18	21	21	20	18	20	25
REGIONAL DEVELOPMENT BANKS[C]	8	11	12	12	7	11	6	7
OPEC MULTILATERAL[B]	2	–	1	1	2	2	2	2
OTHER[C]	5	8	11	9	11	10	8	9
BILATERAL SOURCES	59	63	55	57	60	59	64	57
DAC/EEC	56	59	53	54	51	56	62	54
OPEC BILATERAL	3	4	2	3	9	3	2	3
ALL SOURCES (MULTILATERAL + BILATERAL)	100	100	100	100	100	100	100	100

[A] PRELIMINARY.
[B] EXCLUDING COMMITMENTS TO CGIAR.
[C] INCLUDING UNDP, CGIAR, FAO/TF, FAO/TCP AND IFAD (FROM 1978).

SOURCES: FAO AND OECD.

ANNEX TABLE 19. DAC COUNTRIES: BILATERAL ODA COMMITMENTS FROM INDIVIDUAL COUNTRIES AND PROPORTION TO AGRICULTURE (BROAD DEFINITION)

COUNTRY	BILATERAL ODA TO ALL SECTORS					PROPORTION OF ODA TO AGRICULTURE				
	1981	1982	1983	1984	1985[A]	1981	1981	1983	1984	1985[A]
	$ MILLION					%				
AUSTRALIA	590	545	536	694	532	14	11	5	10	8
AUSTRIA	265	291	183	79	65	10	1	2	1	3
BELGIUM	432	320	183	169	118	4	3	5	1	2
CANADA	1 011	807	1 139	1 575	1 172	39	15	25	22	25
DENMARK	225	282	260	288	340	44	51	22	38	34
FINLAND	111	123	96	171	233	19	11	24	13	11
FRANCE	4 431	4 358	4 380	4 403	3 756	8	8	11	10	10
GERMANY, FED. REP.	3 467	2 713	2 271	2 800	2 427	13	18	15	14	15
IRELAND	–	12	14	13	17	–	–	–	–	24
ITALY	481	641	882	903	1 340	6	17	20	20	16
JAPAN	3 437	3 622	3 483	3 968	4 076	24	18	17	19	24
NETHERLANDS	1 066	934	901	902	731	27	22	23	27	19
NEW ZEALAND	52	47	40	41	47	33	30	15	15	23
NORWAY	262	309	288	350	346	26	25	17	35	23
SWEDEN	518	579	526	576	566	39	32	24	26	25
SWITZERLAND	253	207	239	218	307	46	31	55	22	26
UK	1 000	1 112	927	1 009	731	8	8	12	14	14
USA	5 135	6 112	6 989	8 144	9 156	16	14	14	15	11
TOTAL DAC COUNTRIES	22 736	23 014	23 337	26 303	25 960	17	15	15	16	15

[A] PRELIMINARY.

SOURCE: OECD.

ANNEX TABLE 20. PERCENTAGE DISTRIBUTION OF OFFICIAL COMMITMENTS TO AGRICULTURE (EXCLUDING TECHNICAL ASSISTANCE GRANTS), BY PURPOSE 1978-85

	1978	1979	1980	1981	1982	1983	1984	1985[A]
	%							
LAND AND WATER DEVELOPMENT[B]	26	18	25	17	22	20	20	20
AGRICULTURAL SERVICES	12	10	13	7	12	15	17	11
SUPPLY OF INPUTS	5	3	6	5	4	6	5	5
CROP PRODUCTION	8	7	7	6	8	6	7	6
LIVESTOCK	4	3	2	2	1	2	2	4
FISHERIES[C]	3	3	3	3	2	2	2	2
RESEARCH, EXTENSION, TRAINING[D]	4	3	5	5	5	6	9	6
FORESTRY	2	3	2	2	3	2	3	5
AGRICULTURE, UNALLOCATED	12	17	9	14	11	9	12	16
TOTAL NARROW DEFINITION	76	67	72	61	68	68	77	74
RURAL DEVELOPMENT/INFRASTRUCTURE	15	16	19	22	23	21	12	14
MANUFACTURING OF INPUTS[E]	4	11	2	10	4	1	5	2
AGRO-INDUSTRIES	5	6	7	5	4	7	3	4
REGIONAL DEVELOPMENT	–	–	–	2	1	3	3	6
TOTAL BROAD DEFINITION	100	100	100	100	100	100	100	100

NOTE: THIS TABLE NOW INCLUDES FORESTRY IN THE NARROW DEFINITION.

[A] PRELIMINARY, INCLUDING PARTIAL ESTIMATES.
[B] INCLUDING RIVER DEVELOPMENT.
[C] INCLUDING INPUTS SUCH AS FISHING TRAWLERS, FISHING GEAR.
[D] INCLUDING COMMITMENTS TO CGIAR.
[E] MOSTLY FERTILIZERS.

SOURCES: FAO COMPUTERIZED DATA BANK ON EXTERNAL ASSISTANCE TO AGRICULTURE.

ANNEX TABLE 21. DISTRIBUTION OF OFFICIAL COMMITMENTS TO AGRICULTURE, EXCLUDING TECHNICAL ASSISTANCE GRANTS (BROAD DEFINITION) FROM ALL SOURCES, BY REGION AND ECONOMIC GROUPS, 1978-85

	1978	1979	1980	1981	1982	1983	1984	1985[A]
	%							
CONCESSIONAL AND NON-CONCESSIONAL COMMITMENTS								
FAR EAST AND PACIFIC	49	46	46	42	49	42	48	47
AFRICA	22	24	22	28	28	26	27	25
LATIN AMERICA	21	22	24	23	18	24	18	19
NEAR EAST	8	8	8	7	5	9	7	9
TOTAL 4 DEVELOPING REGIONS	100	100	100	100	100	100	100	100
OF WHICH:								
LOW-INCOME FOOD DEFICIT COUNTRIES[B]	60	65	66	64	65	62	69	60
LEAST DEVELOPED COUNTRIES[C]	13	18	19	19	19	21	17	18
CONCESSIONAL COMMITMENTS								
FAR EAST AND PACIFIC	53	55	50	48	46	48	53	52
AFRICA	26	23	26	32	39	31	34	30
LATIN AMERICA	14	13	14	12	9	12	7	11
NEAR EAST	7	9	10	8	6	9	6	7
TOTAL 4 DEVELOPING REGIONS	100	100	100	100	100	100	100	100
OF WHICH:								
LOW-INCOME FOOD DEFICIT COUNTRIES[B]	70	75	78	78	78	78	82	70
LEAST DEVELOPED COUNTRIES[C]	21	24	27	28	30	36	26	29
NON-CONCESSIONAL COMMITMENTS								
FAR EAST AND PACIFIC	**41**	**24**	**37**	**31**	**53**	**33**	**38**	**39**
AFRICA	**17**	**27**	**12**	**20**	**11**	**19**	**17**	**18**
LATIN AMERICA	**33**	**42**	**47**	**44**	**33**	**40**	**38**	**32**
NEAR EAST	**9**	**7**	**4**	**5**	**3**	**8**	**7**	**11**
TOTAL 4 DEVELOPING REGIONS	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**
OF WHICH:								
LOW-INCOME FOOD DEFICIT COUNTRIES[B]	**43**	**41**	**36**	**38**	**44**	**40**	**45**	**46**
LEAST DEVELOPED COUNTRIES[C]	**1**	**3**	**1**	**2**	**1**	**1**	**1**	**2**

[A] PRELIMINARY, INCLUDING PARTIAL ESTIMATES.
[B] 64 COUNTRIES WITH PER CAPUT GNP OF US$790 IN 1985. UP TO 1984, 65 COUNTRIES INCLUDING MALAWI, NEPAL AND PAKISTAN EXCLUDING SWAZILAND. IN 1985, 64 COUNTRIES EXCLUDING MALAWI, NEPAL AND PAKISTAN AND INCLUDING SWAZILAND.
[C] 36 COUNTRIES.

SOURCES: FAO COMPUTERIZED DATA BANK ON EXTERNAL ASSISTANCE TO AGRICULTURE.

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