THE ROLE OF AGRICULTURE IN THE DEVELOPMENT OF LEAST-DEVELOPED COUNTRIES AND THEIR INTEGRATION INTO THE WORLD ECONOMY

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Contents

PREFACE

This volume contains contributions originally prepared by FAO for the Third United Nations Conference on the Least-developed Countries (LDCs) held in Brussels from 14 to 20 May 2001. The material included here, which was presented to the thematic session on "Enhancing Productive Capacities – the Agricultural Sector and Food Security" of the Conference, consists of an analysis of the role of agriculture in the development of least-developed countries and their integration into the world economy, a summary of FAO field programmes in LDCs and a compendium of agricultural statistical indicators relevant to the LDCs.

These papers, which have been revised and edited, are being published in this form in order to facilitate a wider distribution.

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EXECUTIVE SUMMARY

This paper examines the role of the agricultural sector in poverty alleviation and in the sustainable economic growth and development of the least-developed countries (LDCs). It sets out to provide up-to-date information and to generate debate that will help forge stronger consensus on actions needed for agriculture to be accorded its rightful place in the LDCs.

Agriculture is the mainstay of the LDC economies, underpinning their food security, export earnings and rural development. Yet, their agricultural production for the domestic and export markets has lagged behind, with growth in per caput output declining in the 1990s. Slow production growth and sharp annual fluctuations in output have continued to be chronic problems for the LDCs, constituting the main causes of their persistent poverty and rising food insecurity. The proportion of undernourished in the total LDC population increased from 38 percent to 40 percent between 1969-71 and 1996-98, while the absolute number rose from 116 million to 235 million. As regards trade, the LDCs have continued to be marginalized in world agricultural markets, accounting for only 5 percent of global agricultural exports in the early 1970s and barely 1 percent in the late 1990s.

The poor performance of agriculture in the LDCs is related to the many internal and external difficulties that these countries face as they seek to develop this sector and achieve their objectives of improving food security and increasing export earnings. Their internal difficulties include low productivity, rigid production and trade structures, a limited skills base, short life expectancy and low educational qualifications, poor infrastructure, and inadequate institutional and policy frameworks.

At the same time, with the growing integration of markets from globalization and trade liberalization, their economies have to operate in an increasingly competitive external environment. They continue to export a narrow range of primary commodities that are highly vulnerable to instability of demand and deteriorating terms of trade. In addition, external assistance to agriculture in the LDCs has declined, with average annual ODA falling 20 percent from 1981-90 to 1991-99. Their inability to compete not only on world markets but also on their home markets is reflected in their rising food import bills.

Reversing this decline and integrating the LDCs into the world economy represent enormous challenges: overcoming marginalization from global markets; adapting to technological change; and coping with a new institutional environment. But most of the LDCs have enormous untapped agricultural potential to meet these challenges, with considerable scope for more effective use of resources and higher productivity. What is needed therefore is a renewed focus on agricultural and rural development. Significant progress in promoting economic growth, reducing poverty and enhancing food security cannot be achieved in most of these countries without drawing more fully upon the potential productive capacity of agriculture and its contribution to overall economic development. With the support of their development partners, the governments of the LDCs may need to rethink their agricultural and rural development strategies if they are to achieve their social and economic objectives, including that of reducing the number of undernourished by 2015.

The paper highlights elements of a strategy for action by the LDCs - with the support of the international community - that will help them exploit their agricultural potential by strengthening their supply capabilities and competitiveness, and thus take full advantage of the trading opportunities inherent in the multilateral trading system. Progress is crucial on three fronts: raising and sustaining productivity and competitiveness; diversifying production and trade; and improving access to foreign markets.

Recommendations for key actions to spur agricultural growth in the next decade are put forward for both LDC governments and their development partners, drawing upon past experience and success stories, and taking into account emerging domestic and global challenges. The critical strategy must be to recapitalize agriculture, investing more heavily in this sector and in programmes to develop rural economic and social infrastructure. Public investment needs to be directed in particular towards promoting agricultural research and extension, improving access to financial services, providing investment incentives, and increasing access of the poor to support services and productive resources.

The paper proposes the following priority measures:

1. The LDC governments must commit themselves to a coherent and comprehensive vision of agricultural and rural development. They need to design, implement and constantly review a series of priority and carefully-timed measures necessary to boost investment in agriculture:

- Maintaining sound and stable macroeconomic and trade policies that encourage investment in agriculture;
- Strengthening human capital in rural areas through health and education services and access to productive resources;
- Establishing a strong institutional environment that improves access to markets, ensures dissemination of information, sets standards and provides an adequate legal and regulatory framework;
- Enabling research and extension services to develop productive and robust technologies under farm conditions;
- Upgrading the marketing, transport and communication infrastructure to support farmers' access to seasonal and longer-term capital and inputs, and providing them with strong price incentives;
- Safeguarding natural resource and environment capacity.

2. Such action on the part of the LDC governments can be rendered more effective if their development partners take steps to:

- Increase ODA and other forms of assistance to help the LDCs meet public investment needs in agriculture. Current initiatives to provide financial assistance to LDCs through targeted debt relief and other means could be partly channelled towards supporting efforts to develop the sustainable agricultural potential of LDCs, in particular by strengthening research and development and the extension services, by ensuring the availability of essential inputs and structured commodity finance, and by providing marketing assistance;
- Support LDC efforts to facilitate the transfer of technology and the flow of foreign direct investment that will improve agricultural productivity and competitiveness;
- Facilitate market access of LDC's agricultural commodities in developed and developing countries, notably by improving terms of trade, adapting multilateral trade rules to the institutional, human capital and infrastructural context of the LDCs, and assisting in developing product quality and pre- and post-production standards.

INTRODUCTION

Role of agriculture in the economy

The agricultural sector is at the heart of the economies of the least-developed countries (LDCs). It accounts for a large share of gross domestic product (GDP) (ranging from 30 to 60 percent in about two thirds of them), employs a large proportion of the labour force (from 40 percent to as much as 90 percent in most cases), represents a major source of foreign exchange (from 25 percent to as much as 95 percent in three quarters of the countries), supplies the bulk of basic food and provides subsistence and other income to more than half of the LDCs' population. The strong forward and backward linkages within the rural sector and with other sectors of the economy provide added stimulus for growth and income generation.

Thus, significant progress in promoting economic growth, reducing poverty and enhancing food security cannot be achieved in most of these countries without developing more fully the potential human and productive capacity of the agricultural sector and enhancing its contribution to overall economic and social development. A strong and vibrant food and agricultural system thus forms a primary pillar in the strategy of overall economic growth and development. Agriculture in LDCs cannot continue to be treated as a residual sector for policy attention and investments.

The challenges of globalization and trade liberalization

Although globalization offers opportunities for growth and development in all parts of the world, the hopes and promises attached to rapid liberalization of trade and finance have not so far been fulfilled in many developing countries, and particularly so in LDCs. In fact, the latter are increasingly becoming marginalized, especially in agriculture. The combined share of their agricultural exports declined from about 5 percent

of world agricultural exports in the early 1970s to just around 1 percent in 1996-98.

LDCs face many difficulties, both internal and external, in their efforts to develop their agriculture and to achieve their objectives of improving food security and increasing export earnings. Internal difficulties include low productivity, inflexible production and trade structures, low skill capacity, low life expectancy and educational attainments, poor infrastructure, and deficient institutional and policy frameworks. At the same time, with the growing integration of markets due to globalization and liberalization, their economies face a more fiercely competitive external trading environment. They continue to export a limited range of primary commodities that are highly vulnerable to instability in demand and a decline in terms of trade. In addition, their external debt remains large. Their inability to compete on world markets, as well as in their home markets, is also reflected in their rising food import bills.

Effective ways need to be found to support LDCs with a view to improving their economic and social conditions, achieving structural transformation, diversification and international competitiveness, overcoming their supply-side constraints and, ultimately, accelerating sustainable growth.

Scope of the paper

This paper focuses on the role that the agricultural sector can play in accelerating the economic growth and development of the LDCs and their integration into global trade. The objective is to identify elements of a strategy for action by LDCs - with the support of the international community - to exploit their agricultural potential by strengthening their competitiveness and supply capabilities so as to take full advantage of trading opportunities under the multilateral trading system. To that end, an assessment is made of the main constraints facing their agricultural development, including those associated with globalization and the international trading regime for agriculture. Policy lessons of relevance to

LDCs are drawn, based on the experience over the past three decades or so and focusing on success stories in agricultural development and the enhancement of competitiveness. In this connection, the paper assesses the implications of trade liberalization and puts forward some policy guidelines for integrating LDCs' agriculture into the global economy in a manner that would help these countries to maximize the benefits accruing to them in terms of growth and development. Accordingly, it addresses the following specific questions:

- What are the factors that have facilitated or constrained agricultural development in LDCs, in terms of their resource base (both natural and human resources), domestic policy, human development and institutions and external economic environment?
- What challenges lie ahead in the new era of globalization and trade liberalization?
- What can be learned from past agricultural development experiences?
- What should be done to improve the competitiveness of agriculture in LDCs and alleviate their supply-side constraints?
- What should be the role of the Government in LDCs and of their development partners and other stakeholders?

I. THE PRESENT SITUATION OF AGRICULTURE

Despite its importance to the economy, agriculture in LDCs has remained largely underdeveloped in production both for the domestic market and for export. Although there was a modest growth of output during 1995-98, it barely exceeded population growth, and for the 1990s as a whole in per caput terms it actually declined. In addition, slow food production growth and sharp annual fluctuations in output remain major and chronic problems for the LDCs, constituting the major causes of their rising poverty and food insecurity. Between 1969-71 and 1996-98, the proportion of undernourished in total population in LDCs increased from 38 percent to 40 per cent, while the absolute number of undernourished increased from 116 million to 235 million. For the rest of the developing countries, by contrast, the proportion of undernourished in total population in 1996-98 was18 percent. In addition, indicators of poverty show that the proportion of people living below the poverty line (defined as $1 per day) has risen in many LDCs.[1] What follows is a brief analysis of the major internal factors underlying the present agricultural situation in LDCs. Areas are highlighted where improvements in policies, institutions and investment could accelerate agricultural growth to levels that would help to reduce rural poverty and enhance food security.

Supply issues

Trends in production

Over the past decade, agricultural production, including food production, has not kept pace with population growth in LDCs as a whole. Although agricultural output in 1990-99 rose at an annual average rate of

[1] For example, recent World Bank figures for sub-Saharan Africa (SSA), which contains the majority of LDCs (34), show that the proportion of poor people increased from 38.5 percent in the late 1980s to 39.1 percent in the mid-1990s. (World Bank, *Entering the 21st Century: World Development Report 1999/2000* (*New York: Oxford University Press for the World Bank, 2000), p. 25).*

2.5 percent, exceeding the rate of 1.6 percent in the previous decade, in per caput terms there was virtually no increase in output, or even a slight decline. The situation was the same for per caput staple food production (Table 1).

1. However, these aggregate figures conceal a wide diversity of performance among countries. While more than 25 countries experienced negative per caput growth rates during 1990-99, 5 had positive growth as high as 2-5 percent. In only about 15 LDCs was per caput agricultural production in 1990-99 higher than in 1980-90. Elsewhere, mainly in sub-Saharan Africa (SSA), there was a decline.

2. Many LDCs changed from being net food exporters during the 1960s to net food importers during the 1980s and 1990s.Current projections are for their dependence on imports to increase at least up to 2015.[2]

3. Although there have been sharp annual fluctuations over the past 30 years, the value of production of nearly all agricultural commodities rose during 1990-97, the only exceptions being cassava, cocoa and sisal (Annex Table 1).

[2] See FAO (2000), *Agriculture: Towards 2015/30*, Technical Interim Report.

Table 1. Agricultural and food production in the 1980s and 1990s in LDCs and other developing countries (annual average percentage increase)

	Agricultural production			
	Total		**Per capita**	
	1980-90	**1990-99**	**1980-90**	**1990-99**
LDCs	1.6	2.5	-0.8	-0.1
All developing countries	3.6	3.7	1.5	2.0
	Food production			
	Total		**Per capita**	
	1980-90	**1990-99**	**1980-90**	**1990-99**
LDCs	1.7	2.5	-0.8	-0.1
All developing countries	3.7	3.9	1.5	2.2

Source: Computations based on volume indices (FAOSTAT 2000).

Determining factors and constraints

Physical aspects

Most LDCs have considerable unexploited potential in agriculture, thanks to their factor endowment in land, water, climate, the scope for utilizing their human resources and improving on their so far limited use of modern farming methods. There is thus great scope for more effective use of their agricultural resources and for increasing their agricultural productivity.

Land and water resource potential and constraints

The most fundamental factor influencing the agricultural production potential of a country is the availability of arable land. Land is the essential prior resource needed for crop, animal and forestry production. Thus, the existence of a potential for expanding the cultivated

area is basic to national agricultural planning. Comparing the potentially cultivable area with current use of land and forecasts of future population growth will indicate whether countries have the physical capacity for expanding agricultural production, whether for domestic use or for export.

Least-developed countries have widely diverse agro-ecological situations, with varying availability and quality of arable land and varying climatic conditions. Some countries have large areas of arable land and considerable water resources while others have more limited availabilities or are almost devoid of these resources. Prospects for agricultural development necessarily hinge on these considerations.

With the objective of classifying countries in terms of potential for agricultural production, a ranking on the basis of the land resource availability and constraints was undertaken, taking into account not only land and water constraints but also climatic constraints and population growth.[3] Annex Table 2 ranks 35 of the LDCs for which comprehensive data were available in terms of per caput potential arable land as well as per caput cultivable land in actual use. Potential arable land refers to areas that could be brought under cultivation because of soil suitability and availability of water (rainfall or irrigation).[4] It is important to note that in most cases potential arable land is rainfed and suffers from constraints such as ecological fragility, low fertility, toxicity, and high incidence of disease. These reduce its productivity and require heavy inputs and management skills to permit its sustainable use. Furthermore, especially considering the lack of financial resources in many LDCs, prohibitively high investments may be required before the land is rendered accessible or disease-free. FAO projections to 2015 indicate that the expansion of

[3] One of the clearest consequences of population increase will be to exert pressure for more land to be brought under cultivation. At the same time, existing agricultural land will be used more intensively.

[4] Potential arable land as referred to here is a rough indicator: it includes lands which are currently under forest and wetlands which are protected and not available for agriculture and makes no allowance for land for human settlement. Thus, land potential as shown in Annex Table 2 is likely to be overestimated, but it should nevertheless be a good indicator of the relative potential of different countries.

arable land as well as harvested land is expected to be below the past rate of increase.

The overall rankings indicate countries with the most favourable conditions (low rank numbers) or the most severe problems (high rank numbers) with respect to physical resource potential and constraints, now and in the future. This ranking is broadly indicative of a country's relative land resource potential. Three types of countries can be distinguished: i) those with a relatively large land balance, where extensive agricultural expansion may still be possible (e.g. Democratic Republic of the Congo and Mozambique); ii) those which are close to the limit of exploiting actual arable land (e.g. Bangladesh and Somalia); and iii) those which have exploited almost all their arable land and can probably not expand much more (e.g. Afghanistan and Yemen). Thus grouped, the countries can respectively be considered as having a high, medium and low agricultural potential. Out of the 10 highest-ranked countries 8 fall in the humid zone of central Africa. In this group there would appear to be a productive potential that is not yet exploited.

Among the lowest-ranked countries, there are two highly contrasted groups: i) two countries that have over 90 percent of their land as deserts and drylands; and ii) four relatively humid countries with problems of steplands and land degradation.

Another feature of the lower-ranking countries that may be noted is that at least five of them have, in recent years, experienced major civil conflicts, political instability, or war. The high rate of population growth in these countries is likely to increase pressure on land resources, which can lead to the breakdown of traditional property rights to land, and ultimately of law and order. Among the many consequences of such changes is further degradation of land.

Potential for growth in agricultural productivity and its importance

In LDCs, the contribution of increases in productivity to agricultural growth has been limited or zero. Horizontal expansion, i.e. bringing more land under cultivation, remains the dominant source of

growth. Given the increasing pressure on agricultural resources, however, faster agricultural growth, particularly in countries with limited scope for land expansion, will require continuing increases in agricultural productivity from its present relatively low level. Such increases are attainable if major constraints on enhancing productivity, such as lack of favourable incentives, limited rural public investment and poor institutional support, are effectively tackled.

Available evidence shows that the potential productivity gains are considerable. In terms of agricultural value added per worker, productivity increased, though only slightly, in 21 out of the 31 LDCs for which data are available between 1979-81 and 1995-97 (Annex Table 3). However, in comparison to other developing countries the agricultural value added per worker in LDCs appears to be relatively low, suggesting that there is much room for improvement.

The following is a broad assessment of productivity in each of the major agricultural sub-sectors.

(i) Crops

The most widely used indicator of crop productivity is production per unit of land (also referred to as crop yield). In general, crop yields in LDCs are low relative to those in other developing countries (Annex Table 4). Yields of the basic food commodities (cereals, roots and tubers and oil crops) are less than half the average for developing countries, although there is much variation among countries. There thus appears to be potential for substantial gains in productivity.[5]

Unlike most other developing countries, growth in agriculture in LDCs owes a great deal to area expansion rather than to advances in yields. For example, area expansion accounted for 77 percent of the growth in cereal production in LDCs during 1981-89 and for 72 percent in 1990-99, and higher yields for only 23 percent and 27 percent,

[5] Although yield comparisons should be in a homogenous agroecological context, such comparisons of averages provide a good idea of the range of possibilities.

respectively (Annex Table 5). For rice, maize and fibre crops, however, a relatively high and increasing contribution was made by productivity improvements (yields).

(ii) Livestock

Livestock is an important and growing sub-sector, providing a substantial source of income and nutrition for the rural poor in most LDCs. It remains the principal form of non-human power available to rural farmers, and is used by both men and women for various purposes, including accumulation.

LDCs have substantial hidden growth reserves in the livestock sector. A comparison of LDCs' share in world livestock numbers with their share in world output therefrom (Annex Table 6) provides an indication of the relative productivity levels of LDCs. Although 14 percent of the world's cattle and 18 percent of the world's sheep and goats were in LDCs in 1997-99, those countries produced only about 4 percent of the world's beef and 11 percent of the world's sheep and goat meat.

Livestock production in LDCs relies much more on traditional operations. It relies largely on growth in the number of animals for increased production. There was virtually no significant improvement in productivity per animal in most LDCs, where their average productivity levels remain much below those of developing countries as a whole (Annex Table 6). The extreme scarcity of capital, shortage of quality feed and widespread prevalence of disease have constrained their livestock sector. To achieve greater improvements in productivity there is a need for: i) continued investment in both research and the development of animal and feed grain production and processing and ii) assistance to small, poor livestock producers, so that they can become better integrated with commercial livestock marketing and processing.

(iii) Fisheries

Many LDCs have great potential in fisheries. Although this potential has not yet been fully exploited, fisheries products are

increasingly contributing to food consumption of the population and to foreign exchange earnings. Catch potentials vary widely among countries. Those in north-west Africa, south-west Africa, the south-west Indian Ocean (for tuna) and the Rift Valley lakes, for example, have the greatest potential for production and exports. The countries bordering the Atlantic Ocean benefit from particular oceanic conditions (i.e. upwelling systems) that greatly contribute to the increase of marine water productivity, although these systems are subject to marked fluctuations due to weather. High-price demersal species are considered to have approached the limits of possible exploitation, but low-price pelagics are thought to be largely under-exploited. Countries still depend largely on foreign investment or international fishing agreements for the exploitation of their offshore resources.

(iv) Forestry and agroforestry

Forests and trees indirectly contribute to economic development and food security and sustainable livelihoods in numerous ways, through support to agricultural systems, their role in rural development and in maintaining environmental integrity and the provision of opportunities for income generation and employment.

Rural communities, particularly in LDCs, are highly dependent on forest goods. Wood fuel is the main source of energy in most LDCs, representing up to 90-95 percent of domestic energy consumption. Non-wood forest products (NWFPs) are of major significance primarily in households and local economies. An estimated 80 percent of the population in the developing world use NWFPs to meet some of their health and nutritional needs. Millions of households depend heavily on these products for subsistence consumption and/or income. Timber and the timber industry are an important source of income and a significant component of the national economy in LDCs with high forest cover, representing in one case 15 percent of GDP and 35 percent of total export revenue.

In LDCs, forest goods and environmental services are provided almost exclusively by natural ecosystems, which are threatened by

unsustainable exploitation practices and other factors, including inappropriate horizontal expansion of crop production. The challenge will be to define and develop integrated systems that ensure sustainable provision by forests and trees of goods and services which are vital to the livelihoods of the population in LDCs.

The foregoing analysis shows that the gap between actual productivity levels (in terms of land, labour or animal head) in LDCs and what is potentially achievable is huge. This gap can be defined at three levels:

- Average productivity is far below what could be achieved by using the best practices and technology suitable for the specific location. There is scope for closing this gap through extension programmes and infrastructure investments;
- Yet further improvements in productivity could be obtained through more applied research programmes. However, this involves a long time span and requires continuity of support. The experience of maize in SSA shows that African countries are slow in acquiring the capacity for developing reliable and cost-effective systems for the delivery of crops from the laboratory to the field;[6]
- The difference between productivity derived from scientific innovation and from research is also high. To close this gap applied adaptive research programmes must be supported by international and national pre-invention science programmes.

Improving agricultural productivity is associated with the progressive reduction of each of these gaps − starting with the extension gap, moving on to the research gap and then to the science gap − as the country's capacity expands for adopting and developing improved technologies. At this stage of development in the LDCs reducing the extension and research gaps would be the immediate priorities.

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[6] IFPRI, "Is there hope for food plenty in Africa?", *News & Views*: A 2020 Vision for Food and the Environment, October 1996.

In many developing countries (including LDCs), governments have often intervened in markets in inappropriate ways and have invested in state-owned production enterprises that have often been inefficient. Reforms have been undertaken to privatize inefficient state-owned enterprises and to eliminate marketing boards and other inefficient regulatory agencies in many countries in recent decades. However, the historical role of such institutions and the associated provision of these public goods in agriculture has not always been fully appreciated. Public sector investment in rural schools, in the development of input and output markets, in agricultural extension and in applied agricultural research have been vital to agricultural development in every economy in the world. Institutional reform without investment in these public goods does not produce economic growth in the agricultural sector. Growth is not produced by passive "let the markets work" policies that do not include critical public investment programmes.

Evidence shows that public spending on agricultural extension and research has a potentially high payoff in LDCs. A recent overview of studies on returns to investments in research and extension confirmed that the internal rate of return in Africa (which contains the largest number of LDCs) is rewarding: the median return was 27 percent for extension and 37 percent for research (Annex Table 7). Therefore, building extension and research capacity is necessary to enable LDCs to achieve high productivity growth, in line with the experience of many developing countries. As the programmes are complemented by institutional investments in markets and infrastructure, their effectiveness increases.

Despite their high potential payoff, agricultural research and extension expenditures in almost all LDCs are very low in per caput terms compared with those in other developing countries or the developed countries. A recent study by FAO has shown that, in 1989-90, total expenditures on agricultural research in SSA countries were less than 0.6 percent of agricultural GDP.[7]

[7] FAO, Rome (1995), The National Agricultural Research Systems of West and Central Africa.

Environmental and natural resource sustainability

There is a growing concern that the expansion and intensification of agriculture may lead to degradation of the natural resource base (soil, water, vegetation and biodiversity) and consequently to a decrease in agricultural production. However, agricultural intensification *per se* – i.e. increasing the productivity of land already under cultivation - should not be a threat. In fact, properly managed intensification is needed to meet agricultural production needs and reduce the pressure of agricultural expansion in fragile and marginal areas. The lack of sound management practices and of access to appropriate technology and inputs for agriculture, rather than intensification, is the most serious cause of environmental degradation.

Sustainability of environmental and natural resources in LDCs is related to a number of factors, such as globalization, inequalities in the development process, lack of access to science and technology, limited financial means of production and disrupted traditional institutions and production systems. Moreover, agriculture still functions as an isolated sector in many LDCs**.** Increased stress on natural resources, encroachment on marginal lands, migration towards cities or more developed countries, urban slums, social disintegration and poverty often result from a lack of services and employment opportunities in rural areas in the LDCs.

Population growth and unsustainable management practices create pressures on the eco-system and jeopardize the ecological balance. The last five decades of resource over-exploitation in many LDCs have drained reserves of natural capital in many regions and limited agricultural and livelihood opportunities for future growth. Revitalization of indigenous knowledge and more research are needed on production methods that preserve natural resources and the environment. Most importantly, more attention should be given to local participation in decision-making processes for better interactions of individuals and social groups with the natural ecosystem. There should be financial and other assistance to help LDCs adapt and acquire appropriate technology. Programmes, including a diagnosis, at national, sub-national and local

level, of areas and populations most exposed to the degradation of land resources, and with consequences for their livelihood, need to be initiated and implemented jointly by various stakeholders. Unfortunately, these areas are often left aside by development programmes, as their rehabilitation is complex and not easy to justify on purely economic grounds. The selection of appropriate inputs should also be based on solutions that combine traditional knowledge and modern techniques and assist the farmers in investing in the maintenance of land assets.

The integration of environmental considerations into development planning should be seen as an indispensable element of development strategy in LDCs. It is not only a means of protecting fragile lands for future agricultural production, but also a mechanism for LDCs, in particular those in dryland zones, to sustain an important capital of biological diversity and contribute to solutions to some of the global change issues. Thus, a site-by-site analysis is likely to be required, given that the interaction between policies that promote a supply response and the manner in which that response will be achieved (and hence the environmental impact) is likely to be ambiguous.

In sum, it appears that many of the LDCs have relatively abundant agricultural and natural resources that could provide them with a comparative advantage in a range of agricultural products. These could be developed to exploit international market opportunities and therefore generate broad-based growth throughout the economy. There are great opportunities for intensification and productivity enhancement in agriculture. The next three sub-sections examine domestic and external challenges and constraints that have impeded the full exploitation of this potential and highlight policy measures for its realization in an effective and sustainable manner.

Human development aspects

Developing the human resource potential involves examining the roles and needs of farmers (both men and women) and other members of the household who may perform diverse duties and have differing requirements with regard to education, health and nutrition, and technical

knowledge. A low level of human development (as measured by a combination of life expectancy rates, education attainment rates and standards of living)[8] is characteristic of LDCs.

Education, training and extension

Education is the main pillar of human development and a major factor in agricultural development. Research shows that primary education attainments and literacy, training in basic skills and extension services have an immediate and positive impact on farmers' productivity. A farmer with four years of elementary education is, on average, 8.7 percent more productive than one with no education. Moreover, the better he is educated, the more he stands to gain in income from the use of new technologies and the more rapidly he adjusts to technological changes. The effects are beneficial to the whole population; more specifically, they enhance the capacity of the rural population.

The quality of education and training in LDCs is low, and the institutional capacity to carry out reforms and improvements in education and training for agriculture and rural development is weak. As a result, LDCs have high rates of illiteracy and of children out of school, affecting most acutely the rural population.

Population and health

Demographically speaking, the LDCs suffer from a dangerous combination of population, health and development problems that adds up to a daunting challenge for their people, their governments and the international community.

Current projections indicate that they will continue to experience a high national rate of population growth, although it could be set back by the AIDS epidemic, if unchecked. Obviously, the projected increases in

[8] See UNDP, Human Development Report 2000 *(New York : Oxford University Press for UNDP), 2000.*

overall population numbers will have major implications for food requirements. For instance, a recent FAO study [9] indicated that in order to maintain, or slightly improve, present per capita food availability by 2050, food supply would need to be nearly quadrupled in some LDCs.

There are other demographic factors that are likely to be of direct relevance to agriculture and food security in LDCs. In particular, the increasingly rapid spread of HIV/AIDS in rural areas poses a very serious problem. The pandemic is unique in comparison with other diseases in that it affects the most productive age groups: those between 15 and 50 years. It thus has direct quantitative and qualitative effects on agricultural labour: it greatly reduces the size of the agricultural workforce and its productivity; it changes the division of labour; and it results in a loss of skills that are important for farming, marketing and management of resources.[10]

The pandemic also directly affects markets for agricultural production by altering the size and composition of the population to be fed, and limiting its effective demand for food. In addition to being a major health problem, in recent years HIV/AIDS has been considered a critical socio-economic issue. Its impact is also related to the fact that it provides an entry point for other diseases, such as tuberculosis and malaria. Increased levels of morbidity and mortality impoverish affected households and deplete the rural sector at large. This is likely to lead to declines in agricultural production and to aggravate food shortages and long-term nutritional deficiencies.

The role of rural women in agricultural development

Rural women play an important role in producing the world's staple crops, raising poultry and small animals (sheep, goats, rabbits and

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[9] Collomb, P. (1999): *Une voie étroite pour la sécurité alimentaire d'ici à 2050.* FAO, Rome, and Economica, Paris.

[10] D. Topouzis and J. du Guerny, Sustainable agricultural/rural development and vulnerability to the AIDS epidemic, FAO/UNAIDS joint publication, 1999.

guinea pigs), and providing labour for post-harvest activities. Their role is particularly prominent in LDCs. Wars, increasing rural-to-urban migration of men in search of paid employment, together with rising mortality attributed to HIV/AIDS, have led to an increase in the number of female-headed households in the developing world. This 'feminization of agriculture' has placed a considerable burden on women's capacity to produce, provide, and prepare food in the face of already considerable obstacles.

FAO studies demonstrate that while women in most developing countries are the mainstay of agricultural sectors, the farm labour force and food systems (and day-to-day family subsistence), they have been the last to benefit from - or in some cases have been negatively affected by - prevailing economic growth and development processes. Gender bias and blindness persist: farmers are still generally perceived as 'male' by policy-makers, development planners and providers of agricultural services. Women consequently find it more difficult than men to gain access to valuable resources such as land, credit and agricultural inputs, technology, extension services, training and other services that would enhance their productive capacity.

Overall, women's contribution to agriculture is poorly understood and their specific needs ignored in development planning. However, women's full potential in agriculture must be realized if the goal of promoting agricultural and rural development is to be achieved.

Information and communications

Information and communications are also essential for sustainable agricultural and rural development. Investments in rural information systems can improve farmers' knowledge levels and management skills. Raising the level of awareness, acquiring information, sharing experiences, changing attitudes and developing skills call for processes of communication and learning. While Internet-based technologies are spreading rapidly in many developing countries, there is still a serious

lack of basic telecommunications infrastructure. The information gap between the rich and the poor is indeed very wide.

Policies and institutions

This sub-section identifies the major policy and institutional measures that have facilitated or constrained agricultural development in LDCs, with emphasis on those that prevented farmers from increasing their productivity or output.

Macroeconomic policy framework

In the past, governments in LDCs used to carry out many of the functions associated with agriculture: funding, a variety of production, marketing and distribution services, regulation and in some cases direct involvement in production. More importantly, the overall effect of government policies was not favourable to the agricultural sector. The prevailing development paradigm emphasized the importance of extraction of agricultural surplus in favour of other sectors. Macroeconomic policies, especially exchange rate policies, discriminated against tradables, while trade policies, by favouring non-agricultural tradables, "tilted" the terms of trade within the tradable sector against agriculture. More importantly, though, the price-based bias against the agricultural sector was not compensated by other forms of transfers in favour of rural areas.

Since the early 1980s, most LDCs, like many other developing countries, have been implementing a series reforms both to address macroeconomic disequilibria and to rectify the distorted inter and intra-sectoral price incentives. At the macroeconomic level and in the context of stabilization programmes, a major change has been a move towards an exchange rate system better reflecting the scarcity of foreign exchange and a monetary and fiscal policy conducive to macroeconomic stability. Thus, a major source of anti-agricultural bias has been addressed but not necessarily entirely removed. And steps towards macroeconomic reform have not been uniform in all countries. At the sectoral level, steps have

been taken to remove distortionary barriers to the functioning of markets, and towards privatization of processing, marketing and distribution activities.

The diversity in the contents and in the implementation of reform "packages" makes it impossible to undertake an overall evaluation of their impacts on agriculture (by e.g. comparing pre-and post-adjustment growth in agriculture or countries which adjusted and those that did not). With respect to macroeconomic policies, it is nevertheless relevant to note that in a number of LDCs which experienced buoyant agricultural growth, macroeconomic policies brought about an increasingly competitive exchange rate and more realistic interest rates.[11] A stable macro-economy, by promoting investor confidence, constitutes an essential characteristic of an overall growth environment, which in turn induces an expansion of the internal market for agricultural commodities. A competitive exchange rate promotes agricultural exports.

As for sectoral policies, the limited cross-country evidence on the impact of sectoral policy reform on agriculture has shown that, while improving the structure of price incentives facing agricultural producers is important, it does not address all the constraints which prevent agriculture from realizing its productive potential. In fact, examination of a number of successful and sustained agricultural growth experiences shows that, in certain periods, output growth has taken place even though the structure of price incentives was not favourable to agriculture.[12] The principal difference between these success stories and others, where price discrimination against agriculture resulted in the stagnation of the sector, is that, despite price distortions, there was nevertheless a government (and donor) commitment to building rural infrastructure and promoting agricultural research and other public services, which more than compensated for the loss caused by distorted price incentives.

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[11] Dorward A. and Morrison J. (2000), "The Agricultural Development Experience of the Past 30 Years: Lessons for LDCs", background paper prepared for FAO.

[12] Mellor J. (2000), "Agricultural Development: So many Successes, Such Excellent Results", background paper prepared for FAO.

Thus, the major lesson that emerges from country experiences is that for agricultural growth to occur, a number of factors need to be in place which address the "handicap" of the rural sector in terms of infrastructure, social services, technology, marketing infrastructure, and seasonal credit availability, along with the building of an appropriate institutional environment. There is no unique policy prescription that fits the diversity of the agricultural sector in the LDCs. While enhancing productivity is a common essential requirement, the nature of the increase in productivity envisaged will determine the appropriate policy mix. For example, in countries seeking increased productivity through shifts to commodities with a higher income elasticity of demand (such as fruits and vegetables) and through improved access to dynamic markets (both domestic and external), an appropriate institutional environment, market information and assistance in meeting health and sanitation standards are some of the possible elements of policy.

In addition, the multiplicity of linkages of agriculture to the broader rural sector and rural non-farm activities suggests that agricultural policy should not be confined to the narrow limits of the agricultural sector strictly defined, but should consider also the impact of policy on the rural space for which agriculture (especially in LDCs) is the central activity (see the section on interlinkages below).

In several countries reforms have not been properly sequenced so as to ensure their efficiency. In designing policies and programmes governments have often concentrated on exchange rates, domestic price liberalization and privatization of public enterprises, while downplaying other policies and factors affecting agriculture, such as an accompanying adequate improvement in infrastructure, technology and marketing facilities. Inadequate design and sequencing of reforms, and an unstable policy environment, have thus been major sources of the difficulties faced by the reform programmes in many LDCs.

Agricultural and rural development institutions, infrastructure and support services

(i) Markets

Rural infrastructure in most LDCs is rudimentary, with semi-subsistence farming often dominating agricultural activities. Lack of or difficult access to markets is common to most LDCs. Even where rural markets exist they are notoriously imperfect, and when they are totally absent it is difficult for farmers to sell their produce and thus ensure food security for their families. An initial requirement is frequently thus the development of these rural markets. Difficulties that have been cited in the operation of commodity markets include remoteness of producers from markets, poor quality of the produce, high transport costs (because of high energy prices and weak infrastructure), lack of competition among traders and poor organization of producers, lack of information on market conditions, lack of clear market rules and their poor enforcement, as well as sharp price fluctuations during the year.

(ii) Rural financial services

Financial services in rural areas are often poorly developed. The channelling of cheap credit through state agricultural development banks was characterized by low repayment rates, poor targeting and low operational and managerial efficiency and thus was limited in terms of outreach and sustainability. Often subsidized credit has been misused and channelled towards the introduction of technological packages that were not adapted to local farming systems and for which no effective demand existed. Poor assessment of marketing possibilities and profitability and the limited loan repayment capacities of the borrowers often explain the high rate of loan defaults, reinforced by periodic debt waivers advocated through political pressure.

In contrast, private commercial banks charge high interest rates, especially to small farmers in regions with low population densities. The consequently high costs of borrowing are further increased by an unstable macroeconomic environment involving, inter alia, high annual inflation

rates. In addition, poor rural infrastructure and communication systems, ineffective extension services, and inappropriate macroeconomic and sectoral policies raise the costs of inputs and marketing, further reducing the profitability of farming. Linkages between farmer and trader and other arrangements with enterprises in the agribusiness chain, such as contract farming, can overcome many of these constraints.

Experiences with microfinance institutions highlight the crucial importance of client orientation in the provision of financial services and the use of market- based interest rates that cover the full costs of lending. Poor people seem to prefer a reliable and timely availability of loan finance, even at higher costs, to an untimely and bureaucratic supply of subsidized credit that is tied to specific uses.

However, the specific nature of agriculture, such as seasonal credit demand for annual crops and high risks, reduces the role of current microfinance institutions and their lending methods in financing the seasonal and on-farm investment needs of small farmers.

(iii) Availability of farm inputs

Information gathered through FAO's Special Programme for Food Security (SPFS) projects in 22 of the low-income food-deficit countries (LIFDCs) shows that a major problem facing farmers is the unavailability of fertilisers and agro-chemicals, and often of animal feed, on time or in the quantity required. This constraint is largely linked to the lack of credit, difficulties in obtaining foreign exchange, the seasonality of agricultural input requirements, spatial dispersion of farmers, poor transport infrastructure and, sometimes, to the marketing and management inefficiencies of the state-owned companies responsible for single-channel input supply and marketing.

Quality seeds are also said to be available in insufficient quantities, particularly in Africa and Asia. The informal seed supply system is the dominant source of seed/planting materials for resource-poor farmers in marginal areas and has proven to cope better with a disaster situation compared to the formal seed sector. Nevertheless, the informal

seed supply sector has unfortunately received very little attention and financial support from policy makers, to the detriment of the productivity of small-scale farmers. Therefore, without strengthening seed supply systems in developing countries there will be little or no technology transfer to improve crop productivity and hence the livelihoods and well being of poor and vulnerable households in rural communities. In some countries, there are worries that the genetic base of certain cereals has become too narrow, especially as local varieties have been given less importance or suppressed. Absence of improved animal breeds and insufficient livestock treatment facilities are also reported in some cases.

Another institutional constraint is inefficient use and distribution of water, which is usually blamed on poor management of irrigation schemes and inadequate water distribution arrangements, which result in an uneven and untimely distribution of water among farmers. In many LDCs, the management of irrigation schemes and water distribution is under public control. Farmers' associations are rarely involved or are too weak to contribute to both the design of water distribution systems and the maintenance of the network. The water needs of farmers have to be examined from both the household and production-for-export aspects, since the particular use affects the quality of life of both men and women and their communities.

(iv) Agricultural research and extension

In most LDCs, the institutional capacity for research and extension is weak. As a result, the technology available is insufficiently adapted to local conditions and research results do not come up with a variety of technological solutions adapted to the range of socio-economic and agro-ecological conditions existing in the country, such as the differing technical needs of female and male farmers. Lack of technological alternatives is often mentioned as a constraint to irrigation development (e.g. different models of irrigation pumps, suited to the needs of different users). Where techniques and technologies developed by research are available, their dissemination is faced with a number of difficulties such as the poor delivery of the extension and training services that are not necessarily targeted to the appropriate users.

Weak extension and training services and the consequent lack of technological knowledge of farmers are often considered to be the major factors behind the insufficient adoption of improved technologies. This constraint could be overcome by improving farmers' access to knowledge. For example, valuable information can be obtained from some of the extension materials on FAO's Ecoport web pages.

(v) Social and cultural factors

The development and adoption of high-production technology has also been constrained by a number of social and cultural factors, including:

- Insecurity of **land tenure** and **fragmentation of land holdings** in some LDCs, particularly in Africa, especially with regard to women, who may have little or no access to land, depending on custom or formal laws that regulate the tenure practices;
- The low level of **education**, which is an obstacle to raising the technological capacity of farmers from its currently low levels and to the adoption of new technologies. Education for both boys, girls and adult women is often lacking. This constraint is considered to be particularly acute for women. For example, the lack of farmers' bookkeeping skills makes it more difficult for them to appreciate the advantages of improved technologies;
- The **risk-averse tendencies** of farmers, which have been generally underestimated, particularly when they have not been involved in the decision-making process on the development and use of new products. Farmers have sometimes hampered the adoption of new technologies and management practices, especially when their traditional livelihoods and associated local traditions have been threatened. For example, high variability of yield of certain improved varieties has been a constraint to their adoption by poor farmers bordering on the subsistence level. It is essential that both male and female farmers be involved in the entire process of developing new high-yield varieties and associated technologies, in order to ensure a greater acceptance and adoption by those who stand to benefit most;

- Since educational attainment has a direct impact on the knowledge, skills, attitudes and behaviour of farmers, low educational attainment in LDCs is reflected in the great difficulty in changing farmers' **attitude and behaviour** to cope with the new policy reforms. The reforms implemented since the early 1980s have involved drastic changes in the environment in which producers operate. While they were relatively passive actors before policy reform, they have now to take initiatives and organize themselves.

Post-production activities

Lack of good quality **roads** as well as insufficient **storage facilities** have been identified as major constraints in many LDCs, sometimes resulting in crops remaining unsold. Failure of the transport infrastructure in some LDCs to move food grains from surplus to deficit areas during periods of localized drought illustrates the severity of transport bottlenecks and agricultural market segmentation. Inadequate communication facilities tend to limit, for many producers, the possibilities of access to markets and market information, as well as to make access to inputs more difficult and costly, and lower producers' returns. The absence of storage facilities amplifies seasonal market fluctuations and the level of post-harvest losses, which in some cases can be as high as 30 percent of total production.

Food safety and quality standards

Ensuring the safety and quality of foods in developing countries is of paramount importance not only from the point of view of public health but also to improve the competitiveness of their food products in the international market. Their control systems and institutions suffer from a number of weaknesses which make them ineffective in ensuring consumer protection and benefiting from the post-Uruguay Round trading regime. These weaknesses concern all the basic elements of a national food control system, i.e. food legislation, food inspection, quality assurance at

the production level and testing capabilities (human and physical) to control the quality and safety of the food supply.

The following actions are needed to enhance the capacity of developing countries to meet the requirements set out in the relevant WTO Agreements, thus ensuring consumer protection and promoting food trade, internally and externally:

- Capacity building to implement the Agreement on the Application of Sanitary and Phytosanitary Measures (SPS) and the Agreement on Technical Barriers to Trade (TBT) and to fulfil other new international and domestic requirements on standards;
- Developing national capacities for risk assessment; designing domestic regulations and policies for export, food and agribusiness development;
- Promoting regional cooperation and enhancing coherence in trade policies and domestic regulations on standards;
- Development of national food safety regulations and standards without distorting international trade;
- Enhancing the participation of developing countries in international standard-setting bodies;
- Collection of relevant information for national capacity building and policy making;
- Improving the negotiating stance in international trade negotiations

Investment in agriculture

Least-developed countries face a major domestic resource gap in generating the investments needed to achieve their developmental objectives in agriculture, including the target of reducing the number of under-nourished people by 2015. The concept of investment to augment the productive capacity of agriculture entails not only physical assets, but also science and technology dissemination, human capital enhancement and social capital build-up. Creating a pro-investment climate to raise productivity levels and achieve the necessary structural changes is a major policy challenge.

In many LDCs, much public expenditure on agriculture is in the form of subsidies, leaving little public funding for the creation of new assets, for maintenance or for other growth-producing expenditure. The result is that many agricultural support services barely function, rural roads are impassable for much of the year, farm machinery is mostly inoperable and irrigation schemes are crippled.

It was seen above that many LDCs have adopted policies to deregulate agricultural markets, reduce price distortions, and allow a greater role for private agents in economic activity. Such measures, although necessary, are not always sufficient for inducing the investment necessary to permit sustained production increases. Improved investment incentives also require policies that improve access to markets, ensure dissemination of information, set standards and provide an adequate legal and regulatory framework. At a more general level, there is consensus that political stability and a well-defined and enforced institutional framework are also needed. Strong complementarity between public and private investment is also necessary to sustain agricultural growth, with governments investing in sectors having an important public goods element such as research, extension and infrastructure and hence covering in particular roads, education, norms and standards.

FAO projections put the average annual gross investment requirements until 2010 in SSA for primary agriculture, storage and processing (excluding the related pre- and post-production infrastructures and services) at some US$ 11.1 billion, under the "business-as-usual" scenario[13]. To reach the World Food Summit target of halving under-nutrition, however, additional investments of about US$ 3.6 billion would be required to ensure the necessary increase in domestic food production.

Rural infrastructure (e.g. irrigation and roads) is badly lacking in LDCs, particularly in SSA. Heavy investments are needed in rural communication infrastructure, irrigation improvements and

[13] FAO Committee on World Food Security, Investment in agriculture for food security: Situation and resource requirements to reach the World Food Summit Objectives, CFS: 99/Inf.7, June 1999.

modernization, better exploitation of rainfall by simple and improved water capture and use, land management and improvements, education extension and research and the provision of health services. Research results and best practices, as yet untried on a large scale, can be adopted for high-potential areas in SSA. Research continues to be needed to develop farming systems for small, resource-poor farmers, who form the majority in most LDCs. These new farming systems need to be sustainable at higher population densities and capable of intensifying production on existing land.

While the need for investment is huge, sequential removal of constraints is crucial. National experience has shown that when the increase in production associated with a reform or a change in circumstances has reached a plateau, a further reform, or series of reforms, has been required to unleash further potential. Sustained growth has only been possible when new constraints have been alleviated by further reforms.

Most of the required investments can be expected to be forthcoming from the private sector, and therefore depend decisively on the prevalence of a conducive climate at the national and international levels. In this regard, public investment is an indispensable pre-condition and catalyst for and complement to private investment, involving basically investment in research and infrastructure.

Demand Issues

Trends in consumption

Domestic consumption (human consumption and other uses) of agricultural products in LDCs varies widely between food and non-food products. Non-food products such as raw materials and tropical beverages are basically produced for export. The little that goes to the domestic market is destined essentially for local processing industries, which in turn export the bulk of their produce. In contrast, the domestic consumption of food products is a large and growing proportion of output. Consumption

of basic foodstuffs in LDCs grew by an annual 2.3 percent during 1990-97 (Annex Table 1), below the population growth rate of 2.6 percent. The consumption of cereals met by domestic production declined from 96 percent in 1970-80 to 85 percent in 1990-98.

For many commodities, production has not kept up, and perhaps will not keep up, with demand. For example, during the 1960s LDCs were net exporters of rice (2.4 million tonnes), but by the mid-1990s they were importing 3.5 million tonnes, a figure that is projected to rise to over 7.5 million tonnes by 2015. Similarly, net imports of wheat increased from 1.1 million tonnes in 1961-63 to 6.1 million tonnes in 1995-97 and are projected to reach 15 million tonnes by 2015. Cassava and plantains, the main staple food in many African LDCs, also showed an increase in net imports in the 1990s.

In sum, trends in production, consumption and trade amply demonstrate the increasing import dependence of LDCs for food. FAO projections for 2015 suggest that this dependence will continue to increase. If the requisite commercial imports cannot be ensured, or if food aid cannot make up for the shortfall, per caput food consumption will inevitably fall.

Determining factors and constraints

There are three determinants of demand growth: population, per caput income, and the income elasticity of demand. For LDCs as a whole, real GNP per caput has been stable over the last two decades. Between 1989-91 and 1995-97, in only 20 out of the 40 LDCs for which comparable data are available did it rise. This suggests that the increase in cereal consumption in most LDCs during 1990-98 was due mainly to population growth. Population growth rates in LDCs are among the highest in the world. For LDCs as a whole, the rate increased from an annual 2.5 percent in 1980-90 to 2.6 percent in 1990-96 and is projected to remain high (2.3 percent) during 2000-2015. Their food security is thus threatened unless production performance and/or food import capacity can be improved significantly over the levels of the past 10 years.

The capacity to import food is determined by the availability of foreign exchange, which in turn is determined by export earnings (essentially from commodities for most LDCs) and by the external resource flow. Many LDCs suffered because of the fall in prices of their primary commodity exports during 1990-98. The foreign debt burden also limits the ability of many LDCs to import, and the situation has been compounded by the slowing down of the external resource flow.

Food security

The interaction between food supply and demand factors determines the level of food adequacy. The most widely available and used indicator for estimating food adequacy levels is per caput dietary energy supply (DES), which measures the food available to each person on average in a country. As shown in Table 2 and Annex Table 8, the DES for LDCs as a group has been very low and has barely risen since 1979. For roughly half of the 44 LDCs for which data are available it has been below 2 100 kcal/day. This stands in contrast to the progress in other developing countries and the world as a whole, where food production has continued to outstrip population growth.

Table 2. Per caput dietary energy supply (DES)

	Per caput DES (kcal/day)			Average annual rate of increase (percent)	
	1979-81	**1989-91**	**1996-98**	**1979-81 to 1989-91**	**1989-91 to 1996-98**
World	2 540	2 700	2 780	0.6	0.4
Developing countries	2 300	2 510	2 650	0.9	0.8
LDCs *	2 040	2 080	2 070	0.2	-0.1
of which in :					
Africa	2 060	2 010	2 000	-0.2	-0.1
Asia	2 020	2 180	2 180	0.8	0.0
Pacific	2 380	2 340	2 410	-0.2	0.4
Caribbean	2 040	1 770	1 840	-1.4	0.5

* Excluding Bhutan, Equatorial Guinea, Samoa and Tuvalu, for which data were not available.
Source: FAO.

FAO estimates show that the incidence of chronic undernutrition (undernourishment)[14] is high in LDCs (Annex Table 9). Between 1969-71 and 1996-98, the proportion of undernourished in total population in LDCs increased from 38 percent to 40 per cent, while the absolute number of undernourished is estimated to have increased from 116 million to 235 million.

[14] The term "undernourished" in the context of the World Food Summit 1996 refers to persons whose food consumption level is inadequate in terms of calories consumed relative to requirements on a continuing basis.

Interlinkages: Agricultural Growth, Rural Development and Poverty Alleviation

Nature of the linkages

With 70 percent of the world's extremely poor and food-insecure people living in rural areas, the role of agricultural and rural development in the eradication of poverty and food insecurity is crucial. As agriculture is the predominant economic activity in rural areas, the rural poor strongly depend on it for their income and food entitlements. The dependence is most marked in countries where food insecurity is most widespread, and where there often exists a combination of low incomes, a food deficit and high external indebtedness. Most such countries are LDCs.

National experience of economic growth and poverty alleviation reveals that: i) poverty alleviation is positively related to overall economic development; ii) agricultural growth in developing countries has stronger effects on poverty alleviation than growth in other sectors; iii) it alleviates poverty mainly through the labour market, especially through increases in wages; iv) its impact on poverty reduction lessens if there is growing income inequality; and v) rural growth reduces both urban and rural poverty.

The potential for agricultural growth to alleviate rural poverty in the LDCs is exemplified by the fact that, on average, agriculture employs about 75 percent of the total labour force (over 80 percent in several cases) and that the percentage of poor in the rural areas is generally much higher than in the urban areas (see Annex Table 10). Hence, agricultural growth can increase the income of the poor both directly, through the additional demand for labour, and indirectly, through input, output and expenditure linkages with non-farm productive activities in the rural sector.

The rural non-farm sector constitutes the connecting link between agriculture, rural development and rural poverty alleviation. In many low-income countries, it is expected to be closely linked to agriculture in numerous upstream and downstream productive activities. Earnings from

participation in such activities may constitute a substantial share of the overall income of rural populations. Annex Table 11 shows data on non-farm income and its distribution (when available) by (a) income percentiles (b) zones, according to the type of agricultural production; and (c) types of product cultivated. It covers a limited number of LDCs in Africa and Asia for which data are available.

Thus, farm and non-farm rural activities should be considered complementary in terms of financing investment in both sectors: savings derived from farm activities can constitute start-up capital for rural non-farm activities; at the same time, savings derived from non-farm activities can be used to acquire inputs and adopt improved agricultural technologies.

Does the type of agricultural growth matter?

The shares of non-farm income reported in the foregoing paragraphs demonstrate, if anything, that the terms rural and agricultural growth are not synonymous and that non-farm income is an important component in the livelihoods of rural households. Thus, when considering the impact of agricultural growth on poverty and rural development, its effects through production, income and expenditure linkages on rural non-farm income and employment should also be taken into account. Approaching the question of agricultural growth and poverty reduction within the more general rural development framework described above makes the analysis more complex.

One example is that of productivity-driven agricultural growth achieved through capital-intensive technologies. Such a pattern of productivity growth may not result in poverty alleviation for two reasons: (a) poor farmers lack the necessary access to capital that would enable them to benefit from the new technologies; and (b) agricultural growth is not translated into increased demand for labour and thus landless rural labourers do not benefit. Consequently, the agricultural growth does not directly benefit the poor. On the other hand, a more complete examination of the effects of agricultural growth should take into account the effects on

rural incomes and poverty via the rural non-farm sector. Specifically, is increased agricultural output associated with increased demand for services provided at the local level (input provision or services or output processing and distribution)? Is additional income resulting from increased growth spent on locally produced goods?

In cases of extreme inequality in the distribution of productive assets and a capital-intensive technological change it can be expected that there will be no indirect effects (through various linkages of agriculture to the non-farm sector) and most probably the poor will not benefit. Agricultural inputs are likely to be "imported" (from urban areas or abroad) while the consumption patterns of those who benefit from agricultural expansion are likely to involve a large proportion of high-value commodities and luxuries that are not produced locally. Input, output and expenditure linkage effects can thus be expected to "leak out" of the rural areas.

On the other hand, the benefits of agricultural growth based on improvements in labour productivity are likely to be widely diffused in the rural areas. Such technologies (and the gains from them) may be accessible to poorer farmers, while landless labourers benefit from higher wages or employment. Input, output and expenditure linkages should favour the rural sector, since landless labourers and smallholders are likely to acquire inputs or services and spend additional income in the rural areas, thus increasing secondary income effects through the expansion of rural non-farm activity and demand for labour.

Another distinction concerning the types of agricultural growth concerns that of "food versus staples". The stylised fact that most of the rural poor derive income from the production of staples in the form of either food or other entitlements (i.e. income derived from employment in the production of staples or from activities linked to it) has prompted the "promotion" of staples production (in terms of research on ways of increasing staples yields) in preference to the production of cash or commercial crops. In the context discussed above, such an argument would imply that staples production has stronger linkages to the local economy and thus a stronger effect on reducing poverty and enhancing

food security than non-staples. Such indeed may be the case for rural areas with limited access to food or other markets (such as urban and export markets). In such situations, linkages created by productivity-induced increases in food production are very strong, as there are no "leakage" effects.

Nevertheless, no general statement can be made in favour of or against staple commodities. There is no evidence that shifts to cash (or commercial) crops have been associated with increases in poverty. Cash crops have much to offer in the way of both higher income and greater income diversification opportunities. In the presence of higher risks associated with reliance on the market for both food and income, farm households can be expected to diversify their resources between them. Critical requirements for successful diversification opportunities are that channels for the supply of inputs and marketing of outputs are opened up and that there should exist well-functioning rural financial markets.

In sum, the role of agricultural development in overall economic development and in eradicating poverty and food insecurity in LDCs is crucial. Measures to that end include: raising agricultural productivity and encouraging other sources of rural development, notably through rural infrastructure; enhancing human capabilities in rural areas through health, education and sanitation services and access to productive resources, with stress on gender equality; and preserving the capacity of the natural environment to sustain the present population and future generations.

II. EXTERNAL ECONOMIC ENVIRONMENT: OPPORTUNITIES AND CHALLENGES

Given the rapid pace of globalization, the external economic environment presents major challenges as well as opportunities for agriculture in LDCs. While access to larger and more affluent markets favours growth and development through trade, the LDCs face many internal supply-side constraints, associated with their economic underdevelopment, which render their exports uncompetitive. This section reviews the major trends and patterns of their agricultural trade and examines the main factors affecting them.

Participation of the least-developed countries in world trade in agriculture

Salient trends

The marginalization of LDCs in world agricultural markets

The participation of LDCs in international agricultural trade is insignificant and has been declining. Their share in world agricultural exports has dropped steadily, from 3.3 percent in 1970-79 to 1.9 percent in 1980-89 and a mere 1.5 percent in 1990-98 (Table 3). Their share in world imports has also declined, though much less so, from 1.8 percent in 1970 to 1.6 percent in 1998. While world agricultural trade (including the intra-trade of EU) expanded at an average annual rate of over 5 percent during 1990-98, exports from LDCs grew by only 3.9 percent, in contrast to 6.6 percent for the developing countries as a whole. Their market share of many key agricultural commodities has fallen significantly from the 1980s to the 1990s, by over 30 percent for such commodities as timber, coffee, tea and cocoa and about 20 percent for cattle.

Table 3. Trend in agricultural exports of LDCs and other developing countries

	LDCs	All developing countries
Average annual rate of export growth (percent)		
1970-79	9.5	16.0
1980-89	-1.4	2.4
1990-98	3.9	6.6
Share of world agricultural exports (percent) [1]		
1970-79	3.3	33.8
1980-89	1.9	31.0
1990-98	1.6	30.0

[1] World exports include intra-EU trade.
Source: FAOSTAT (2000).

Commodity and geographical concentration of exports

In addition to their small and declining share in world agricultural trade, LDCs' agricultural exports consist largely of a few low value-added primary commodities. On average, the top three export items, which are predominantly primary agricultural commodities, account for over 65 percent of total export earnings. The major agricultural exports of LDCs include coffee, cotton, jute, fish and seafood, tropical wood and bananas, mostly in unprocessed form. Moreover, the exports are concentrated on only a few markets, of which EU is by far the largest (36 percent), followed by the United States and Canada (21 percent) and Japan (6 percent). Therefore, conditions of market access to these countries are of critical importance in defining their trading opportunities.

Dependence on food imports

The LDCs are increasingly dependent on imports to meet their consumption requirements for their basic food commodities. For example,

their ratio of cereal imports (including food aid) to total cereal food supply has increased from 5 percent in the 1960s to about 15 percent in the 1990s. For 25 out of the 42 LDCs for which comparable data are available for 1990-98 the ratio exceeded 30 percent.

In addition, for LDCs as a whole food imports accounted for 15 percent of total merchandise imports during 1996-98 (Annex Table 12). Cereals dominate the food import bill, accounting for about 52 percent. The volume of cereal food aid fell from about an annual 5.4 million tonnes in 1989-91 to 3.6 million tonnes in 1997-99.

FAO projections for 2010 suggest that the food gap will continue to widen and will have to be filled by imports, including food aid. Whether the LDCs will be able to finance these growing imports depends on a number of factors, the most important in many cases being their export earnings and external resource inflows. In most of these countries export earnings have stagnated over the last two decades, mainly because of the fall in commodity prices. From 1980-82 to 1995-97, per caput merchandise export earnings for LDCs as a whole increased by only US$2 per year (from US$35 to US$37), whereas for other developing countries they doubled over the same period, to reach US$394 per annum. The foreign debt burden has also limited the ability of many LDCs to import. In 1995, the simple average of the debt-service ratio was 23 percent for 41 LDCs for which data are available.

Determining factors and constraints

The marginalization of LDCs in world agricultural trade is reflected in the slow growth of their agriculture sector as well as of their overall economy, slower even than that of other developing countries. As shown in Section I, one reason for this is the inherent structural and technological constraints facing these countries as well as the pursuit of inappropriate policies, along with various domestic socio-political factors. Slow growth and the low level of participation in world markets also reflect the external economic environment they face.

Commodity markets and terms of trade

The primary agricultural commodities on which many LDCs depend heavily (tropical beverages and agricultural raw materials) have experienced sluggish world demand and a downward trend in real prices. Two factors were identified as causing a long-term decline in commodity prices: i) low income elasticity of demand, mainly for food; and ii) declining intensity of raw materials use in manufacturing. In addition, LDCs exporting largely raw materials are particularly prone to changes in commodity markets. For example, Benin, Chad and Mali lost 25 percent of their total export earnings from 1990 to 1992 following a drop in the world price of cotton by 34 percent.[15]

Recent studies show that the downstream marketing, transport and distribution of some agricultural commodities are dominated by few multinational enterprises (MNEs), a handful of which account for 85 percent or more of world trade in wheat, coffee, cocoa, grains, jute, tobacco and tea.[16] Given the high costs associated with these downstream activities, the growers' price represents very low shares of the final product, ranging from 4-8 percent for raw cotton and tobacco to 11-24 percent for jute and coffee.

External assistance to agriculture

In almost all LDCs official development assistance (ODA) is the main catalyst of investment in agriculture. However, such external assistance to the sector has been on the decline since the early 1990s, the average annual amount having fallen by 20 percent from 1981-1990 to 1991-99 (Annex Table 13). Although total ODA to LDCs rose over the same period the share received by the agricultural sector declined from 20 percent to 13 percent. During the 1995 to 1999 period, there was slight increase in multilateral commitments, particularly from IFAD and

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[15] OECD, "Market access for the LDCs: Where are the obstacles?" OECD/GD (97) 174, Paris, 1997.

[16] *Ibid.*

regional development banks, with some decline in bilateral commitments (Annex Table 14).

Reversing this downward trend is crucial to ensuring that appropriate agricultural intensification strategies can be pursued in the future. In particular, adequate external assistance is essential to enhance agricultural productivity, which is dependent on the availability of sustainable alternative technologies and farming practices that will not further degrade the natural resource base.

Given the importance of the agricultural sector in LDCs for poverty reduction and economic growth, current initiatives to provide financial assistance through targeted debt relief and other measures could in part be directed to supporting efforts to develop their sustainable agricultural potential.

Trade preferences

All LDCs are beneficiaries under the Generalised System of Preferences (GSP). In addition, the majority receive special treatment under other schemes - e.g. from the European Community in the context of the Lomé Convention and its successor Cotonou Agreement described below. The Caribbean Basin Initiative (CBI) of the United States is a similar preferential arrangement, but involves only one LDC.

To the extent that the UR Agreements lowered tariffs, the preferential margin enjoyed by LDCs is eroded. Assessments vary as to the extent of erosion and its impact on trade flows and welfare, but the net impact is generally estimated to be very small. In any event, available statistics suggest that, with the exception of a few countries, the preference schemes have not contributed significantly to generating export growth of the beneficiaries or improving their trade shares. While this has been partly because of the various restrictions in the schemes (e.g. in respect of product coverage, quotas, and rules of origin), supply-side constraints appear to have played a greater role.

In June 2000 the EU and the ACP States signed a successor agreement to the Lomé IV Convention, referred to as the "Cotonou Agreement", which stresses compatibility with the WTO trading regime and envisages replacing the Lomé non-reciprocal preferential trading arrangements by regional free trade areas (RFTAs) between EU and regional groupings of ACP countries after a transitional period. One of the major features of the Cotonou Agreement is that it extends the non-reciprocal preferential access for certain ACP agricultural and other goods to the EU market for a transitional period of eight years (March 2000 to end of 2007). The commodity protocols (sugar, beef, bananas, and veal) traditionally annexed to the Lomé Convention were included in the new Agreement. In addition, the Agreement provides for cooperation between ACP and EU in trade-related areas such as competition policy, intellectual property rights, standards of certification, sanitary and phytosanitary measures, trade and environment, trade and labour standards, consumer policy and public health. It was felt that the switch from Lomé preferences to RFTAs could be particularly detrimental to African LDCs. However, in view of the many provisions of the Cotonou Agreement that are geared towards enhancing the capacities of ACP countries in production, supply and trade, it was argued that it could offer more scope for improving export growth in LDCs generally.

In addition, LDCs in Africa can also benefit from the United States Trade and Development Act of 2000, which extends certain trade benefits to sub-Saharan African countries. The Act is much less comprehensive than the Cotonou Agreement, and the main difficulty that is likely to arise in practice relates to eligibility requirements and rules of origin.

More recently, the EU announced a unilateral trade concession that would eliminate all existing tariffs and quotas on all imports from LDCs. Referred to as the 'Everything But Arms' (EBA) proposal, the intention is to extend complete access to all exports from LDCs except arms and ammunitions, with a three-year phase-in for 'sensitive' goods - i.e. bananas, sugar and rice.

Regional trade agreements

Regional integration continues to be an issue of great concern in LDCs and is viewed as a vehicle for promoting cooperation in agriculture and enhancing food security at the national and regional/subregional levels. For LDCs as a whole, there is a potential for their participation in intra-regional trade in agricultural products that has not been fully exploited and which could be particularly beneficial in view of the small size of their domestic markets.

The LDCs have been parties to numerous regional trade agreements (RTAs), the vast majority of which are among African countries. Despite their many provisions regarding the removal of trade barriers, the level of intra-regional agricultural trade in the majority of RTAs of which LDCs are members has stagnated at a low level. This has particularly been the case in Africa, where LDCs predominate (See Annex Table 15).

All such trading efforts have come up against structural and policy obstacles. With a few exceptions, there is not much diversity in natural endowments among countries within most of the existing RTAs. Complementarity of resources and contrasts in comparative advantage are clearer between than within the country groupings. Other difficulties include inadequate international transport and communication facilities and poor information about markets and investment opportunities. Moreover, the absence or inadequacy of a system for standardized packing, grading and quality control systems at the regional level continues to frustrate efforts to expand trade and establish transparent information systems. Improvement and harmonization of inspection and certification systems are among the missing ingredients for promotion of intra and extra-regional trade. Inadequate financing and guaranteeing of regional exports/imports has also been a factor.

Essential requirements for promoting intra–regional trade from which LDCs can benefit are thus the opening up of regional agricultural markets, developing export standards and infrastructures and securing

greater coordination among LDCs in general and within and between existing subregional groupings.

Agricultural prospects in the light of the WTO agreements and their aftermath

The major external challenge facing LDCs is their ability to exercise their rights and meet their obligations under the new multilateral trading system. Given their high dependency on agriculture for jobs, food, national income and export earnings, they have a large stake in the current and future trade negotiations in agriculture. Multilateral reforms undertaken in the WTO context both expand their opportunities and amplify the costs of their inherent structural weaknesses and policy failures.

Of the 48 LDCs, 29 are at present WTO members. Six more are in the throes of accession and three have observer status. The Agreement on Agriculture that emerged from the Uruguay Round began a process of bringing the trade-distorting agricultural policies of developed countries under multilateral rules and disciplines.[17] This section examines the implications of that Agreement and of other WTO Agreements for agriculture in LDCs.

The major factors contributing to the crucial importance of multilateral agreements and negotiations on agriculture are i) the predominant role of agriculture in their economies; ii) the relatively high degree of openness of most of their economies; and iii) their increasing reliance on international trade for satisfying domestic food consumption requirements.

[17] Other Agreements which bear on agriculture include: the Agreement on the Application of Sanitary and Phytosanitary Measures (SPS), the Agreement on Technical Barriers to Trade (TBT); the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS), and the Decision on Measures Concerning the Possible Negative Effects of the Reform Programme on Least Developed Countries and Net Food-Importing Developing Countries.

Impact of the Agreement on Agriculture

For a number of reasons it is difficult to assess, in either quantitative terms or in terms of policy implications, the probable impact on agriculture in LDCs of the Agreement on Agriculture[18]. In respect of policy changes the LDCs, along with all other WTO members, have had to remove non-tariff measures and bind all agricultural tariff lines, but they were exempt from tariff reductions. Most LDCs generally bound their tariffs at levels above the applied rates (Annex Table 16). All have declared that they have not provided any support to agriculture that is subject to the reduction commitment. In fact, many do not subsidize agriculture at all but tax the sector explicitly, by taxing production and exports of many commodities, or implicitly, by giving higher protection to industry. Overall, the scope for LDCs to support agriculture through measures exempt from the reduction commitment (including green box measures and the *de minimis* provision) is considerable; however, such measures require financial outlays which most LDCs cannot afford.[19]

Research undertaken in FAO and elsewhere indicates that, on the whole, trade liberalization under the UR could worsen the terms of trade for LDCs, which are mostly net importers of food and net exporters of tropical products. On the export side, changes in market access conditions resulting from the UR are not considered to contribute markedly to boosting global trade and raising the prices received for most traditional primary agricultural commodities exported by the LDCs. On the one hand, the impact on tropical commodities, intensively produced and exported by the LDCs, is likely to be modest, as the level of protection was already relatively low for most of these commodities. On the other hand, for temperate-zone products, such as vegetables and fruits and cereals, the

[18] Among these reasons are the difficulty to establish a counterfactual scenario with which to compare actual outcomes, the relatively short period involved for analysis and the absence of steep reductions in support and protection.

[19] See FAO, Rome (2000), *Multilateral Trade Negotiations on Agriculture*. A Resource Manual: II - Agreement on Agriculture.

effects of trade liberalization are potentially larger, but they are not major export items for most LDCs.

As for food products, the expected increase in world market prices for basic food staples and other selected agricultural commodities is projected to have little effect on domestic food production in LDCs because of the severe supply-side constraints and in consequence their food import bills will increase.

Opportunities for export diversification

It is generally acknowledged that supply side problems have historically played a dominant role in limiting export diversification by LDCs into non-traditional commodities and processed products. Indeed, many of today's developing countries with diversified agricultural export structures were at one time heavily dependent on primary agricultural commodities, e.g. Malaysia, Thailand, Indonesia and Chile. They achieved this diversification despite facing a similar external trading environment common to all developing countries; indeed, in some respects it was worse as, by and large, they did not benefit from preferential trading arrangements. Many LDCs failed to diversify their exports despite their having received trade preferences from the developed countries.

The UR initiated the process of opening up new opportunities for export diversification in agriculture, through, *inter alia*; across-the-board reductions in MFN tariffs on agricultural products; reduced tariff escalation, albeit limited; and the strengthening of trade rules, particularly those on sanitary and phytosanitary measures and technical barriers to trade. As discussed above, prospects for growth in LDCs are more promising in new crops and processed products than in traditional primary commodities.

While many traditional primary commodities exported by the LDCs suffered from slow growth in world import demand and a decline in real world prices, world trade in several non-traditional agricultural

commodities (NTCs), particularly, but not exclusively, horticultural products, has been growing relatively fast and exports of such products are becoming increasingly important for some developing countries. [20]

Another potentially beneficial effect of the WTO Agreements for the development of value-added industries in LDCs is the reduction in tariff escalation. Tariffs have generally been higher on processed agricultural products than on primary commodities. This tariff wedge between a processed product (e.g. orange juice) and its corresponding primary commodity (e.g. oranges) has been one of the obstacles in commodity-exporting countries in their efforts to establish processing industries for higher value exports. An analysis of tariff escalation has shown that tariff wedges have on average fallen from the pre-UR level of 23 percent to 17 percent.[21]

While LDCs do export a range of processed products, such as coffee extracts, cocoa pastes, crude vegetable oils and leather, the post-UR tariff rates on these products are relatively low and the lessening of tariff escalation will consequently not provide many additional export opportunities. On the other hand, tariff escalation has been substantially reduced for many important processed commodities that LDCs do not export at present but could well do so in the new situation. Such potential exports include: cigarettes, some dairy products, and certain animal foodstuffs to EU; wine, some dairy and meat products to Japan; and orange juices and certain dairy products to the United States. Sanitary and phytosanitary standards play an increasingly prominent role in trade in processed products, especially foodstuffs, and this is an area where LDCs will need to do much more if they are to exploit the new opportunities.

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[20] For example, an FAO study on EU, Japan and the United States has estimated that their total value, which amounted to 19 percent of world agricultural imports in 1994, grew at a rate of 10.9 percent per annum during 1985-94, compared to 5.8 percent per annum for other agricultural imports. (FAO, Committee on Commodity Problems, Impact of the Uruguay Round on agriculture: Follow-up activities, *CCP 97/16, February 1997).*

[21] See Lindland J. (1997), *The impact of the Uruguay Round on tariff escalation in agricultural products*, FAO, ESCP/No. 3.

Many other issues have arisen from the implementation of the UR Agreements, as well in the new negotiations on agriculture, that are of particular concern to LDCs in respect of improving their market access and developing domestic export capacities, some of which are summarized below.

Improving market access for agricultural exports

Many LDCs indicated that the AoA has not brought about any real improvement in market access for their agricultural exports, mainly because of the erosion of their tariff preferences, the persistence of tariff peaks and tariff escalation in some sectors of particular interest to them and the high SPS standards imposed in the importing countries. In the current negotiations on agriculture they look to ensure that there really will be an improvement in market access, especially for those products with a high growth potential and high value. Thus, they have an interest in reducing border protection and tariff escalation in the developed and developing countries and in ensuring that the beneficiaries of preferential arrangements are compensated for the loss or erosion of such preferences and assisted in adjusting to a more competitive environment.

Special and differential treatment

Under the WTO agreements, LDCs have received special consideration in respect of market access, implementation of their various commitments and technical and financial support. However, LDCs have been disappointed with the limited implementation of the special and differential treatment (SDT) provisions of the agreements, particularly as regards financial and technical assistance. This is particularly the case with respect to the SPS and TBT Agreements. Because SDT provisions were often expressed as "best endeavour" obligations, many LDCs have suggested that these should be included as binding commitments in a development box.

Food safety and quality standards

Another major challenge faced by LDCs is raising the SPS/TBT standards of their exports to at least internationally recognized levels. Because of their poor capacities in scientific research, testing, conformity and equivalence, they face difficulties in meeting international safety and quality standards. The task is even more daunting when the developed countries, on risk assessment grounds, adopt higher standards than those currently recognised by international standard-setting bodies. Moreover, rising consumer concerns in the affluent countries over food safety and quality compound the difficulty of the developing countries in meeting ever higher standards. Fulfilment of the promises of financial and technical assistance to LDCs, and other developing countries, in respect of SPS/TBT standards is thus important to them.

Compliance with the TRIPS Agreement

The requirement for countries to provide for the protection of plant and animal varieties, either by patents or by effective *sui generis* measures, presents a number of challenges for developing countries. The lack of plant variety protection and of sufficient capacity to provide rapidly such protection in most developing countries may hamper their ability to comply with this requirement. In addition, patentability of plants and animals raises a range of controversial issues relating to its implications for food security, rights of local communities and indigenous peoples, biosafety and sovereign rights over genetic resources. The provision of the TRIPS Agreement are also significant for input industries and may, in the short to medium-term, increase costs of developing and acquiring farm technology. Likewise, debates on genetically modified products, which involve also the SPS and TBT Agreements, continue to require analysis of their implications for the development and dissemination of new technologies and their consequent effects on small farmers and low-income countries.

Food security

The special situation of LDCs was recognised in the Ministerial Decision on *Measures Concerning the Possible Negative Effects of the Reform Programme on Least Developed and Net Food-Importing Developing Countries*. To date, the *Decision* has not been activated, despite the fact that food aid has dropped to very low levels and food import bills of LDCs and NFIDCs have risen. Implementation has so far been hampered by several factors, including: the requirement for providing evidence that the reform process led to difficulties; and the variety of instruments envisaged under the *Decision* to respond to such needs, without the respective responsibilities of all concerned being clearly specified. The basic consideration, however, is that the Decision addresses a transitional problem, whereas the food security problem in the LDCs is a long-term and complex one, encompassing broader development issues that go beyond trade.

Changes in the global economy are raising the stakes for domestic agricultural policy reforms in LDCs. The main concern is that while the WTO regime imposes disciplines on subsidized agricultural exports, it is likely to hurt poor agricultural producers in LDCs, who will become more vulnerable to instability in world prices as border protection is lowered. Although price instability on world markets affects all countries, the consequences can be much greater for LDCs for two reasons: i) a large proportion of the rural population still earns a living from food production; and ii) food accounts for a large share of household expenditure.

III. POLICIES TO FULLY EXPLOIT AND DEVELOP THE AGRICULTURAL POTENTIAL

Sustained and accelerated development of agriculture is the key to economic development and poverty reduction in the LDCs. The preceding sections shown that they have considerable agricultural potential, but that it has not been realized for a number of reasons, including structural and technological constraints, inappropriate domestic policies and an unfavourable external economic environment. As a result, the growth of these economies has been slow, undernourishment has been increasing and the marginalization of these countries in the global economy has continued.

The challenges facing LDCs are numerous enough to strain their capacity to design and implement effective policies and institutions for agriculture. However, development is a cumulative process, with success in one area opening up opportunities in others. The focus of this section is on the identification of measures to alleviate the supply-side constraints, and to improve agricultural productivity and competitiveness in the framework of a strategy that is poverty-alleviating, balanced, sustainable and based on comparative advantage. The analysis draws on FAO's field experience, including its policy assistance work in the LDCs, together with new policy approaches for accelerated agricultural development based on the past 30 years of development experience. FAO's technical assistance in various agricultural areas to LDCs is described in detail in Annex I.

Lessons from experience

In view of the critical importance of agriculture in the majority of the LDCs, it is important to understand how their agricultural growth can be accelerated, the priorities that are involved and the impact of faster growth on poverty levels.

Over the past three decades there have been wide variations in the nature and components of growth among different countries and between sub-sectors of agriculture within them. However, in a number of cases there has been rapid growth of the agricultural sector, with major effects on poverty reduction and national economic development, from which some useful and relevant lessons can be drawn. One important lesson is that it is necessary to establish priorities and a sequencing of activities. Governments can only do a certain amount at any given time. Most activities must be taken up by the private sector and through the operation of markets so as to free governments to concentrate on those areas where the private sector cannot be expected to come forward.

There is no unique set of physical conditions for rapid agricultural growth. Nor is there a single set of activities that will guarantee success. It is nevertheless possible to identify common patterns and themes from success stories:

- The three principal means of increasing output (area expansion, changes in output mix, and technical change) vary in importance and are a function of the stage reached in growth. Possibilities of area expansion are finite: as more land is cultivated area expansion becomes of declining importance. But changes in both output mix and technology preserve their importance throughout the development process (neither is effective on its own), and require a dynamic and flexible sector;
- It is necessary to provide appropriate incentives to farmers and to ensure conditions that permit them to respond to the incentives. To that end there must be sound macro-economic policies allowing both trade in agricultural products and their supply to the domestic market and an institutional and physical infrastructure that support broad-based change (by facilitating access to land, rural finance, technical knowledge, communications and transport);
- The commodity base for agricultural growth can vary (for example, it may consist of traditional or non-traditional exports, or of staple foods), but intensification and a switch away from staple foods are natural as economic growth spreads its net more

widely, stimulating local demand for more labour-intensive, high income-elastic products such as vegetables, fruit and livestock products. The agricultural sector thus needs to be dynamic and flexible;

- Technical change also needs to be a continuing process, but in staple food production this is a large and complex undertaking to which the private sector and producer organizations are not well suited, although experience has demonstrated that it cannot be left solely to public bodies. An indigenous system for generating technical change is necessary if the technology is to match changing local needs;
- The effects and benefits of agricultural growth are diluted by high population growth and/or by its being limited to small geographical areas or regions or to a small number of commodities. Linkages and multipliers between agricultural and non-agricultural activities are also important but may be absent. For broader growth and poverty reduction, agricultural development needs to be broad-based, with small/medium-scale rural industries. The development of such industries requires appropriate industrial policy and is a further justification for improving rural infrastructure, services and institutions.

Challenges for agricultural development in a globalized economy

The situation facing LDCs and their farmers today may be more difficult in a number of ways than that which was faced by developing countries that achieved sustained agricultural growth in the last three decades. As discussed in Sections I and II, the new and emerging challenges confronting them can be identified under three broad headings: overcoming their marginalization resulting from integration of markets due to globalization and liberalization; adapting to technological change; and coping with the new institutional environment.

Globalization of markets: The economies of LDCs now have to compete in a more fiercely competitive world market. The gradual removal of trade barriers, rising demand for higher quality products and higher standards, the continuous erosion of trade preferences and the costly compliance with the new trade rules are particular problems that hamper the competitiveness of producers in LDCs in both world and domestic markets. Because of globalization and liberalization, LDCs are also becoming more vulnerable to changes in world market conditions, on account of their small economic size and their increasing reliance on imports for food supplies. Their problems have been compounded by the long-term decline in real prices of their major primary commodity exports, despite some temporary increases experienced in the early 1990s.[22] The consequent decline in the commodity terms of trade has reduced both the incentives to engage in the production of tradables and the gains and economic stimulus from such production.

Technological challenges: Keeping pace with the increasing domestic demand for food, meeting requirements for enhancing competitiveness and ultimately raising rural incomes, necessitate raising agricultural productivity. As discussed in Section I, most LDCs are at an early stage of agricultural technology and the potential to increase productivity is enormous. However, sustained agricultural growth in most cases requires more than the ingredients of the 'green revolution'. In particular, it calls for substantial investment in irrigation and rural infrastructure, human development and institutions. New developments in biotechnology may pose further threats to export-based growth in LDCs if the new technologies associated with them result in a sharp increase in productivity in more advanced economies, thereby increasing production, pushing down prices, and giving them a competitive advantage over producers in LDCs.

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[22] In 1999 the combined price index of soft commodities (i.e. all commodities other than minerals and metals and petroleum), deflated by the price index of manufactured exports of developed countries, was one half of the average for 1979-1981, which was about the same as the average for 1970. For tropical beverages and basic food, the decline was steeper. See the report by UNCTAD, "World commodity trends and prospects", distributed to the United Nations General Assembly under cover of A/55/332, August 2000, sect.II.

The institutional environment: The institutional environment (both nationally and internationally) is also very different from the past. As noted in Section II, international trade is subject to WTO disciplines and takes place in a globalized context. The roles and modus operandi of the IMF and the World Bank have also changed, associated with liberalization and structural adjustment programmes in member countries. Perhaps the most important consequence has been the sweeping away of much of the public sectors'involvement in agricultural research and extension and in commodity and financial markets. Inefficient and ineffective as it often was, the role of state intervention in supporting agricultural growth in earlier success stories is now clearly recognized, and has resulted, for example, in arguments being put forward for a reassessment of the performance of state marketing boards in Africa.[23] However, current attitudes among donors and within LDCs do not favour efforts to involve the State in the search for innovative solutions to some of the institutional problems that it has successfully addressed in the past. Moreover, some donors and governments perceive previous unsuccessful attempts to stimulate agricultural development as evidence that policy support to agriculture is not an important priority in seeking broad-based, poverty-reducing economic growth, an attitude that is reflected in the reduced share of ODA going to agriculture.

Against all these difficulties there are also some new opportunities for agriculture in LDCs. New technologies are bringing down the cost of communications dramatically,which should benefit remote, more sparsely populated areas with poor roads. Biotechnology (with appropriate safeguards) offers opportunities for more rapid technological advances if there is sufficient investment in their application to the crops and problems in LDCs. In addition, globalized markets and the implementation of trade agreements should bring benefits for LDC

[23] See, for example Dorward, A, Kydd, J and Poulton, C. (1998*), "Conclusions: New Institutional Economics, Policy Debates and the Research Agenda*" in Dorward A, Kydd J and Poulton C (eds), Smallholder Cash Crop Production under Market Liberalisation: A New Institutional Economics Perspective, *CAB International, Wallingford*; and Reardon, T, Barrett, C, Kelly, V and K. Savadogo (1999), "Policy reforms and sustainable agricultural intensification in Africa", Development Policy Review,. Vol. 17. pp. 375-395.

exporters if they can be assisted in overcoming their supply and competitiveness contraints. Policy makers may be swinging back to a more balanced and nuanced understanding of the importance of agriculture and of the potential roles (and pitfalls) of state support.

Measures to accelerate agricultural development and trade competitiveness

This section outlines some general recommendations for both national policy actions and international actions for removing supply bottlenecks, boosting competitiveness and alleviating poverty and food insecurity in LDCs. The proposed policies may differ widely in their relevance to different countries, depending on the nature of their agricultural development problems, resource availability and economic conditions.

General measures and strategies to support agricultural development

First, emphasis needs to be given to increasing the production of tradable products, which is an essential component of agricultural growth and normally the driving force behind it. This calls for an appropriate set of macro-economic policies appropriate to the country's specific economic conditions, adoption of a technology suited to current farm conditions, and a communications infrastructure and marketing and institutional arrangements that support farmers' access to seasonal and longer-term capital and inputs and provide them with strong price incentives. Determining the most appropriate respective roles in this regard for government agencies, donors, civil organizations, and commercial entities requires an imaginative and innovative approach, with greater emphasis on policy support and sharing of best practice (as is

done, for example, through the FAO South-South partnership programme).[24]

Technology, resource use, institutions, knowledge and markets need to be adapted to deal with bottlenecks or constraints affecting particular commodity systems, in order to respond to problems of natural resource exhaustion or degradation and ensure that advantages of new opportunities are taken through diversification. Local technological research capacity may be important in this respect, but policies and institutions and the ability of farmers to access resources, as noted in the preceding paragraph, will also be critical. Again, a range of different types of actors may need to support processes of change, in which governments may play a critical institutional role. Land reform is a highly controversial form of institutional change that has not been given much attention in this paper – but that does not imply that land tenure systems may not be a serious impediment to growth in particular circumstances[25].

Sustained agricultural growth may also be promoted by, in particular, linkages that promote production of what are non-tradable products in practice in most LDCs (crops, livestock and forestry products) for local consumption. This may be further enhanced by economies of scope in more widespread investment in infrastructure in rural areas and by farmers, on the basis of suitable institutional arrangements, using

[24] At the heart of this programme is an exchange of knowledge and experience among developing countries. In this scheme, the more advanced developing nations send experts and technicians to work directly with their counterparts and farmers in other developing countries (See Annex I, para. 18).

[25] Mellor (1995) observed that more equitable land tenure relations may contribute to growth by strengthening consumption linkages rather than by directly promoting agricultural productivity *per se.*, although this observation runs counter to the conventional wisdom of an inverse relationship between farm size and efficiency in land-scarce traditional agriculture. In sub-Saharan Africa there is often more concern about traditional land tenure systems inhibiting investment in land improvement and putting it more productive uses, but the evidence for this is mixed and it is probably not possible to reach any general conclusions. (Mellor, J.W. (ed) (1995), Agriculture on the Road to Industrialization. *IFPRI/Johns Hopkins).*

equipment acquired or developed for cash crop production to enhance production for local markets.

In order to meet the challenges of new problems facing LDC agriculture, policy makers need to give renewed emphasis to understanding and promoting processes supportive of agricultural research. In addition, tariff protection may be necessary to protect farmers in LDCs from some of the less benign effects of globalization and to raise incentives for domestic production. There are also strong arguments for strengthening the role of the State in promoting efficient and effective institutional arrangements to support farmers' access to seasonal finance and to input and output markets. Finally, there is need for continued attempts to reform international trade rules with a view to ensuring fuller participation of LDCs in world agricultural markets.

Recommendations for national and international action

Meeting the new challenges facing agriculture and integrating LDCs more fully into the world economy will require a renewed focus on agricultural and rural development. With the support of their development partners, governments of LDCs may need to formulate or revise and effectively implement their agricultural development strategies. The basic elements and priorities of such strategies, include: further emphasis on macroeconomic and sectoral incentives; strengthening institutional capabilities; raising and sustaining productivity and competitiveness; diversifying production and trade; and improving access to foreign markets.[26]

This subsection briefly elaborates these priorities, placing stress on the key measures needed to increase resources available to agriculture and use them more efficiently.

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[26] See the series of "National agricultural development strategies towards 2010" prepared by FAO in 1997 for a number of LDCs.

Macroeconomic and sectoral policies

The challenge facing LDCs is to establish a stable and efficient policy environment that encourages investment in enhancing the productivity of agriculture and contributes to bringing about the necessary structural changes. Many LDCs have adopted policies to deregulate agricultural markets, reduce price distortions, and allow a greater role for the private sector. Macro-economic policy is an important tool in support of agricultural growth. Stable prices (including foreign exchange and interest rates) are important to provide domestic and foreign investors with confidence and to allow farmers and traders to take informed, long-term decisions. At the same time, realistic exchange rates, low tariffs and effective price systems are required to ensure that agricultural producers and consumers face price and other incentives that reflect the comparative advantages, opportunities and resource costs of society as a whole, and promote productive resource use and investment.

Such measures, although necessary, are not sufficient. Improved investment incentives also require policies that improve access to markets, ensure dissemination of information, set standards and provide an adequate legal and regulatory framework. Strong complementarity between public and private investment is also necessary to sustain agricultural growth, with governments investing in sectors having an important public good element such as research, extension, and infrastructure – particularly roads, education, norms and standards.

Institutions

The least-developed countries need to undertake policies and measures aimed at strengthening the ability of their institutions to operate efficiently. Weaknesses in the structure and capacities of rural and related institutions are one reason why economic policy reforms have failed to achieve the desired increase in aggregate agricultural output in many

African LDCs.[27] Rapidly changing agricultural technology, specialization, and trade require a complex set of institutions. Governments must diagnose these requirements and determine the respective roles of the public and private sector and how the two complement each other. Political, legal and economic institutions play a major role in determining both macro-economic and sectoral policies. Improved formulation and implementation of these policies often requires wide-ranging institutional changes.

For the agricultural sector growth requires the development of appropriate institutional arrangements for overcoming market constraints for agricultural products (for example, specific contractual arrangements between farmers and traders). In the context of declining real world prices for the main agricultural commodities exported by LDCs, improved mechanisms for the transmission of international prices to domestic producers is of key importance. The involvement of an increasingly competitive private sector in these various commodity markets has driven down margins and allowed greater returns to producers.

Enhancing productivity and competitiveness

The experience of countries with a similar agroecological base to that of LDCs - maize in Zimbabwe, rice in Viet Nam, horticulture in Kenya, cocoa in Cote d'Ivoire and cotton and rice in Mali- demonstrates that there is much potential for raising agricultural productivity in LDCs also. These limited but promising areas of success in other countries can serve as a model for LDCs. Research has shown that not only the domestic terms of trade for agriculture, but also the content of capital input are key determinants of agricultural productivity and competitiveness. Important in this respect are: rural infrastructure development; strengthening research and extension services; enhancing human capital in rural areas through health, education, and access to productive resources; and preserving the capacity of the natural resource

[27] See Global Coalition for Africa: "Promoting agricultural productivity and competitiveness in sub-Saharan Africa," Economic Committee Meeting, Nairobi, Kenya, April 1999.

and environment to sustain productivity achievements. While the main focus of the current reforms in LDCs has been on macroeconomic and price policies, the weaknesses in this area require substantial increases in investment in agriculture by both the public and the private sectors, if they are to be overcome.

To that end an appropriate and well-sequenced combination is needed of:

- sound and stable macro-economic policies;
- technology that is productive and robust under farm conditions;
- a strong institutional environment;
- a communications infrastructure and market and institutional arrangements supporting farmers' access to seasonal and longer-term capital and inputs and providing them with strong price incentives.

Sequential removal of constraints is critical. When the increase in production associated with a reform or change in circumstances reaches a plateau another reform/series of reforms is required to unleash further potential. Sustained growth is only possible if new constraints are alleviated by further reforms. There also needs to be a dynamic ability for technology, resource use, institutions, knowledge and markets to be adapted to deal with successive bottlenecks or constraints affecting particular commodity systems, to respond to problems of natural resource exhaustion or degradation, and to diversify to take advantage of new opportunities.

Policy makers need to give renewed emphasis to understanding and promoting processes supportive of agricultural growth and increased emphasis is needed on agricultural research to address the problems facing farmers in non-green revolution areas. There are strong arguments for seeking a more nuanced role for the State in promoting efficient and effective institutional arrangements to support farmers' access to seasonal finance and to input and output markets. Finally, there is need for continued attempts to reform world trade rules that impede the fuller participation of LDCs in world markets.

Diversification of production and exports

Excessive dependence on a narrow range of products has a number of important consequences: it exposes farmers unduly to the vagaries of climate, pests and diseases and to price fluctuations; leads to fluctuations in farm income and government revenue; contributes to environmental degradation; may result in failure to take advantage of complementarities (e.g. between livestock and crops); and has negative effects on diet and health. In addition, adverse international terms of trade facing the primary agricultural commodity sector are a further constraint on growth of the sector.

There is a clear need to diversify the production and export base (both horizontally and vertically) from low value added to high value added products. The challenge is to initiate and sustain the momentum for diversification in order to realize the considerable potential that undoubtedly exists.

A plethora of measures at different levels will be necessary, the most important of which are: the maintenance of a stable and predictable macroeconomic and political environment; establishing a fair and open regulatory framework; improving the efficiency of financial institutions, strengthening research and extension for developing and adopting relevant technology; improving rural services; upgrading the marketing, transport and communication infrastructure; and development of human resources.

Areas and commodities on which the diversification programmes focus should be selected on the basis of potential viability as well as technical sustainability. A multidisciplinary and holistic approach needs to be adopted to all aspects of diversification and not only to production. Activities involved relate not only to on-farm production technologies but also to upstream and downstream constraints to production such as input supply, technical advisory services, storage, processing and marketing. While the focus of such programmes in LDCs may require a rapid increase in productivity, the approach should be holistic to ensure that all major issues affecting diversification are taken into account in an integrated manner.

The FAO Special Programme for Food Security (SPFS) has shown that many LDCs have great potential to diversify production and exports into tree crops, fisheries, small animal husbandry and agro-industries. Diversification of production could cover: i) introduction of aquaculture, artisanal fisheries development, small animals (poultry, sheep, goats, pigs etc.) and tree crops; intercropping of trees and field crops; ii) training in use of crop residues for animal feed; iii) introduction of low-cost methods of animal disease control; iv) support for post-production activities to promote income generation; and v) development of agro-industries.

On the trade side, diversification should be encouraged into newer and where possible higher-value export products. The trading partners of LDCs can contribute by maintaining preferential market access for such exports and where relevant by reducing tariff escalation on processed agricultural products with export potential.

Access to foreign markets

So far, the implementation of the Agreement on Agriculture has not led to significant improvements in market access for the LDCs, for reasons noted earlier in this paper, such as the persistence of tariff peaks and tariff escalation and the high SPS standards set in their main import markets. However, the major challenge facing agriculture in LDCs is the erosion of the non-regional trade preferences they have hitherto enjoyed. Many countries, both developed and developing, have expressed their intentions of according them more favourable treatment. The Quad countries, for example, have proposed to implement both tariff-free and quota-free treatment, consistent with domestic requirements and international agreements, under their respective preferential schemes, for essentially all products originating in LDCs.

A key interest of LDCs in the current negotiations on agriculture is to ensure that the negotiations result in tangible improvements in market access for their exports, especially those with a high growth potential. While they welcome the emerging consensus in WTO on duty-free and quota-free market access for their products, they consider that

these commitments should be *binding* and be applicable to *all their products*.[28] They argue that any market access concession they obtain should be made predictable and not subject to autonomous changes.

Other developing countries, along with the OECD countries, could improve access of LDCs to their agricultural markets by, *inter alia:* i) lowering tariffs and reducing or abolishing export subsidies; ii) reducing tariff escalation; and iii) encouraging the flow of foreign direct investment in LDCs to improve technology and knowledge transfer.

Multilateral trade rules on agriculture

The WTO trading regime offers opportunities to LDCs but also poses challenges. If they are to develop fully their agricultural potential, they will need, as will the WTO members in general, to address the following issues:

Rule making in favour of LDCs: WTO rules should be supportive of the development of LDCs. In particular, they should be made compatible with their institutional, human capital and infrastructure requirements in order to permit them to benefit fully from the global trading system. The specific concerns of LDCs need to be reflected in the structure, framework and long-term objective of the Agreement on Agriculture;

Capacity building for trade: LDCs have neither the institutional capacity nor the human resources to face all the challenges or take full advantage of the opportunities flowing from the multilateral trading system, and to participate fully as equal partners in new WTO negotiations on agriculture. Technical and financial assistance to build capacity is therefore essential, especially in the following areas:

- Developing and strengthening institutional capacity to meet international standards, e.g. in food safety and quality;
- Strengthening the capacity in multilateral negotiations, in particular assisting them to deal with problems confronted in

[28] OAU/AEC (2000), "Current developments on issues of interest to African countries in the context of post-Seattle WTO negotiations" (OAU/AEC/TD/MIN/2 (III)), Annex III.

honouring their WTO commitments, including follow-up of decisions in their favour, and to take advantage of trading opportunities;
- Strengthening their capacity to analyse trade issues in the context of the continuation of the reform process;
- Assisting non-members of WTO to achieve accession on terms consistent with their development and food security needs;
- Implementing the Integrated Framework for Trade-Related Technical Assistance to LDCs as recognized in the WTO Plan of Action for LDCs adopted in 1996 at the first WTO Ministerial Conference.

External assistance

LDCs face a major domestic resource gap in generating the investments needed to achieve their developmental objectives in agriculture, including the target of halving the number of under-nourished people by 2015. External assistance is needed to accelerate agricultural productivity, which is dependent on the availability of sustainable alternative technologies and farming practices that will not further degrade the natural resource base.

Experience has shown that foreign aid has played a major role in almost all success stories of agricultural development. Its role was critical in the Green Revolution, and it has always been a key element in institutional development. If the donors' current goal of poverty reduction is to be met, external assistance to agriculture in LDCs will need to be restored to, and indeed exceed, its earlier levels.

In this regard, and in view of the importance of agriculture for poverty reduction and economic growth in LDCs, current initiatives to provide financial assistance to LDCs through targeted debt relief and other financial assistance could pay special attention to efforts to exploit their sustainable agricultural potential.

STATISTICAL ANNEX

Table 1. Food and agricultural production, consumption, and trade in LDCs, 1970-1997 (annual average percentage growth in value)

Commodity group/ commodity	Production			Consumption			Imports			Exports		
	1970-79	1980-89	1990-97	1970-79	1980-89	1990-97	1970-79	1980-89	1990-97	1970-79	1980-89	1990-97
Basic foodstuffs	1.78	1.91	2.40	2.40	2.33	2.26	4.43	3.12	2.51	-5.95	-7.92	9.23
Cereals	0.65	2.05	2.32	1.96	2.79	2.21	4.07	0.79	2.66	-5.70	-10.66	-1.99
Wheat	2.53	0.67	5.53	3.59	2.73	4.49	3.25	3.40	4.21	-15.57	20.51	35.72
Rice, milled	0.51	2.24	1.75	1.93	3.09	1.69	4.22	-0.61	1.20	-6.31	-13.98	-10.24
Coarse grains	0.80	1.54	3.98	1.60	1.71	3.45	6.13	-2.45	3.26	0.39	0.83	-1.26
Maize	3.26	3.98	1.66	3.55	3.02	2.64	9.39	-3.30	-0.14	-20.86	16.84	1.29
Millet & sorghum	0.45	1.07	4.08	1.21	2.51	2.25	7.12	-10.37	4.88	15.32	-1.65	-3.87
Other coarse grains	-1.42	-1.19	7.65	-0.07	-1.53	6.96	0.64	2.41	8.11	-2.00	14.54	-10.59
Root crops	2.71	2.18	1.68	2.71	2.27	1.64	-2.05	7.73	-10.32	-9.58	-5.36	-15.40
Cassava	1.88	2.97	-0.41	1.90	2.98	-0.29	-28.92	27.08	7.57	-9.97	3.26	-28.21
Fats, oils & oilmeals	1.89	1.35	3.07	3.23	3.08	3.28	5.38	8.74	7.68	-6.41	-5.23	5.06
Fats and oils	1.95	0.44	3.73	3.63	3.09	3.97	5.38	8.72	7.79	-9.39	-4.40	6.60
Oilmeals	1.81	2.43	2.33	2.57	3.04	2.15	5.25	10.41	0.26	-3.25	-6.19	2.91
Pulses	2.21	0.59	2.77	3.01	0.59	1.50	17.38	10.69	-1.89	-2.50	-5.12	14.69
Meat	1.73	1.89	2.56	1.96	2.00	2.47	6.76	5.17	-0.11	-12.38	-13.09	17.62
Beef and veal	1.49	1.69	1.68	1.81	1.88	1.54	1.30	6.17	-6.09	-14.99	-19.57	-3.86
Mutton and lamb	2.25	1.00	3.42	2.25	1.05	3.10	3.34	17.77	-30.27	12.66	-49.05	256.79
Pigmeat	1.26	4.85	4.12	1.31	4.94	4.02	-1.88	6.78	1.92	-27.87	-	-
Poultry meat	2.78	4.33	4.11	4.11	4.27	4.44	44.41	3.69	7.92	-19.68	-27.05	36.92

Dairy products	2.88	1.90	2.79	2.91	2.08	2.61	3.68	5.65	-1.62	-6.38	-1.68	24.30
Milk & milk products	2.86	1.91	2.74	2.89	2.12	2.53	4.19	6.62	-3.01	-5.98	-17.59	5.52
Butter	2.75	1.69	1.84	2.20	0.50	3.23	-1.32	-5.17	14.19	-5.76	0.91	35.16
Eggs	3.57	1.68	4.18	3.79	1.67	4.43	42.97	1.28	15.97	-20.57	-25.61	50.36
Other food commodities	0.51	2.22	1.15	0.96	2.41	1.51	2.57	2.08	7.19	-0.84	0.85	-0.43
Sugar	-0.84	0.95	1.75	0.14	1.81	3.72	3.93	1.98	8.02	-2.62	-2.61	0.85
Vegetables	2.16	2.74	1.67	2.17	2.76	1.79	3.82	7.12	4.73	8.40	18.32	-14.89
Fruits	0.27	2.16	0.86	0.19	2.27	0.94	5.24	-1.07	7.01	4.21	-2.47	-1.16
Tropical Fruits	-0.28	2.52	0.89	-0.20	2.49	0.92	4.44	-6.41	0.78	-7.07	4.11	-15.24
Citrus fruits	0.16	2.63	2.06	0.50	2.44	2.92	15.24	-6.95	33.96	-1.36	-0.52	-13.39
Tropical beverages	-2.28	1.26	0.43	3.94	2.14	3.35	-2.45	0.75	7.77	-1.82	1.51	-0.09
Tea	1.88	1.06	3.69	3.04	0.87	5.40	-1.63	-1.87	5.66	1.48	-1.51	3.49
Coffee	-2.82	1.21	0.01	4.23	2.01	2.80	-2.97	9.27	17.31	-2.13	2.10	-0.64
Cocoa	-0.95	3.38	-1.86	-0.66	26.92	0.86	-6.69	-5.50	13.28	-3.50	-2.88	0.15
Agricultural raw materials	-0.63	1.48	4.48	1.93	1.79	4.48	2.32	4.41	5.98	-3.12	2.04	3.00
Cotton	-3.78	3.92	7.75	0.17	5.88	10.33	0.24	6.14	3.11	-4.12	4.71	3.35
Jute	-0.61	-1.84	3.18	2.42	-0.73	3.76	4.60	-7.98	2.90	-4.67	-4.09	1.68
Sisal	-9.81	-7.80	-3.67	1.34	-0.81	-4.55	-43.89	-	-19.43	-10.88	-14.77	-1.79
Rubber	-2.12	3.15	2.94	6.13	0.30	-10.86	3.76	0.82	3.91	-3.10	5.76	15.79

Source: FAOSTAT (2000).

Table 2. LDCs: land resource potential

Country *	Actual arable land per caput (1994) (hectares) [1]	Potential arable land per caput (hectares) [2]	Land in use (1994) as % of potential arable land [3]
With relatively large land balance:			
Democratic Republic of the Congo	0.07	2.29	3
Mozambique	0.09	2.59	4
Central African Republic	0.63	11.15	6
Angola	0.33	5.38	6
Liberia	0.16	2.19	7
Guinea-Bissau	0.10	1.05	10
Mali	0.18	1.72	10
Madagascar	0.18	1.69	10
Zambia	0.67	4.86	14
Sudan	0.32	2.32	14
Chad	0.53	3.56	15
United Republic of Tanzania	0.23	1.44	16
Guinea	0.26	1.30	20
Gambia	0.12	0.55	22
Lao People's Democratic Republic	0.20	0.88	22
Burkina Faso	0.35	1.43	24
Benin	0.36	1.40	26
Sierra Leone	0.29	0.83	35
Myanmar	0.22	0.63	35
Ethiopia	0.21	0.52	40
Cambodia	0.46	0.93	49
Malawi	0.22	0.42	51
Nepal	0.11	0.17	65
Mauritania	0.24	0.36	66
With relatively limited land balance:			
Bangladesh	0.08	0.12	71
Togo	0.61	0.74	83
Uganda	0.36	0.42	84
Somalia	0.13	0.15	90

Country *	Actual arable land per caput (1994) (hectares) [1]	Potential arable land per caput (hectares) [2]	Land in use (1994) as % of potential arable land [3]
With almost no land balance:			
Burundi	0.20	0.15	130
Haiti	0.13	0.09	151
Yemen	0.10	0.06	156
Lesotho	0.17	0.11	160
Eritrea	0.15	0.08	201
Afghanistan	0.47	0.23	207
Rwanda	0.30	0.12	259

*Ranked in order of land use as a percentage of potential arable land.
[1] Land presently cultivated per caput of total population.
[2] Areas that are suitable for cultivation in terms of soil suitability and availability of water (rainfall or irrigation). Includes lands currently under forest or wetlands which are protected and not available for agriculture.
[3] High values indicate a low (or zero) reserve of available land.
Source: Adapted from A. Bot, F. Nachtergaele and A. Young, "Land resources potential and limitations at regional and country levels", *World Soil Resources Report*, Number 90, FAO, Rome, 2000.

Table 3. LDCs: agricultural value added per worker, 1979-81 and 1995-97

Country	Agricultural value added per worker (1995 US$) 1979-81	1995-97	Percentage change
Angola	241[1]	117	-51
Bangladesh	181	221	22
Benin	302	504	67
Bhutan	106	148	40
Burkina Faso	134	159	19
Burundi	177	139	-21
Cambodia	361[1]	407	13
Central African Republic	396	439	11
Chad	155	212	37
Comoros	415	386	-7
Democratic Republic of the Congo	270	285	6
Gambia	325	216	-34
Guinea	239	262	10
Guinea-Bissau	221	326	48
Haiti	578	407	-30
Lao People's Democratic Republic	460[1]	526	14
Lesotho	498	319	-36
Madagascar	198	180	-9
Malawi	100	122	22
Mali	225	241	7
Mauritania	301	439	46
Mozambique	74[1]	76	3
Nepal	162	188	16
Niger	222	190	-14
Rwanda	307	201	-35
Sierra Leone	368	404	10
Togo	345	510	48
Uganda	54	326	504
United Republic of Tanzania	152	159[2]	5
Yemen	295	305[2]	3
Zambia	331	226	-32
Memo items:			
Sub-Saharan Africa	418	371	
Low and middle income countries *	...	567	-11
High income countries*	...	18 918	...

*As defined by the World Bank. [1] 1985-87. [2] 1990-92.
Source: World Bank (1999), *World Development Indicators 1999*.

Table 4. Yields of major crops in LDC and other developing countries

Crop	Average annual yield in 1995-99 (tonnes per ha)		Average yield in LDCs as percentage of yield in all developing countries
	All developing countries	LDCs	
Wheat	2.64	1.48	66.0
Rice	3.70	2.54	68.0
Maize	2.86	1.23	43.0
Coarse grains	1.94	0.81	42.0
Fibre crops	0.64	0.52	81.0
Oil crops	0.48	0.22	47.0
Pulses	0.67	0.51	77.0
Roots and tubers	11.80	6.60	56.0
Vegetables	14.60	7.20	49.0

Source: Computations based on data from FAOSTAT (2000).

Table 5. Relative contributions of area and yield to growth in crop production in LDCs, 1981-89 and 1990-99

Crop	1981-89			1990-99		
	Average annual growth (percent)	of which due to: Area (percent)	Yield	Average annual growth (percent)	of which due to: Area (percent)	Yield
Total cereals	2.1	77.0	23.0	2.0	72.0	28.0
of which:						
Wheat	0.8	36.0	64.0	4.0	70.0	30.0
Rice	2.3	17.0	83.0	1.7	43.0	58.0
Maize	4.1	88.0	12.0	2.4	43.0	57.0
Coarse grains	2.7	118.0	-18.0	2.5	75.0	25.0
Fibre crops (cotton)	1.5	35.0	65.0	3.0	80.0	20.0
Oil crops	1.0	85.0	15.0	3.6	105.0	-5.0
Pulses	0.3			4.4	84.0	26.0
Roots and tubers	2.7	77.0	23.0	1.7	81.0	19.0
Vegetables & melons	2.8	69.0	31.0	1.8	62.0	38.0
Fruits	2.3	106.0	-6.0	1.0	99.0	1.0

Source: Computations based on data from FAOSTAT (2000).

Table 6. Share of LDCs in world livestock numbers in 1997-99 and in world output therefrom

	Share in world livestock (percent)		Productivity (kilograms of product per animal)	
	LDCs	All developing countries	LDCs	All developing countries
By product:				
Beef	4	48	113	167
Sheep and goat meat	11	70	11	13
Milk	3	39	115	414
Poultry meat	2	50	0.89	1.30
Pigmeat	1	57	46	72
By type of animal:				
Cattle and buffalo	14	77		
Sheep and goat	18	76		
Chickens	5	70		
Pigs	2	67		

Source: FAOSTAT (2000).

Table 7. Internal rate of return per unit of expenditure on agricultural extension and research in developing countries, by region, and in OECD countries

Region	Extension Median return (percent)	Applied research Median return (percent)
Developing countries in:		
Africa	27	37
Asia	47	67
Latin America	46	47
OECD countries	50	40

Source: FAO (Rome, 2000), The State of Food and Agriculture, 2000, Table 16.

Table 8. LDCs: Per caput dietary energy supply (DES), 1979-81, 1989-91 and 1996-98 (kcal/day)

Country/region	1979-81	1989-91	1996-98
World	**2 540**	**2 700**	**2 780**
Developing countries	**2 300**	**2 510**	**2 650**
LDCs * of which in	**2 040**	**2 080**	**2 070**
Africa	2 060	2 010	2 000
Asia	2 020	2 180	2 180
Pacific	2 380	2 340	2 410
Caribbean	2 040	1 770	1 840
Afghanistan	2 210	1 920	1 620
Angola	2 120	1 790	1 910
Bangladesh	1 910	2 060	2 060
Benin	2 050	2 310	2 540
Burkina Faso	1 690	2 090	2 160
Burundi	2 030	1 910	1 640
Cambodia	1 720	1 940	2 060
Cape Verde	2 500	2 960	3050
Central African Republic	2 320	1 920	2 000
Chad	1 650	1 740	2 070
Comoros	1 790	1 870	1 850
Democratic Republic of the Congo	2 070	2 100	1 750
Djibouti	1 810	1 810	2 060
Eritrea	...	...	1 650
Ethiopia	...	...	1 850
Gambia	1 800	2 440	2 520
Guinea	2 270	2 050	2 310
Guinea-Bissau	2 010	2 400	2 420
Haiti	2 040	1 770	1 840
Kiribati	2 600	2 580	2 920
Lao People's Democratic Republic	2 080	2 090	2 120
Lesotho	2 250	2 220	2 230
Liberia	2 520	2 120	2 000
Madagascar	2 420	2 160	2 010
Malawi	2 270	1 960	2 170
Maldives	2 160	2 370	2 470
Mali	1 760	2 270	2 150
Mauritania	2 120	2 540	2 630

Table 8 (cont.). LDCs: Per caput dietary energy supply (DES), 1979-81, 1989-91 and 1996-98 (kcal/day)

Country/region	1979-81	1989-91	1996-98
Mozambique	1 920	1 780	1 860
Myanmar	2 320	2 630	2 830
Nepal	1 900	2 360	2 190
Niger	2 140	2 050	1 940
Rwanda	2 290	2 000	2 030
Sao Tome and Principe	2 080	2 150	2 170
Sierra Leone	2 110	2 020	2 050
Solomon Islands	2 230	2 110	2 170
Somalia	1 820	1 760	1 550
Sudan	2 270	2 190	2 430
Togo	2 190	2 290	2 460
Uganda	2 120	2 300	2 140
United Republic of Tanzania	2 280	2 220	2 000
Vanuatu	2 560	2 730	2 730
Yemen	1 950	2 050	2 050
Zambia	2 180	2 060	1 960

* Excluding Bhutan, Equatorial Guinea, Samoa and Tuvalu, for which data were not available.
Source: FAO.

Table 9. Prevalence of undernourishment in the LDCs, 1969-71 and 1996-98

	Total population*		Population undernourished			
	1969-71	1996-98	1969-71		1996-98	
	(millions)	(millions)	Number (millions)	% of total population	Number (millions)	% of total population
All LDCs*	304.9	594.3	115.7	38	235.2	40
Africa	165.6	344.9	67.4	41	149.0	43
Angola	5.6	11.7	1.8	33	5.0	43
Benin	2.7	5.6	1.1	41	0.8	14
Burkina Faso	5.4	11.0	3.2	59	3.5	32
Burundi	3.5	6.4	1.2	34	4.3	68
Central African Rep.	1.8	3.4	0.4	22	1.4	41
Chad	3.7	7.1	1.4	38	2.7	38
Dem. Rep. of the Congo	20.3	48.0	6.7	33	29.3	61
Eritrea	...	3.4	...	...	2.2	65
Ethiopia	...	58.2	...	...	28.4	49
Ethiopia PDR	30.6		17.2	56	...	...
Gambia	0.5	1.2	0.1	32	0.2	16
Guinea	3.9	7.3	1.3	34	2.1	29
Lesotho	1.1	2.0	0.5	43	0.6	29
Liberia	1.4	2.4	0.4	30	1.1	46
Madagascar	6.9	14.6	1.1	16	5.8	40
Malawi	4.5	10.1	1.0	23	3.2	32
Mali	5.5	10.4	2.3	41	3.4	32
Mauritania	1.2	2.5	0.6	48	0.3	13
Mozambique	9.4	18.4	5.0	53	10.7	58
Niger	4.2	9.8	1.7	41	4.5	46
Rwanda	3.7	6.0	1.0	28	2.3	39
Sierra Leone	2.7	4.4	0.9	34	1.9	43
Somalia	3.6	8.8	2.0	56	6.6	75
Sudan	13.9	27.7	4.3	31	5.1	18
Togo	2.0	4.3	0.5	24	0.8	18
United Rep. of Tanzania	13.7	31.4	8.1	59	12.7	41
Uganda	9.8	20.0	2.2	23	6.0	30
Zambia	4.2	8.6	1.2	30	3.9	45
Asia	134.7	241.6	45.8	34	81.3	34
Afghanistan	13.6	20.9	4.7	34	14.6	70
Bangladesh	66.7	122.7	20.2	30	46.8	38
Cambodia	6.9	10.5	2.1	30	3.4	33

Table 9 (cont.). Prevalence of undernourishment in the LDCs, 1969-71 and 1996-98

	Total population*		Population undernourished			
	1969-71	1996-98	1969-71		1996-98	
	(millions)	(millions)	Number (millions)	% of total population	Number (millions)	% of total population
Lao People's Dem. Rep.	2.7	5.0	0.9	32	1.5	29
Myanmar	27.1	43.9	9.4	35	3.1	7
Nepal	11.3	22.3	5.0	44	6.2	28
Yemen	6.3	16.3	3.6	57	5.7	35
Caribbean	4.5	7.8	2.5	54	4.8	62
Haiti	4.5	7.8	2.5	54	4.8	62

* Excluding Bhutan, Cape Verde, Comoros, Djibouti, Equatorial Guinea, Guinea-Bissau, Kiribati, Maldives, Samoa, Sao Tome and Principe, Solomon Islands, Tuvalu and Vanuatu, for which data were not available.

Note: Totals may not add up due to rounding.

Source: 1969-71: Unpublished FAO data., 1996-98: FAO, Rome (2000), *The State of Food Insecurity in the World*, Table 1.

Table 10. Rural and urban poverty in selected LDCs (percentage of total rural or urban population)

Country/Region	Year or period	Poverty	
		Rural	Urban
West and Central Africa			
Burkina Faso	1998	50.7	15.8
Chad	1985-1986	67.0	63.0
Guinea-Bissau	1991	60.9	24.1
Mauritania	1996	58.9	19.0
Niger	1989-1993	66.0	52.0
Sierra Leone	1989	76.0	53.0
East and Southern Africa			
Ethiopia	1994-1997	45.9	38.7
Lesotho	1993	53.9	27.8
Madagascar	1993-1994	77.0	47.0
Uganda	1997	48.2	16.3
Zambia	1996	74.9	34.0
East and South Asia			
Bangladesh	1995-1996	39.8	14.3
Cambodia	1997	43.1	24.8
Lao People's Democratic Republic	1993	53.0	24.0
Nepal	1995-1996	44.0	23.0

Source: *IFAD Rural Poverty Report 2000*, Rome (2000).

Table 11. Non-farm income share for selected LDCs

Country	Year	Strata	Percentage share
Bangladesh	1987	Irrigated	29
		Favourable rainfed	41
		Drought-prone	36
		Flood-prone	45
		Saline-affected	28
	1963		18
	1973		22
	1976		18
	1982		8
	1979-81	Dhaka	59*
		Chittagong	65*
	1983/84		34*
	1984/85		35*
	1990/91		39*
Nepal	1987	Irrigated 1	19
		Irrigated 2	7
		Rainfed 1	17
		Rainfed 2	1
Burkina Faso	1978/79		22
	1981-85	Sahelian (Unfavourable)	34
		Guinean (Favourable)	41
	1981-85	Unfavourable zone	
		Low-income tercile	14
		High-income tercile	44
		Favourable zone	
		Low-income tercile	20
		High-income tercile	50
Ethiopia	1989/90		31
	1989/90	1st income tercile	34
		2nd income tercile	30
		3rd income tercile	30
Gambia	1985/86		23
	1985/86	1st income quartile	20
		2nd income quartile	21
		3rd income quartile	20
		4th income quartile	26
Lesotho	1976		67
	1976	1st income quartile	30
		2nd income quartile	63

Table 11 (cont.). Non-farm income share for selected LDCs

Country	Year	Strata	Percentage share
Lesotho	1976	3rd income quartile	94
		4th income quartile	84
Malawi	1990/91		34
Mali	1988/89		59
Mozambique	1991	Cash crop zone	17
		Non-cash crop zone	12
	1991	Cash crop zone	
		1st income quartile	11
		2nd income quartile	15
		3rd income quartile	16
		4th income quartile	25
		Non-cash crop zone	
		1st income quartile	6
		2nd income quartile	6
		3rd income quartile	20
		4th income quartile	16
Niger	1989/90	Unfavourable	44
		Favourable	34
	1989/90	Sudano-Sahelian (Unfavourable)	
		Low-income tercile	27
		Middle-income tercile	41
		High-income tercile	64
		Sudano-Guinean (Favourable)	
		Low-income tercile	31
		Middle-income tercile	32
		High-income tercile	40
Rwanda	1991		24
	1991	1st income quartile	13
		2nd income quartile	16
		3rd income quartile	19
		4th income quartile	31
Sudan	1988		38
United Rep. of Tanzania	1980		25

*Percentage share of employment.
Source: FAO, Rome (1998), The *State of Food and Agriculture* 1998, Part III.

Table 12. Food imports in LDCs, 1996-98 (annual average)

Country	Total food imports (million US$)	Cereal imports (million US$)	Share of food imports in total merchandise imports (percent)	Share of cereals in food imports (percent)
All LDCs	**5 179**	**2 710**	**15**	**52**
Afghanistan	124	35	28	28
Angola	275	104	13	38
Bangladesh	598	363	9	61
Benin	98	43	15	43
Bhutan	14	9	10	62
Burkina Faso	97	63	13	66
Burundi	22	13	17	58
Cambodia	59	13	10	22
Cape Verde	49	11	21	23
Central African Republic	24	9	10	38
Chad	37	22	16	59
Comoros	22	11	38	48
Dem. Rep. of the Congo	196	103	45	52
Djibouti	54	24	17	43
Equatorial Guinea	8	2	8	24
Eritrea	69	57	14	82
Ethiopia	113	93	10	82
Gambia	63	31	26	49
Guinea	155	77	16	50
Guinea-Bissau	29	22	46	77
Haiti	224	134	32	60
Kiribati	11	4	27	38
Lao People's Dem. Rep.	37	24	6	66
Lesotho	143	70	13	49
Liberia	67	46	17	69
Madagascar	52	35	11	67
Malawi	43	30	7	69
Maldives	45	13	13	28
Mali	91	29	12	32
Mauritania	171	108	70	63
Mozambique	120	68	15	57
Myanmar	34	12	1	37
Nepal	84	20	6	23

Table 12 (cont.). Food imports in LDCs, 1996-98 (annual average)

Country	Total food imports (million US$)	Cereal imports (million US$)	Share of food imports in total merchandise imports (percent)	Share of cereals in food imports (percent)
Niger	76	28	18	37
Rwanda	66	48	25	72
Samoa	27	7	27	25
Sao Tome and Principe	5	2	22	50
Sierra Leone	130	94	76	73
Solomon Islands	17	11	10	64
Somalia	88	36	50	41
Sudan	239	146	14	61
Togo	48	26	11	54
Tuvalu	1	0	11	34
Uganda	48	34	6	70
United Rep of Tanzania	137	71	10	52
Vanuatu	15	7	15	48
Yemen	969	442	51	46
Zambia	85	61	10	72

Source: FAO

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Table 13. External assistance to agriculture (EAA) for developing countries and LDCs, 1981-99

Period	Total ODA commitments			Of which external assistance to agriculture (EAA)				
	All developing countries	LDCs	Share of LDCs in total ODA in developing countries	All developing countries	LDCs	EAA as % of ODA in developing countries	Share of LDCs in total EAA of developing countries	Share of EAA in total ODA in LDCs
	(million US$) (1)	(million US$) (2)	(percent) (3)=(2/1)	(million US$) (4)	(million US$) (5)	(percent) (6)=(4/1)	(percent) (7)=(5/4)	(percent) (8)=(5/2)
1981	39 894	10 316	25.9	9 945	2 173	24.9	21.9	21.1
1982	37 277	10 529	28.2	10 775	2 317	28.9	21.5	22.0
1983	35 907	10 317	28.7	10 031	2 214	27.9	22.1	21.5
1984	39 012	10 631	27.3	9 411	1 808	24.1	19.2	17.0
1985	38 128	10 892	28.6	9 988	2 228	26.2	22.3	20.5
1986	44 951	13 121	29.2	12 532	2 329	27.9	18.6	17.8
1987	52 638	15 876	30.2	12 229	2 845	23.2	23.3	17.9
1988	61 224	15 949	26.1	13 343	3 354	21.8	25.1	21.0
1989	56 213	15 548	27.7	12 404	2 826	22.0	22.8	18.2
1990	80 923	16 042	19.8	13 591	3 090	16.8	22.7	19.3
Average 1981-90	**48 617**	**12 922**	**27.2**	**11 425**	**2 518**	**24.4**	**21.9**	**19.6**

Table 13 (cont.). External assistance to agriculture (EAA) for developing countries and LDCs, 1981-99

Period	Total ODA commitments			Of which external assistance to agriculture (EAA)				
	All developing countries	LDCs	Share of LDCs in total ODA in developing countries	All developing countries	LDCs	EAA as % of ODA in developing countries	Share of LDCs in total EAA of developing countries	Share of EAA in total ODA in LDCs
	(million US$) (1)	(million US$) (2)	(percent) (3)=(2/1)	(million US$) (4)	(million US$) (5)	(percent) (6)=(4/1)	(percent) (7)=(5/4)	(percent) (8)=(5/2)
1991	77 758	17 570	22.6	12 196	1 881	15.7	15.4	10.7
1992	71 811	17 034	23.7	12 547	2 505	17.4	20.0	14.7
1993	72 180	15 478	21.4	9 535	1 708	13.2	17.9	11.0
1994	74 248	16 430	22.1	11 350	1 520	15.3	13.3	9.3
1995	75 385	15 693	20.8	10 949	1 798	14.5	16.4	11.5
1996	73 709	14 620	19.8	10 951	2 185	14.9	20.0	15.0
1997	63 442	14 044	22.1	11 641	2 205	18.4	18.9	15.7
1998	61 533	14 229	23.1	11 953	2 270	19.4	19.0	16.0
1999 *	67 798	14 976	22.1	10 297	2 145	15.1	20.8	14.3
Average 1991-99	**70 874**	**15 564**	**22.0**	**11 269**	**2 014**	**16.0**	**18.0**	**13.1**

* 1999 data is provisional

Source: FAO data on external assistance to agriculture, based on information available from OECD, World Bank, regional development banks, IFAD, OPEC and CGIAR.

Table 14. External assistance to agriculture (EAA): total commitments by main donor groups from 1995 to 1999 (millions of US$)

	LDCs - total					All developing countries - total				
	1995	**1996**	**1997**	**1998**	**1999***	**1995**	**1996**	**1997**	**1998**	**1999***
Total EAA commitments	**1 798**	**2 185**	**2 205**	**2 270**	**2 145**	**10 949**	**10 951**	**11 641**	**11 953**	**10 297**
of which grants	**926**	**1 496**	**1 074**	**1 153**	**1 092**	**3 306**	**3 508**	**3 231**	**3 565**	**3 259**
Total Bilateral	**1 001**	**1 511**	**1 088**	**1 140**	**1175**	**4 727**	**5 136**	**4 137**	**4 446**	**3 992**
Total Multilateral	**797**	**674**	**1 118**	**1 130**	**970**	**6 221**	**5 815**	**7 504**	**7 507**	**6 305**
of which:										
- CGIAR Group/ FAO/UNDP	*na*	*na*	*na*	*na*	*na*	663	657	730	718	708
- IFAD	120	133	106	150	175	255	391	350	405	393
- Regional Development Banks	205	161	400	300	357	990	1 889	2 247	1 548	2 039
- World Bank Group	370	300	493	535	279	4 158	2 622	3 752	4 330	2 872

na: data not available
* 1999 data is provisional.

Source: FAO data on external assistance to agriculture, based on information available from OECD, World Bank, *Regional Development Banks*, IFAD, OPEC and CGIAR.

Table 15. Intra-regional and interregional agricultural trade of developing countries, 1980-97 (value in million US dollars)

Exports from: / Exports to:	Year	All developing countries		Latin America		Africa		West Asia		Other Asia	
		Value	Percent of total exports	Value	Percent of total exports	Value	Percent of total exports	Value	Percent of total exports	Value	Percent of total exports
World	1980	78 023	100	15 503	100	15 082	100	14 044	100	30 177	100
	1990	102 457	100	17 070	100	15 621	100	19 031	100	47 382	100
	1996	166 940	100	31 688	100	17 560	100	24 462	100	88 705	100
All developing countries	1980	27 348	35	3 964	26	3 274	22	5 248	37	14 197	47
	1990	41 668	41	5 740	34	4 946	32	7 407	39	23 019	49
	1997	83 947	50	13 626	43	6 173	35	13 857	57	48 990	55
***of which in*:**											
Latin America	1980	6 990	9	3 335	22	970	6	1 204	9	1 269	4
	1990	11 128	11	4 859	28	1 552	10	2 202	12	2 243	5
	1997	22 894	14	12 085	38	1 857	11	2 556	10	6 253	7

Table 15 (cont.). Intra-regional and interregional agricultural trade of developing countries, 1980-97 (value in million US dollars)

Exports from: / Exports to:	Year	All developing countries		Latin America		Africa		West Asia		Other Asia	
		Value	Percent of total exports	Value	Percent of total exports	Value	Percent of total exports	Value	Percent of total exports	Value	Percent of total exports
Africa	1980	2 144	3	108	1	881	6	444	3	542	2
	1990	3 645	4	136	1	1 517	10	840	4	1 104	2
	1997	5 371	3	300	1	1 901	11	1 173	5	1 959	2
West Asia	1980	1 520	2	14	0	138	1	1 144	8	197	1
	1990	2 611	3	40	0	332	2	1 936	10	238	1
	1997	2 912	2	88	0	446	3	4 300	18	1 013	1
Other Asia	1980	16 274	21	486	3	1 165	8	2 372	17	12 066	40
	1990	23 851	23	668	4	1 409	9	2 350	12	19 272	41
	1997	48 527	29	1 109	7	1 935	11	5 805	24	39 498	45

Note: The table relates to trade in all food items and agricultural raw materials (i.e. SITC 0+1+2 (less 27 and 28) +4).
Source: *UNCTAD Handbook of International Trade and Development Statistics 1996-1997* (New York and Geneva: United Nations, 1999).

Table 16. Summary of tariff commitments made by LDCs under the Agreement on Agriculture

Country	Average rate of :		Average applied tariff rate [2]
	Bound tariffs [1] (percent)	ODCs [1]	
Africa:			
Angola	55 [3]	0.1	...
Benin	60[3]	19	13
Burkina Faso	100	50	33
Burundi	100	30	...
Central African Republic	30	16	...
Chad	80	...	...
Democratic Republic of the Congo	55[3]	0.1	...
Djibouti	40[3]	100	...
Gambia	110[3]	10	...
Guinea	40	23[3]	16.6[5]
Guinea-Bissau	40	25[3]	...
Lesotho	200	...	...
Madagascar	30	250	...
Malawi	125	0	...
Mali	60	50	27.6[5]
Mauritania	25[3]	15	...
Mozambique	100[3]	300	...
Niger	50[3]	50	...
Rwanda	80	...	...
Sierra Leone	40[3]	20[3]	...
Togo	80	7	17
Uganda	80[3]	...	21
United Republic of Tanzania	120	120	16.2[6]
Zambia	125[3]	...	24

Table 16 (cont.). Summary of tariff commitments made by LDCs under the Agreement on Agriculture

Country	Average rate of :		Average applied tariff rate [2]
	Bound tariffs [1] (percent)	ODCs [1]	
Asia			
Bangladesh	200[3]	30	7.5-60 (range)
Maldives	30[3]	1	...
Myanmar	84[4]	...	...
Solomon Islands	80[3]		35.6
Latin America and the Caribbean			
Haiti	21[4]	16[4]	...

[1] Tariff bindings and other duties and charges (ODCs) are uniform for all items, except where otherwise indicated. (*Source:* Notifications to WTO).
[2] Taken from the latest Trade Policy Reviews of the respective countries and from Kent, Wilcock and Gwynn (1997), Likely Impact of the GATT Agricultural Agreement on African Agricultural Trade and Development, ARAP II Research Report No. 1024, USAID.
[3] Rate applied to most agricultural products.
[4] Simple average of all agricultural tariff lines.
[5] As a member of the West African Economic and Monetary Union (WAEMU) is moving towards the Common External Tariff of 10 % or 20 % on agricultural products.
[6] Average for all goods (including manufactured products).

ANNEX I

FAO TECHNICAL ASSISTANCE TO AGRICULTURE IN THE LEAST-DEVELOPED COUNTRIES

ANNEX I.
FAO TECHNICAL ASSISTANCE TO AGRICULTURE IN THE LEAST-DEVELOPED COUNTRIES

INTRODUCTION

Modernization of agriculture in the least-developed countries (LDCs) faces a series of persistent constraints. They include: low levels of productivity and technical skills; high natural and economic vulnerability; weak agricultural policy and support institutions; inadequate physical infrastructure; and shortages of production inputs. In several LDCs, agriculture is further affected by emergencies due to civil conflicts and natural disasters. Nevertheless, agriculture in most LDCs has large unexploited potential. As noted in the present paper, many have considerable reserves of land and water, and all have ample scope for increasing output and productivity in their crop, livestock, fishery and forestry sectors.

Technical assistance from FAO helps them both to overcome emergencies and to meet short-term, pressing needs, and to build a modern food and agricultural system by exploiting more fully their human and natural resource potentials. The assistance is guided by three global goals, which have been shaped by the Constitution of FAO and by international conferences, particularly the 1996 World Food Summit and the 1992 United Nations Conference on Environment and Development:

1. Access of all people at all times to sufficient, nutritionally adequate and safe food, with the aim of ensuring that the number of undernourished people is reduced by half by no later than 2015;
2. The continued contribution of sustainable agriculture and rural development, including fisheries and forestry, to economic and social progress and the well-being of all;

3. The conservation, improvement and sustainable utilization of natural resources, including land, water, forest, fisheries and genetic resources for food and agriculture.[29]

In providing its assistance, FAO follows a policy of making maximum use of technical expertise available in developing countries, through its South-South Cooperation (SSC) scheme and its programmes of Technical Cooperation among Developing Countries and Countries in Transition (TCDC/TCCT). The assistance includes normative as well as operational field activities with a direct impact on supply-side capacities.[30] This annex reviews the operational field activities in LDCs and provides an illustrative list of ongoing FAO field projects in these countries.

I. THE FAO FIELD PROGRAMME IN LDCs

FAO provides *technical cooperation* and *emergency assistance*, funded from its regular programme and extra-budgetary resources, to least developed and other developing countries at their request, and in partnership with bilateral donors, multilateral institutions, other organizations of the United Nations system, as well as with the private sector and civil society.

In the period 1992-2000, the value of FAO field projects in LDCs totalled some US$849 million, or 31 percent of its total Field Programme. These projects met a wide range of needs, from emergency relief and agricultural rehabilitation to practical assistance to government programmes for food security, sustainable agriculture and rural development.

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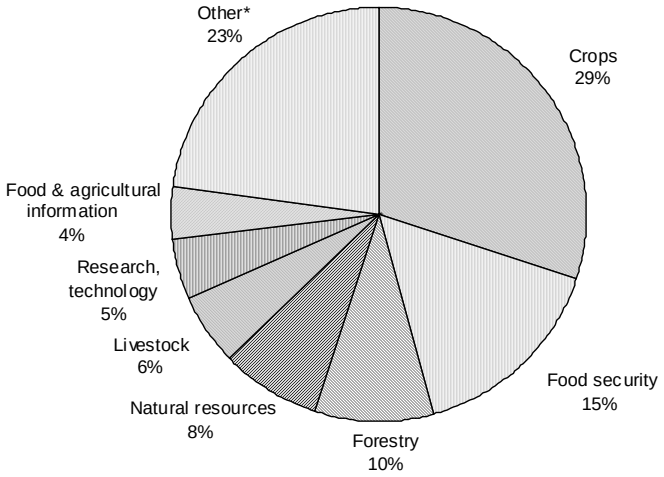
[29] See *The Strategic Framework for FAO 2000-2015*, Rome, FAO, 1999.

[30] FAO's normative assistance includes policy analysis and policy advice on a variety of agricultural policy issues. For example, FAO assisted many of the LDCs in preparing their national agricultural development strategies towards 2010.

In the year 2000 alone, more than 700 field projects, with a total budget value of US$423 million, were ongoing in 46 of the then 48 LDCs. (For an illustrative list of the projects see the Appendix to this Annex). As shown in the figure below, they cover a wide range of technical fields in agriculture, forestry and fisheries.

FAO Field programme delivery in LDCs by technical sector, 2000



* Comprises, *inter alia,* fisheries (3 percent of the total budget value); rural development (3 percent); food and agricultural policy (2 percent); agricultural support systems (2 percent); nutrition (1 percent); and agricultural applications of isotopes and biotechnology (<1 percent).
Source: FAO Field Programme Management Information System.

Technical cooperation

In the *crops* sector, for example, an FAO project in **Nepal** helped strengthen the country's capacity for introducing and testing improved vegetable varieties, stimulated private sector involvement in production of improved seeds, and contributed to an 85 percent increase in domestic vegetable production.

Forestry projects have assisted in rehabilitation of tree cover in **Mauritania**, capacity-building in forestry research in **Bhutan**, and creation of a forestry crime monitoring programme in **Cambodia**.

In the *natural resources* sector, FAO has assisted sustainable agriculture and soil conservation in environmentally fragile mountainous areas of **Haiti** and helped improve irrigation and water conservation in **Djibouti**. *Livestock* projects have increased veterinary vaccine production in **Ethiopia**, and helped **Angola** detect and control transboundary livestock diseases.

Fisheries projects are in progress in **the Lao People's Democratic Republic,** a provincial aquaculture programme, designed to be replicated in other areas, and provide advice to **Cape Verde** on new policies for its fisheries sector. Other Field Programme activities include expansion of the national food information system in **Eritrea**, assistance to fruit and vegetable marketing in **Nepal**, strengthening of the agricultural extension system in **Bangladesh**, and support to national food quality control in **Lesotho**, **Bhutan** and **Cambodia**.

In all of the above sectors, FAO provides also *policy advice and assistance* to LDCs - for example, through projects for household food security in **Gambia**, diversification of food production in **Malawi**, and a review of sugar sub-sector policy in **Mozambique**.

Emergency assistance

FAO meets requests for emergency assistance in the agricultural, livestock and fisheries sectors from LDCs affected by exceptional natural

or man-made calamities. It also assists them in the establishment of programmes of disaster preparedness and in post-emergency measures, and in the formulation and implementation of relief and rehabilitation programmes that speed the return to sustainable agricultural development. In October 2000, FAO was operating 42 emergency projects in 16 LDCs, including provision of food storage facilities, livestock feed and animal health inputs in **Afghanistan**, assistance to farmers in drought-affected areas of **Rwanda**, and support to programmes for the war-affected population in **Sierra Leone**. Delivery of emergency assistance in the year 2000 was over US$18 million, or 31 percent of all technical cooperation provided to LDCs.

II. SPECIAL DIMENSIONS

The World Food Summit

The World Food Summit, held in Rome in November 1996, called for concerted efforts at all levels to raise food production and improve access for all to safe and nutritious food, with the objective of reducing the present number of malnourished people in the world by half by the year 2015. The Plan of Action adopted by the Summit focuses on the following: assuring enabling political, social and economic conditions; food production through sustainable agricultural development policies and practices; improving access to food; fostering a fair and market-oriented world trading system; dealing adequately with natural disasters and man-made emergencies; and encouraging investment in agricultural and rural development to promote food security.

Special Programme for Food Security (SPFS)

The SPFS constitutes FAO's major thrust toward achieving the World Food Summit's goals. It aims at helping developing countries, in particular the 78 low-income food-deficit countries (LIFDCs), to improve food security at both household and national levels by promoting rapid

increases in productivity by small farmers in food production and other rural activities, reducing annual fluctuations in production and improving people's access to food.

The central concept of the SPFS is to improve productivity and broaden access to food by working directly with farmers and other stakeholders in identifying and resolving constraints to agricultural development (whether of a technical, economic, social, institutional or policy nature) and demonstrating practical ways of increasing production and productivity.

By March 2001, the SPFS was in operation in 34 LDCs (25 in Africa, six in Asia and the Pacific, one in the Caribbean and two in the Near East) while projects had been formulated or were in formulation for five others. The Programme has had notable success in identifying constraints to enhanced agricultural production and in introducing improved technologies on a pilot scale or more generally. For example, in the **United Republic of Tanzania**, the Government has adopted the SPFS as a national programme following the successful completion of activities that promoted improved water control, participatory transfer of improved technologies for crop and small livestock production, and income generation based on formation of participatory farmer groups. Technical advice on irrigation is being provided by Egypt through a South-South Cooperation agreement (see below) within the SPFS. In **Cambodia**, the Programme has helped to achieve a 30 percent increase in rice yields and increases in farm incomes, using the Farmers' Field School extension approach in introducing new production and post-production technologies. In **Nepal**, more than 3,000 farmers have been trained in crop husbandry and irrigation, in particular under a World Bank/FAO-assisted irrigation project using the SPFS approach, while in **Haiti**, 2,500 farmers have participated in farm demonstrations with assistance from experts from Bolivia and Morocco.

Initially, SPFS projects were funded from FAO's own resources, but have attracted increasing levels of support from the FAO bilateral Trust Fund Programme, UNDP, other United Nations agencies, international financial institutions, development banks, non-governmental

organizations (NGOs) and the private sector. To date, funds mobilized in support of SPFS activities total more than US$230 million.

South-South Cooperation

Launched in 1996 within the framework of the Special Programme for Food Security, FAO's South-South Cooperation (SSC) initiative provides an opportunity for more advanced developing countries to share with LDCs their experience and expertise in agriculture and rural development. The more advanced developing countries provide technicians and experts who work for two to three years with farmers, livestock owners and fishing communities to increase their productivity and production and to improve access to food. Funding is arranged on a case-by-case basis but involves contributions from the cooperating country, FAO's Regular budget and the host country, in some cases in conjunction with Trust Fund projects.

By April 2001, a total of 21 SSC agreements had been signed, providing up to 2,100 field experts and technicians, and a further 17 agreements were expected to be signed soon.

Technical Co-operation among Developing Countries and Countries in Transition (TCDC/TCCT)

FAO's TCDC/TCCT Programme provides another source of technical expertise available to LDCs. So far 125 countries have signed agreements under the Programme, providing more than 1,500 experts for wide-ranging FAO priority programmes and projects in member countries. Experts from the private sector and NGOs have also undertaken a number of assignments.

III. SOURCES OF FUNDING

Trust Funds

In the period 1992-2000, some US$370 million of FAO's technical assistance to LDCs (or 43 percent of total delivery) was funded by donors channelling their resources through FAO's Trust Fund Programme. About 30 percent of this support was for *emergency projects*. Of increasing importance are *Unilateral Trust Funds* (UTFs), whereby recipient governments themselves finance programmes and projects that are implemented with FAO technical assistance. In 2000, FAO was implementing 33 projects in LDCs through UTF arrangements.

United Nations Development Programme

UNDP has always been one of the largest funding sources for FAO's technical support, accounting for about US$350 million (or about 41 percent of total funding) for Field Programme projects in LDCs in 1992-2000. However, UNDP funding channelled through FAO has declined substantially over the period, from some US$80 million in 1992 to US$12.5 million in 2000, due to a reorientation in UNDP's development assistance strategy and the introduction of the national execution modality.

FAO Regular Budget

In addition to providing funds for the SPFS, FAO allocates limited resources from its own budget for its Technical Cooperation Programme (TCP), which responds rapidly to urgent and unforeseen requests for technical assistance in agriculture, fisheries, forestry and rural development. During 1992-2000 FAO provided such assistance to LDCs totalling US$120 million (14 percent of total delivery).

Telefood Fund

Since 1997, FAO's annual, world-wide fund-raising campaign, Telefood, has collected US$6 million for small, grassroots microprojects. The campaign is supported by a variety of partners, including private companies and institutions, local and national governments, NGOs, and radio and television broadcasters. Telefood projects are designed to cost less then US$10 000 each and are integrated to the extent possible into the SPFS.

Support to investment

In addition to the direct assistance described above, FAO assists member countries by identifying and preparing agricultural investment projects and programmes for funding by international financial institutions. Over the period 1992-2000, the **FAO Investment Centre** helped generate total investment in agriculture for LDCs valued at a little over US$3 143 million.

IV. OUTLOOK

FAO’s technical cooperation with developing countries largely relies on extra-budgetary resources. Consequently, the volume and effectiveness of its direct support to LDCs depends on the extent of such funding. As regards official development assistance (ODA), annual commitments to LDCs rose from an annual average of US$12 922 million in 1981-1990 to US$15 564 million in 1991-1999,[31] but the share of agriculture in the total fell by 20 percent. This trend is a matter of concern, as food security in LDCs will remain a major priority in the foreseeable future, as was noted by the World Food Summit.

A major thrust of FAO's Medium Term Plan (2002-2007) is accordingly to create the conditions and enabling mechanisms for a

[31] See table 13 of the present paper.

substantial flow of extra-budgetary resources, primarily to meet requests for technical assistance. It foresees continuous assessment of country needs, and creation of partnership agreements with multilateral and bilateral donors and private institutions to ensure coherent, longer-term cooperation. It stresses early involvement of prospective donors in project formulation and close monitoring of Field Programme performance.

A major opportunity for renewal of international commitment to FAO's goals, and to its technical cooperation activities in LDCs, will come in November 2001 when the Organization hosts a special high-level conference (World Food Summit: Five years later) aimed at both strengthening the political will and enhancing the financial resources needed to reduce hunger and poverty.

Appendix to Annex I

FAO Field Projects in operation in LDCs in 2000

AFRICA

Angola

- Support for restructuring of the Fishery Statistics Services
- Emergency collection and conservation of plant genetic resources
- Surveillance and control of bovine pleuropneumonia and other transboundary diseases
- Support for coordination and monitoring of emergency agricultural activities
- Support for coordination of emergency operations and resettlement of displaced persons
- Urgent multiplication of maize and bean seeds in the provinces of Huila and Huambo
- Emergency supply of agricultural inputs to war-affected populations in the province of Bengo
- Emergency supply of maize seed to war-affected populations in the province of Huambo
- Support for the coordination of emergency agricultural operations and supply of horticultural seeds
- Rehabilitation of the agricultural sector in the provinces of Huambo and Huila
- Project of food security in the province of Uige
- Assistance to the Department of Food Security
- Artisanal fishing in Ambriz

Benin

- Support for the intensification and diversification components of the Special Programme for Food Security
- Support for water control in the Special Programme for Food Security
- Promotion of private irrigation

Burkina Faso

- Low-cost reclamation and development of three lowland areas
- Artisanal manufacture of farm metal silos for grain storage
- National policy of communication for rural development
- Support for training and production centres for young girls
- Formulation of support project for farmers' organizations and food security
- Support for the encouragement of youth to remain on the land
- Land management: support for collaboration/coordination and promotion

Burundi

- Reinforcement of the Fishery Statistics Unit
- Support for rehabilitation of the agricultural statistics system
- Project formulation mission: diversification under the Special Programme for Food Security
- Development of small lowland areas under the Special Programme for Food Security
- Coordination of emergency agricultural operations in Burundi
- Emergency supply of agricultural inputs (bean and horticultural seeds) to vulnerable populations affected by drought in Burundi
- Urgent production of quality seeds in crisis-affected areas
- Support for rehabilitation and management of the environment

Cape Verde

- Special Programme for Food Security: South-South Cooperation Cape Verde/Cuba
- Review of fisheries management and development policy and strategy
- Preparatory assistance for the national agricultural census
- Water management and control
- Fisheries development
- Promotion of micro-irrigation techniques

Central African Republic

- SPFS in Central African Republic

- Support for multiplication and distribution of healthy cassava cuttings under the Special Programme for Food Security
- Introduction of low-cost water control techniques

Chad

- Support for implementation of the diversification component of the Special Programme for Food Security
- Water control under the Special Programme for Food Security
- Support for the follow-up mechanism of the sectoral meeting on rural development
- Support for revision of the Forest Code

Comoros

- Promotion of household food security
- Support for the strategy of revival of agricultural and rural development. Control of blackleg in cattle

Democratic Republic of the Congo

- Support for multiplication and distribution of healthy cassava cuttings in Lower-Congo and Kinshasa
- Emergency vaccination campaign against the major cattle diseases
- Emergency assistance for the rehabilitation of agricultural production
- Support for the activation of community and local rural radio
- Emergency assistance for the reinforcement of fishery activities
- Supply of basic agricultural inputs to vulnerable households in the provinces of Kivu
- Support for the agricultural integration of disadvantaged households
- Production and distribution of quality seeds to vulnerable households in the provinces of North and South Kivu
- Emergency agricultural assistance to affected populations in the provinces of the East
- Emergency agricultural assistance to populations affected by the crisis in the provinces of Kinshasa and Katanga
- Reinforcement of household food security in Kisangani

- Emergency supply of essential agricultural inputs to the war-displaced, refugees and host populations
- Urban and peri-urban horticultural development
- Environmental management

Equatorial Guinea

- Special Programme for Food Security
- School vegetable gardens of the Special Programme for Food Security
- Feasibility study of a small rural forestry unit

Eritrea

- Horticulture marketing development
- Technology transfer on cactus pear production and utilization development of crop statistics methodology
- Preliminary assistance for launching banana production, quality and export improvement programme
- Urgent provision of poultry to internally displaced families in the Jejah Camp, Gash Barka Region
- Emergency distribution of vegetable seeds and farming hand tools to assist internally displaced families
- Urgent provision of cereal seeds to drought-affected farmers in the Lowlands, north-east Red Sea Region
- Development of crop statistics methodology
- Strengthening the documentation and information services of the Ministry of Fisheries

Ethiopia

- Provision of seeds/animal fodder to destitute farmers
- Strengthening forest fire management
- Urgent distribution of seeds to drought affected farm families in East and West Hararge, South Tigray and Amhara
- Support to the prevention and disposal of obsolete pesticides in Ethiopia in an environmentally safe manner
- Special Programme for Food Security
- Agricultural information management

Gambia

- Emergency eradication of African Swine Fever and enhancement of logistical and technical capacities, Department of Livestock Service
- Cooperation between Indonesian farmers and Gambian Farmers' Association at Jendi
- Special Programme for Food Security – Gambia
- Emergency assistance to flood-affected farming households
- Household food security
- Poverty Alleviation Programme: Household food security component

Guinea

- Support for the development of urban and peri-urban horticulture
- Support for the development of rural fish farming
- National policy and strategy for the development of small-scale irrigation
- Support for women's horticultural operations in Forecariah Prefecture
- Support for realization of the national agricultural census

Guinea-Bissau

- Restructuring of the Ministry of Agriculture, Fisheries and Natural Resources
- Reinforcement of veterinary services and optimization of livestock sector
- Support for water control
- Reinforcement of the Department of Forests and Hunting for enforcement of the new forest policy
- Rational utilization of forest resources in Guinea-Bissau
- Formulation mission - seed multiplication project
- Support for the development of grassroots production capacity and oversight of the Bulletin on Agricultural Development Policy
- Emergency supply of agricultural inputs to the crisis-affected populations
- Supply of fishing gear for revival of fisheries production

Lesotho

- Processing and analysis of agricultural census data
- Water control component of the Special Programme for Food Security

Liberia

- Rehabilitation of the agricultural statistics system
- Emergency supply of basic farm inputs to restore productive capacity of war-affected farmers
- Special Programme for Food Security: Water control and intensification components

Madagascar

- Emergency supply of rice seed to farmers of Lake Alaotra
- Support for improvement of milk collection and processing
- Assessment of development prospects of rice sector
- Control and eradication of an epizootic of African swine fever
- Strengthening the technical capacity of the seeds control service
- Training of trainers in gender-based socio-economic analysis
- Emergency assistance for evaluation of harvests and food supplies
- Fruit and vegetable processing in the region of Morondava
- Support for the Environment Action Plan
- Food security project in Madagascar
- South-South Cooperation Madagascar-Vietnam- FAO Special Programme for Food Security
- FAO/Seecaline cooperation in food and nutrition
- Food security in the provinces of Toliara, Fiarantsoa and Defiarantsoa
- Elaboration of the National Food Security Programme

Malawi

- Diversification component of the Special Programme for Food Security
- Water control component of the Special Programme for Food Security
- Sustainable livelihoods programme

- Containment of transboundary spread of foot-and-mouth disease
- Capacity building for forest policy implementation

Mali

- National strategy of training and integration of youth in the agricultural and rural sector
- Support project for the development of urban and peri-urban horticulture
- Special Programme for Food Security
- Revival of rural radio in Mali

Mauritania

- Support for the Community Nutrition Programme
- Establishment of a system of early warning and control of Rift Valley fever and transboundary diseases
- Emergency assistance to food-affected farmers
- Emergency assistance for desert locust control
- Technical assistance to the oases development project
- Technical assistance to Sisaar, Mauritania.
- Contribution to strategy reflection on the fight against poverty in the rural world
- Green belt of Nouakchott

Mozambique

- Urgent provision of seed and tools and strengthening the coordination of the agricultural relief and rehabilitation programme
- Emergency assistance to flood-affected farmers
- Rehabilitation of family agriculture in the provinces of Manica, Maputo and Sofala
- Support for the rehabilitation of fisherfolk affected by the floods in Sofala, Inhambane and Gaza Provinces
- Sustainable and immediate recuperation of losses due to the floods, for peasants and the private sector
- Support to livestock disease prevention and rehabilitation of the rural and family/cooperative poultry sector

- Mapping of flood-affected areas
- Assistance to the National Early Warning System of Mozambique
- Formulation and execution phases of Special Programme for Food Security
- Community forestry and wildlife management
- Consolidation of the household food security and nutrition information network
- Family sector livestock development programme
- Support to the Coordination Unit of the Ministry of Agriculture and Rural Development
- Support to the judiciary in implementation of new legislation on land, environment, forestry and wildlife
- Assistance in developing and implementing a national land programme
- Marketing management assistance for food security
- Support to national agricultural development programme PROAGRI (Agricultural census techniques)
- Agricultural census sub-component of PROAGRI
- PROAGRI - Fish quality control
- Pilot study on marine fish resources for artisanal fisheries
- Review of sugar sub-sector policy

Niger

- Emergency seed supply to flood-affected rural populations
- Support for the revival of production and marketing of gum arabic
- Promotion of date palm production
- Assistance for production and development of prosopis in the Lake Region
- Drafting of a framework document for revival of the livestock sector
- Promotion of agricultural input utilization by farmer groups
- South-South Cooperation Niger-Morocco-FAO Special Programme for Food Security
- Fight against poverty

Rwanda

- Support for the establishment of a planning, monitoring and evaluation unit for agricultural sector programmes
- Support for the revival of activities of the national veterinary laboratory
- Emergency assistance for the rehabilitation of agricultural activities in Gisenyi Prefecture
- Emergency assistance for the cultivation of wetlands
- Emergency assistance to facilitate wetland cultivation in drought-affected areas
- Emergency assistance to the drought-affected population of the region of Bugesera
- Assistance to cooperatives for the revival of artisanal fisheries on Lake Kivu
- Compilation of a technical reference on soil fertilization

Sierra Leone

- Emergency assistance to artisanal fisheries
- Emergency rehabilitation of agricultural food production
- Urgent provision of seeds and strengthening the coordination of agricultural relief and rehabilitation programmes
- Emergency provision of essential agricultural inputs to war-affected farmers
- Emergency assistance for the reintegration of returning refugees
- Support to preparation of an integrated rural development programme
- Cassava production and processing project for the Maragiri and Kabala district women

Tanzania, United Republic of

- Integrated production and pest management for sustainable agriculture in Zanzibar
- Expansion of Phase I of the Special Programme for Food Security to Zanzibar sites
- Emergency surveillance of rinderpest and other transboundary animal diseases in Northern Tanzania

- Strengthening phytosanitary capabilities
- Emergency supply of vegetable seeds and hand tools to refugees in Kigoma Region
- Emergency supply of seeds to drought-affected farmers
- Small livestock development for food security and poverty alleviation
- Pilot initiative in FFS as alternative extension methodology

Togo

- Training in weed management and control
- Support for water control and management under the Special Programme for Food Security
- Fish farming and inland fisheries programme in Togo

Uganda

- Emergency provision of inputs to households affected by civil strife and drought in N.E. Uganda
- Emergency provision of essential agricultural inputs to drought and strife-torn households in Western Uganda
- Fish processing and fish export sector
- Enhancement of coffee quality through the prevention of mould growth
- Small-scale irrigation development in support of the Special Programme for Food Security
- Support to rapid multiplication and distribution of cassava cuttings
- Training in village-scale meat processing

Zambia

- Emergency supply of agricultural inputs to the refugees in Mayukwayukwa and Meheba
- Training support in agricultural marketing, agribusiness and agricultural finance
- Nutrition education in primary schools
- Training in integrated production and pest management
- Strengthening of revenue collection in the forestry sector

ASIA AND THE PACIFIC

Afghanistan

- Emergency provision of essential livestock feed and animal health inputs to drought-affected farmers
- Emergency procurement of cereal seeds in Central Highlands
- Progressive control of major transboundary animal disease in Afghanistan and neighbouring countries
- Women's veterinary clinics
- Procurement of prefabricated warehouses for safe storage of seed and fertilizer
- Participatory community seed production programme of improved varieties of food crops in Northern Afghanistan
- Food security through sustainable crop production
- Rehabilitation of sustainable potato production
- Livestock development for food security

Bangladesh

- Special Programme for Food Security
- Agricultural market information improvement
- Emergency supply of agricultural inputs to flood-affected farmers
- On-farm water management: pilot programme in support of the Special Programme for Food Security
- Crop yield forecasting and agrometeorology
- Soil testing and fertility management project
- Empowerment of coastal fishing communities for livelihood security
- Effects of arsenic-contaminated water on crop production
- Integrated pest management
- Community/smallholder livestock and dairy development
- Agro-ecological zones
- Integrated horticulture and nutrition development
- Seed quality control

Bhutan

- Strengthening national capacities for food control and effective participation in Codex Alimentarius
- National strategy for use of stoves and other alternative energy-saving technologies/ sources
- Horticulture produce, processing and storage

Cambodia

- Emergency supply of rice seeds to flood-affected farm households
- Urgent supply of small water pumps to flood-affected farmers
- Special Programme for Food Security
- Food security for poverty alleviation strategy
- Strengthening of the National Codex Committee
- Forestry crime monitoring and reporting
- Forest resources inventory
- Forestry policy and programme formulation
- Biodiversity enabling activities
- Participatory natural resources management in the Tonle Sap Region
- Preparation of programmes to strengthen agricultural organizations and rural development institutions
- Technical support to the Cambodian IPM training programme
- Technical support for Cambodia Area Rehabilitation and Regeneration (Carere2)
- Environment impact assessment (Carere2)
- Technical assistance to World Bank/RGC agricultural productivity improvement project (APIP) – agricultural statistics sub-component

Lao People's Democratic Republic

- Development of market information - marketing extension capability
- Provincial aquaculture development
- Promotion of smallholders' participation through an animal health and production extension model

- Environmental policy and planning for sustainable agricultural rural development
- Improved utilisation, quality and safety of fish and fisheries products

Maldives

- Agricultural intensification and water control component of the SPFS
- Strengthening banana production

Myanmar

- Upgrading the safety and quality of fishery products
- Agricultural market information service
- Agriculture and natural resources management in the Northern Rakhine state
- Environmentally sustainable food security and micro-income opportunities in the Dry Zone, critical watersheds (Southern Shan state), and in the Ayeyarwaddy Delta

Nepal

- Technical assistance to Hills Leasehold Forestry Programme
- Poverty alleviation and sustainable household food security
- Assistance to the development of olive production
- Master Plan for agricultural marketing in Kathmandu Valley
- Small marketing infrastructure
- Kalimati wholesale market

Samoa

- Agricultural census and statistics
- Fruit tree development

Solomon Islands

- Capacity building for farming systems development in support of the SPFS

Vanuatu

- Assistance in forestry legislation

NEAR EAST

Djibouti

- Special Programme for Food Security
- Management and development of irrigation and water conservation techniques under the Special Programme for Food Security

Somalia

- Emergency flood and rehabilitation of irrigation canals
- Provision of sorghum seed and tools to vulnerable farmers in Bay, Bakool and Gedo Regions (Southern Somalia)
- Support to the Food Security Assessment Unit
- Nutrition surveillance
- Home gardening for urgent improvement of food security and nutrition

Sudan

- Provision of essential agricultural inputs to war-affected populations of South Sudan and support of household security through coordination of agriculture and fisheries activities
- Emergency procurement of agricultural inputs
- Support to household food security activities of Operation Lifeline Sudan
- Assistance to household food security - livestock sector in war-affected areas of Southern Sudan and the Transition Zone
- Sustainable control of tsetse and trypanosomiasis
- Emergency strengthening of rinderpest surveillance and control in Western Sudan
- Gezira scheme - raising productivity through broadening farmers' choices on farm system/water management
- Special Programme for Food Security - Water control component
- Strengthening national phytosanitary services

Yemen

- Special Programme for Food Security - water control component
- Assistance to Qat policy formulation

- Surveillance and strategy formulation for rinderpest and other major diseases
- Watershed management and waste water re-use in peri-urban areas
- Sustainable water resources management
- Sustainable environmental management

CARIBBEAN

Haiti

- Reinforcement of national capacities for food control
- Definition of policy and elaboration of plan of action for fisheries and aquaculture
- Promotion of sustainable agriculture and soil and water conservation in the humid mountainous areas of Haiti - Marmelade Region.

ANNEX II
FAO COMPENDIUM OF KEY STATISTICAL INDICATORS FOR LEAST-DEVELOPED COUNTRIES

FAO COMPENDIUM OF KEY STATISTICAL INDICATORS FOR LEAST-DEVELOPED COUNTRIES [32]

This document, which was prepared by staff in the Statistical Analysis Service, Statistics Division, presents a set of data/indicators pertaining to the food and agricultural sector for the Least-developed countries. This set of data/indicators is prepared on a country by country basis for various purposes, e.g., input to country briefs and background information for food and agricultural development strategy papers. The information is based on data disseminated by FAO through the FAOSTAT. However, particularly with regard to macro-economic aggregates, data from other sources such as the World Bank, have also been used.

Symbols used in the tables and sources

MLN US$	Millions of United States dollars
Inh	Inhabitants
sq km	Square kilometres
HA	Hectares
kg nutr	Kilograms of nutrients
no	Number
kcal/day	Calories per day
g/day	grams per day
...	Data not available
0 or 0.0	Zero or less than half the unit shown
NES	Not elsewhere specified or included

A blank space has the same meaning as the symbol (...) defined above.

[32] *Compendium of Key Statistical Indicators for Least Developed Countries*, ESS/MISC/2000, FAO, Rome.

Technical notes

Definition of the Agricultural Sector

The definition of the agricultural sector may differ for different parameters. For macro economic aggregates and population it relates to agriculture in the broader sense, i.e. including fishing, forestry and hunting, while for production and trade it refers to the narrow sense, i.e. covering crops and livestock products only.

Population

- *Total population*

Data refer generally to the present-in-area (de facto) population within the present geographical boundaries. The United Nations revise periodically population series. The series presented are based on the 1998 revision).[33]

- *Rural population*

The rural/urban population estimates are prepared by the United Nations Population Division.[34] Usually the urban area is defined and the residual is taken as rural. In practice, the criteria adopted for distinguishing between urban and rural areas vary among countries. However, these criteria can be roughly divided into three major groups: classification of localities of a certain size as urban; classification of administrative centres of minor civil divisions as urban; and classification of centres of minor civil divisions on a chosen criterion, which may include type of local government, number of inhabitants or proportion of population engaged in agriculture.

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[33] United Nations, 1999. *World Population Prospects: The 1998 Revision. New York.*

[34] United Nations, 1997. *World Urbanization Prospects: The 1996 Revision. New York.*

- *Economically active population (labour force)*

Data refer to all persons engaged or seeking employment in an economic activity, whether as employers, own-account workers, salaried employees or unpaid workers assisting in the operation of a family farm or business.

Information on the economically active population is available from national population censuses or labour-force surveys. The data comparability is, however, limited by the different national statistical treatment of certain categories – for example, unpaid family workers, particularly housewives. Furthermore, some countries report information on economic activity for persons of all ages, others only for persons of specified ages – for example, 14 years and over. The International Labour Office (ILO) systematically evaluates these data and makes them consistent with internationally accepted standard concepts, prepares estimates of the economically active population broken down by sector (agriculture, industry and services) and makes projections of the total economically active population.

The estimates of economically active population (total and agricultural) presented are based on assessments made by ILO and are consistent with the 1996 United Nations revision of total population estimates.[35] However, the ILO gives estimates only at ten-year intervals. Estimates for 1995, 1996, 1997, 1998 and 1999 have been obtained by interpolating the 1990 estimates and the projections for 2000 of the economically active population.

- *Economically active population in agriculture (agricultural labour force)*

The economically active population in agriculture is that part of the economically active population engaged in or seeking work in agriculture, hunting, fishing or forestry.

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[35] ILO, 1996. *Economically Active Population, 1950-2010: The 4th Revision*. Geneva.

- *Density*

Total population over land area.

Land use

It should be borne in mind that definitions used by reporting countries vary considerably and items classified under the same category often relate to greatly differing kinds of land.

- *Land area*

Total country area, excluding area under inland water bodies. The definition of inland water bodies generally includes major rivers and lakes.

- *Arable land*

Land under temporary crops (double-cropped areas are counted only once), temporary meadows for mowing or pasture, land under market and kitchen gardens and land temporarily fallow (less than five years). This category does not include abandoned land resulting from shifting cultivation. Data for "Arable land" are not meant to indicate the amount of land that is potentially cultivable.

- *Land under permanent crops*

Land cultivated with crops that occupy the land for long periods and do not need to be replanted after each harvest, such as cocoa, coffee and rubber. This category includes land under flowering shrubs, fruit trees, nut trees and vines, but excludes land under trees grown for wood or timber.

- *Irrigation*

Data on irrigation relate to areas equipped to provide water to the crops. These include areas equipped for full or partial control irrigation, spate irrigation areas, and equipped wetland or inland valley bottoms.

Agricultural production – major items

Included here in quantity terms, and in descending order of importance, are the three major agricultural commodities (crops and livestock products). The commodities are ranked on the basis of their price-weighted quantities in 1998. This information has been extracted from the FAO Production Index database. The FAO production index calculations are based on 1989-91 constant “international commodity prices" derived form the Geary-Khamis formula. This method assigns a single producer price to each commodity. For example, one tonne of wheat has the same price regardless of the country where it is produced.

The commodities covered are all crops and livestock products originating in each country for which information is available. Practically all products are covered, with the main exception of fodder crops. The calculations for meat production are based on indigenous animals, including the meat equivalent of exported live animals but excluding the meat equivalent of imported live animals. Annual changes in livestock and poultry numbers or in their average live weights are not taken into account.

Food production indices

The FAO indices of agricultural production show the aggregate volume of agricultural production for each year in comparison with the base period 1989-91. They are based on the sum of price-weighted quantities of different agricultural commodities produced, after deductions for quantities used as seed and feed weighted in a similar manner. The resulting aggregate represents, therefore, disposable production for any use except as seed and feed.

All the indices at the country, regional and world levels are calculated by the Laspeyres formula. Production quantities of each commodity are weighted by 1989-91 average international commodity prices and summed for each year. To obtain the index, the aggregate for a given year is divided by the average aggregate for the base period 1989-91.

Since the FAO indices are based on the concept of agriculture as a single enterprise, amounts of seed and feed are subtracted from the production data to avoid counting them twice – once in the production data and once with the crops or livestock produced from them. Deductions for seed (in the case of eggs, for hatching) and for livestock and poultry feed apply to both domestically produced and imported commodities. They cover primary agricultural products used as such (e.g. maize and potatoes).

The "international commodity prices" described above are used in order to avoid the use of exchange rates for obtaining regional and world aggregates, and also to improve and facilitate international comparative analysis of productivity at the national level. The currency unit in which the prices are expressed has no influence on the indices published.

The commodities covered in the computation of indices of agricultural production are all crops and livestock products originating in each country. Practically all products are covered, with the main exception of fodder crops. "Food production" includes commodities that are considered edible and that contain nutrients. Accordingly, coffee and tea are excluded along with inedible commodities because, although edible, they have practically no nutritive value.

Indices for meat production are based on indigenous animals, including the meat equivalent of exported live animals but excluding the meat equivalent of imported live animals. Annual changes in livestock and poultry numbers or in their average live weights are not taken into account.

The FAO indices may differ from those produced by the countries themselves because of differences in concepts of production, coverage, weights, time reference of data and methods of calculation.

Foreign trade

- *Total trade*

Data refer to the total merchandise trade. In general, export values are f.o.b. (free on board) and import values are c.i.f. (cost, insurance and freight).

- *Agricultural trade*

Data refer to agriculture in the narrow sense, excluding fishery and forestry products; the SITC divisions included are section 0 (excluding division 03 and item 081.42), section 1, divisions 21, 22, 26 (excluding groups 266, 267 and 269) and 29, group 232 and section 4 (excluding subgroup 411.1).

- *Major agricultural imports and exports*

Included here in percentage terms, and in descending order of importance, are the three major agricultural commodities (crops and livestock products) imported and exported. Items are ranked on the basis of their shares in 1998 total agricultural trade (imports or exports).

Inputs

- *Fertiliser use*

Data refer to total fertilizer consumption, obtained by adding the volumes of nitrogenous, phosphate and potash fertilizers expressed in term of plant nutrients (N, P_2O_5 and K_2O, respectively).

- *Tractors in use*

Data generally refer to total wheel and crawler tractors (excluding garden tractors) used in agriculture.

Food supply

Data refer to the food availability for human consumption as estimated by the FAO Food Balance Sheets (FBS). The FBS are compiled every year by FAO with country-level data on the production of and trade in food commodities. Using these data and the available information on seed rates, waste coefficients, stock changes and types of utilization (feed, food, other uses), a supply/utilization account is prepared for each commodity in weight terms. The food component, which is usually derived as a balancing item, refers to the total amount of the commodity available for human consumption during the year. Besides commodity-by-commodity information, the FBS also provide total food availability estimates by aggregating the food component of all commodities after conversion into nutritive values. From these values and the available population estimates, the per caput dietary energy and protein supplies are derived.

Macro Economic Aggregates[36]

- *GDP at market prices*

GDP measures the total output of goods and services for final use occurring within the domestic territory of a given country, regardless of the allocation to domestic and foreign claims. Cross domestic product at purchaser values (market prices) is the sum of gross value added by all resident and non-resident producers in the economy plus any taxes and minus any subsidies not included in the value of the products. It is calculated without making deductions for depreciation of fabricated assets

[36] World Bank. 2000. *World Development Indicators.* Washington D.C.

or for depletion and degradation of natural resources. Data are in current US dollars.

- *GNP per caput, Atlas method*

GNP per caput is converted to US dollars using the World Bank Atlas method, divided by the midyear population. GNP is the sum of gross value added by all resident producers plus any taxes (less subsidies) that are not included in the valuation of output plus net receipts of primary income (employee compensation and property income) from non-resident sources. Data are in current US dollars.

The conversion into US dollars is usually at official exchange rates for comparisons across economies, although an alternative rate is used when the official exchange rate is judged to diverge by an exceptionally large margin from the rate actually applied in international transactions .To smooth fluctuations in prices and exchange rates, the World Bank uses a special Atlas method of conversion. This applies a conversion factor that averages the exchange rate for a given year and the two preceding years, adjusted for differences in rates of inflation between the country and the G-5 countries (France, Germany, Japan, the United Kingdom, and the United States).

- *Agriculture, value added*

Value added in agriculture measures the output of the agricultural sector less the value of intermediate inputs. “Agriculture” includes forestry, hunting, and fishing.

- *GDP and Agriculture Value Added, annual growth rates*

The growth rates are calculated using constant price data in the local currency.

Calculation of average annual growth rates

- *Using the last and first observations of the period*

The growth rate between two points in time is calculated from the equation:

$$r = (ln(p_n/p_1)/n)$$

where p_n and p_1 are the last and first observations of the period, n is the number of years in the period, and *ln* is the natural logarithm operator.

This calculation is applied to the population time series.

- *Using all the observations of the time series*

The growth rate is derived from an exponential curve fitted to the time series by the least squares method. The growth rate, r, which uses all the observations of the time series, is obtained as

$$r = (e^b-1)*100$$

where b is estimated by least squares procedures.

The calculation is applied to the GDP time series.

AFGHANISTAN							
INDICATORS	UNIT	1979-81	1995	1996	1997	1998	1999
Population & Agric. Labour Force							
Population	1000	16 018	19 663	20 368	20 893	21 354	21 923
Population annual growth	percent	-0.8	4.9	3.5	2.5	2.2	2.6
Rural/Total Population	percent	84	80	80	79	79	79
Density	Inh/sq km	25	30	31	32	33	
Agricultural Labour Force	1000	4 971	5 473	5 642	5 760	5 859	5 986
Agric. Labour Force/Total Labour Force	percent	73	69	68	68	68	67
Land Use							
Total Land	1000 HA	65 209	65 209	65 209	65 209	65 209	
Arable Land + Permanent Crops	1000 HA	8 050	8 054	8 054	8 054	8 054	
Arable Land	1000 HA	7 910	7 910	7 910	7 910	7 910	
Irrigated Land	1000 HA	2 505	2 386	2 386	2 386	2 386	
Agric. Production – Major Items*							
Wheat	1000 MT	2 561	2 500	2 650	2 711	2 834	2 834
Indigenous sheep meat	1000 MT	128	117	117	117	117	117
Indigenous cattle meat	1000 MT	69	65	65	65	65	65
Food Production *							
Food Production Index	1989-91=100	127	107	109	111	113	113
Per caput Food Production Index	1989-91=100	117	81	80	79	79	77
Foreign Trade – Exports							
Total	MLN US$	581.4	155.0	155.0	150.0	150.0	
Agricultural	MLN US$	299.9	95.6	104.3	86.6	86.6	
Major Exports (share in Agriculture)							
Skins dry-salted goats	percent	0.9	22.0	20.1	24.2	24.2	
Raisins	percent	43.7	18.8	17.3	20.8	20.8	
Grapes	percent	5.5	12.0	22.0	17.3	17.3	
Foreign Trade – Imports							
Total	MLN US$	804.5	450.0	450.0	450.0	450.0	
Agricultural	MLN US$	147.4	181.7	135.0	151.9	190.8	
Major Imports (share in Agriculture)							
Tea	percent	17.3	24.8	22.2	36.2	53.5	
Wheat	percent	12.5	11.6	19.9	11.4	9.1	
Sugar refined	percent	26.7	10.2	11.1	12.5	8.4	
Agricultural trade balance							
Exports-imports	MLN US$	152.5	-86.1	-30.6	-65.3	-104.2	
Land & Inputs							
Total Population/Arable Land	Inh/HA	2	2	3	3	3	
Fertilizer use/Arable Land	kg/nutrs/HA	6.2	0.0	0.6	0.6	0.6	
Tractors/Arable Land	no/1000 HA	0.1	0.1	0.1	0.1	0.1	
Food Supply		1979-81	1989-91	1996-98			
Per caput Dietary Energy Supply	kcal/day	2 210	1 920	1 620			
Per caput Dietary Protein Supply	g/day	62	54	45			

Source: derived from data extracted from FAOSTAT

* 1999 provisional

INDICATORS	UNIT	1998	INDICATORS	UNIT	1990-1998
Gross Domestic Product (GDP)	MLN US$	...	Annual growth rate:		
Agric. GDP as share of total GDP	percent	...	GDP	percent	...
Gross National Product per caput	US$	...	Agricultural GDP	percent	...

Note: Agricultural GDP includes Forestry & Fisheries

Source: World Bank 2000. World Development Indicators (CD ROM)

ANGOLA							
INDICATORS	UNIT	1979-81	1995	1996	1997	1998	1999
Population & Agric. Labour Force							
Population	1000	7 019	10 972	11 342	11 715	12 092	12 479
Population annual growth	percent	2.7	3.4	3.3	3.2	3.2	3.2
Rural/Total Population	percent	79	69	68	68	67	66
Density	Inh/sq km	6	9	9	9	10	
Agricultural Labour Force	1000	2 652	3 722	3 25	3 926	4 028	4 132
Agric. Labour Force/Total Labour Force	percent	76	73	73	73	72	72
Land Use							
Total Land	1000 HA	124 670	124 670	124 670	124 670	124 670	
Arable Land + Permanent Crops	1000 HA	3 400	3 500	3 500	3 500	3 500	
Arable Land	1000 HA	2 900	3 000	3 000	3 000	3 000	
Irrigated Land	1000 HA	75	75	75	75	75	
Agric. Production – Major Items*							
Cassava	1000 MT	1 150	2 550	2 500	2 326	3 211	3 130
Indigenous cattle meat	1000 MT	47	65	71	77	85	85
Maize	1000 MT	303	211	398	370	505	428
Food Production *							
Food Production Index	1989-91=100	90	123	128	129	148	141
Per caput Food Production Index	1989-91=100	119	104	105	102	113	105
Foreign Trade – Exports							
Total	MLN US$	1 625.9	3 880.0	4 521 .0	4 221.9	2 880.0	
Agricultural	MLN US$	156.5	5.1	6.3	6.0	6.0	
Major Exports (share in Agriculture)							
Coffee, green	percent	88.5	80.4	84.1	83.3	83.3	
Hides wet-salted cattle	percent	0.6	19.6	15.9	16.7	16.7	
Foreign Trade – Imports							
Total	MLN US$	1 380.9	1 700.0	2 053.0	2 332.3	2 120.0	
Agricultural	MLN US$	374.3	408.9	461.9	398.2	372.7	
Major Imports (share in Agriculture)							
Flour of wheat	percent	5.7	7.9	8.9	12.6	11.8	
Wine	percent	2.3	9.5	7.4	8.5	9.1	
Oil of soya beans	percent	8.1	6.6	7.2	7.0	6.6	
Agricultural trade balance							
Exports-imports	MLN US$	-217.7	-403.8	-455.6	-392.2	-366.7	
Land & Inputs							
Total Population/Arable Land	Inh/HA	2	4	4	4	4	
Fertilizer use/Arable Land	kg/nutrs/HA	4.9	2.7	2.0	0.7	1.7	
Tractors/Arable Land	no/1000 HA	3.5	3.4	3.4	3.4	3.4	
Food Supply		1979-81	1989-91	1996-98			
Per caput Dietary Energy Supply	kcal/day	2 120	1 790	1 910			
Per caput Dietary Protein Supply	g/day	51	41	41			

Source: derived from data extracted from FAOSTAT

* 1999 provisional

INDICATORS	UNIT	1998	INDICATORS	UNIT	1990-1998
Gross Domestic Product (GDP)	MLN US$	7 472	Annual growth rate:		
Agric. GDP as share of total GDP	percent	12	GDP	percent	0.1
Gross National Product per caput	US$	381	Agricultural GDP	percent	-4.1

Note: Agricultural GDP includes Forestry & Fisheries

Source: World Bank 2000. World Development Indicators (CD ROM)

BANGLADESH							
INDICATORS	UNIT	1979-81	1995	1996	1997	1998	1999
Population & Agric. Labour Force							
Population	1000	88 208	118 616	120 594	122 650	124, 774	126 947
Population annual growth	percent	2.6	1.6	1.7	1.7	1.7	1.7
Rural/Total Population	percent	89	82	81	81	79	
Density	Inh/sq km	678	911	926	942	959	
Agricultural Labour Force	1000	30 272	35 880	36 334	36 794	37 257	37 716
Agric. Labour Force/Total Labour Force	percent	73	61	660	59	58	57
Land Use							
Total Land	1000 HA	13 017	13 017	13 017	13 017	13 017	
Arable Land + Permanent Crops	1000 HA	9 161	8 148	8 195	8 241	8 332	
Arable Land	1000 HA	8 894	7 823	7 860	7 901	7 992	
Irrigated Land	1000 HA	1 568	3 429	3 553	3 693	3 844	
Agric. Production – Major Items*							
Rice, paddy	1000 MT	20 125	26 398	28 184	26 152	28 293	29 857
Indigenous cattle meat	1000 MT	141	148	152	165	157	157
Goat milk	1000 MT	406	1 160	1 280	1 328	1 280	1 280
Food Production *							
Food Production Index	1989-91=100	79	104	110	111	112	116
Per caput Food Production Index	1989-91=100	98	96	100	99	98	100
Foreign Trade – Exports							
Total	MLN US$	683.7	3 407.0	3 539.0	4 017.7	5 056.4	
Agricultural	MLN US$	184.0	129.4	106.0	142.6	159.1	
Major Exports (share in Agriculture)							
Jute	percent	71.7	61.5	67.2	70.1	49.7	
Tea	percent	21.2	25.4	28.4	22.3	28.4	
Vegetables fresh NES	percent	0.2	0.0	0.0	0.6	9.0	
Foreign Trade – Imports							
Total	MLN US$	1 897.5	5 436.9	6 235.2	6 795.9	7 029.2	
Agricultural	MLN US$	483.1	1 075.9	1 218.2	1 369.3	1 336.4	
Major Imports (share in Agriculture)							
Cotton lint	percent	20.5	9.6	12.4	13.9	16..9.	
Milled paddy rice	percent	10.3	11.3	9.8	2.2	14.3	
Wheat	percent	31.6	20.1	13.8	14.8	10.7	
Agricultural trade balance							
Exports-imports	MLN US$	-299.1	-946.6	-1 112.2	-1 226.7	-1 177.3	
Land & Inputs							
Total Population/Arable Land	Inh/HA	10	15	15	16	16	
Fertilizer use/Arable Land	kg/nutrs/HA	45.9	152.6	151.2	140.2	146.5	
Tractors/Arable Land	no/1000 HA	0.5	0.7	0.7	0.7	0.7	
Food Supply		1979-81	1989-91	1996-98			
Per caput Dietary Energy Supply	kcal/day	1 910	22 060	2 060			
Per caput Dietary Protein Supply	g/day	42	44	45			

Source: derived from data extracted from FAOSTAT

* 1999 provisional

INDICATORS	UNIT	1998	INDICATORS	UNIT	1990-1998
Gross Domestic Product (GDP)	MLN US$	42 702	Annual growth rate:		
Agric. GDP as share of total GDP	percent	22	GDP	percent	4.7
Gross National Product per caput	US$	352	Agricultural GDP	percent	2.2

Note: Agricultural GDP includes Forestry & Fisheries

Source: World Bank 2000. World Development Indicators (CD ROM)

BENIN							
INDICATORS	UNIT	1979-81	1995	1996	1997	1998	1999
Population & Agric. Labour Force							
Population	1000	3 461	5 336	5 480	5 629	5 781	5 937
Population annual growth	percent	2.8	2.7	2.7	2.7	2.7	2.7
Rural/Total Population	percent	73	62	61	60	59	59
Density	Inh/sq km	31	48	50	51	52	
Agricultural Labour Force	1000	1 121	1 423	1 440	1 456	1 472	1 488
Agric. Labour Force/Total Labour Force	percent	68	59	58	57	56	55
Land Use							
Total Land	1000 HA	11 062	11 062	11 062	11 062	11 062	
Arable Land + Permanent Crops	1000 HA	1 585	1 810	1 825	1 840	1 850	
Arable Land	1000 HA	1 500	1 670	1 680	1 690	1 700	
Irrigated Land	1000 HA	5	10	10	12	12	
Agric. Production – Major Items*							
Yams	1000 MT	687	1 286	1 342	1 514	1 584	1 771
Cotton lint	1000 MT	7	130	166	155	150	175
Cassava	1000 MT	631	1 238	1 457	1 926	1 989	2 377
Food Production *							
Food Production Index	1989-91=100	63	126	135	152	148	170
Per caput Food Production Index	1989-91=100	85	110	115	126	119	133
Foreign Trade – Exports							
Total	MLN US$	47.6	414.0	424.0	407.0	420.0	
Agricultural	MLN US$	38.3	201.1	187.7	198.0	138.7	
Major Exports (share in Agriculture)							
Cotton lint	percent	23.2	86.0	83.6	84.8	77.2	
Cottonseed	percent	1.4	7.5	9.2	8.6	12.3	
Palm oil	percent	8.5	2.0	1.9	1.8	2.9	
Foreign Trade – Imports							
Total	MLN US$	329.2	692.0	665.0	641.0	657.0	
Agricultural	MLN US$	95.1	115.3	121.6	120.6	132.0	
Major Imports (share in Agriculture)							
Milled paddy rice	percent	5.5	19.1	18.9	17.6	16.1	
Sugar refined	percent	1.3	15.6	8.2	9.9	11.4	
Beverages dist. alcoholic	percent	14.5	5.3	8.0	8.0	7.4	
Agricultural trade balance							
Exports-imports	MLN US$	-56.9	85.8	66.1	77.4	6.7	
Land & Inputs							
Total Population/Arable Land	Inh/HA	2	3	3	3	3	
Fertilizer use/Arable Land	kg/nutrs/HA	1.1	212.6	18.3	23.1	22.2	
Tractors/Arable Land	no/1000 HA	0.1	0.1	0.1	0.1	0.1	
Food Supply		1979-81	1989-91	1996-98			
Per caput Dietary Energy Supply	kcal/day	2 050	2 310	2 540			
Per caput Dietary Protein Supply	g/day	50	56	60			

Source: derived from data extracted from FAOSTAT

* 1999 provisional

INDICATORS	UNIT	1998	INDICATORS	UNIT	1990-1998
Gross Domestic Product (GDP)	MLN US$	2 306	Annual growth rate:		
Agric. GDP as share of total GDP	percent	39	GDP	percent	4.6
Gross National Product per caput	US$	379	Agricultural GDP	percent	5.3

Note: Agricultural GDP includes Forestry & Fisheries

Source: World Bank 2000. World Development Indicators (CD ROM)

BHUTAN							
INDICATORS	UNIT	1979-81	1995	1996	1997	1998	1999
Population & Agric. Labour Force							
Population	1000	1 318	1 847	1 893	1 945	2 004	2 064
Population annual growth	percent	2.3	2.0	2.5	2.7	3.0	3.0
Rural/Total Population	percent	96	94	94	94	93	93
Density	Inh/sq km	28	39	40	41	43	
Agricultural Labour Force	1000	637	848	866	887	910	934
Agric. Labour Force/Total Labour Force	percent	94	94	94	94	94	94
Land Use							
Total Land	1000 HA	4 700	4 700	4 700	4 700	4 700	
Arable Land + Permanent Crops	1000 HA	121	150	155	160	160	
Arable Land	1000 HA	104	130	135	140	140	
Irrigated Land	1000 HA	27	39	40	40	40	
Agric. Production – Major Items*							
Nutmeg, mace, cardamons	1000 MT	3	6	6	6	6	6
Indigenous cattle meat	1000 MT	4	4	4	4	4	4
Oranges	1000 MT	25	58	58	58	58	58
Food Production *							
Food Production Index	1989-91=100	84	107	107	107	107	107
Per caput Food Production Index	1989-91=100	108	98	96	93	91	88
Foreign Trade – Exports							
Total	MLN US$	12.3	82.2	99.0	108.0	111.3	
Agricultural	MLN US$	4.0	15.4	15.4	15.4	15.4	
Major Exports (share in Agriculture)							
Beverages dist. alcoholic	percent	0.0	28.5	28.5	28.5	28.5	
Nutmeg, mace, cardamons	percent	64.1	14.1	14.1	14.1	14.1	
Fruit fresh NES	percent	0.0	11.7	11.7	11.7	11.7	
Foreign Trade – Imports							
Total	MLN US$	41.7	110.6	131.0	164.0	136.1	
Agricultural	MLN US$	4.9	19.2	19.1	19.2	19.2	
Major Imports (share in Agriculture)							
Milled paddy rice	percent	24.4	24.0	24.1	24.0	24.0	
Wheat	percent	5.0	15.6	15.7	15.7	15.7	
Oil of veget. origin NES	percent	48.9	7.7	7.7	7.7	7.7	
Agricultural trade balance							
Exports-imports	MLN US$	-0.9	-3.7	-3.7	-3.7	-3.7	
Land & Inputs							
Total Population/Arable Land	Inh/HA	13	14	14	14	14	
Fertilizer use/Arable Land	kg/nutrs/HA	1.0	0.8	0.7	0.7	0.7	
Tractors/Arable Land	no/1000 HA	..	…	…	…	…	
Food Supply		1979-81	1989-91	1996-98			
Per caput Dietary Energy Supply	kcal/day	…	…	…	…	…	
Per caput Dietary Protein Supply	g/day	…	…	…	…	…	

Source: derived from data extracted from FAOSTAT

* 1999 provisional

INDICATORS	UNIT	1998	INDICATORS	UNIT	1990-1998
Gross Domestic Product (GDP)	MLN US$	398	Annual growth rate:		
Agric. GDP as share of total GDP	percent	38	GDP	percent	6.3
Gross National Product per caput	US$	466	Agricultural GDP	percent	3.4

Note: Agricultural GDP includes Forestry & Fisheries

Source: World Bank 2000. World Development Indicators (CD ROM)

BURKINA FASO							
INDICATORS	UNIT	1979-81	1995	1996	1997	1998	1999
Population & Agric. Labour Force							
Population	1000	6 911	10 415	10 704	11 001	11 305	11 616
Population annual growth	percent	2.5	2.8	2.7	2.7	2.7	2.7
Rural/Total Population	percent	92	84	84	83	83	82
Density	Inh/sq km	25	38	39	40	41	
Agricultural Labour Force	1000	3 479	4 845	4 954	5 064	5 177	5 292
Agric. Labour Force/Total Labour Force	percent	92	92	92	92	92	92
Land Use							
Total Land	1000 HA	27 360	27 360	27 360	27 360	27 360	
Arable Land + Permanent Crops	1000 HA	2 785	3 450	3 450	3 450	3 450	
Arable Land	1000 HA	2 745	3 400	3 400	3 400	3 400	
Irrigated Land	1000 HA	10	25	25	25	25	
Agric. Production – Major Items*							
Cotton lint	1000 MT	25	64	88	144	136	136
Millet	1000 MT	390	734	811	737	973	973
Sorghum	1000 MT	620	1 266	1 254	1 094	1 203	1 203
Food Production *							
Food Production Index	1989-91=100	63	121	129	124	136	136
Per caput Food Production Index	1989-91=100	82	105	109	102	109	106
Foreign Trade – Exports							
Total	MLN US$	80.5	306.0	310.0	327.0	330.0	
Agricultural	MLN US$	69.6	141.1	123.0	118.9	148.5	
Major Exports (share in Agriculture)							
Cotton lint	percent	45.5	69.4	66.7	65.6	72.0	
Cattle	percent	12.2	14.1	16.2	16.7	13.4	
Sheep	percent	5.9	3.6	4.1	4.3	3.4	
Foreign Trade – Imports							
Total	MLN US$	334.3	666.9	747.8	734.1	750.0	
Agricultural	MLN US$	73.3	93.1	91.9	101.1	124.8	
Major Imports (share in Agriculture)							
Rice, broken	percent	9.8	25.8	26.1	23.2	33.3	
Wheat	percent	6.2	11.1	15.2	22.5	20.0	
Sugar refined	percent	1.0	2.4	3.8	4.0	6.9	
Agricultural trade balance							
Exports-imports	MLN US$	-3.7	48.0	31.1	17.8	23.7	
Land & Inputs							
Total Population/Arable Land	Inh/HA	3	3	3	3	3	
Fertilizer use/Arable Land	kg/nutrs/HA	2.6	7.1	7.1	12.5	14.8	
Tractors/Arable Land	no/1000 HA	0.0	0.6	0.6	0.6	0.6	
Food Supply		1979-81	1989-91	1996-98			
Per caput Dietary Energy Supply	kcal/day	1 690	2 090	2 160			
Per caput Dietary Protein Supply	g/day	51	61	64			

Source: derived from data extracted from FAOSTAT

* 1999 provisional

INDICATORS	UNIT	1998	INDICATORS	UNIT	1990-1998
Gross Domestic Product (GDP)	MLN US$	2 581	Annual growth rate:		
Agric. GDP as share of total GDP	percent	33	GDP	percent	3.5
Gross National Product per caput	US$	240	Agricultural GDP	percent	3.4

Note: Agricultural GDP includes Forestry & Fisheries

Source: World Bank 2000. World Development Indicators (CD ROM)

BURUNDI							
INDICATORS	UNIT	1979-81	1995	1996	1997	1998	1999
Population & Agric. Labour Force							
Population	1000	4 136	6 156	6 265	6 362	6 457	6 565
Population annual growth	percent	2.7	2.0	1.8	1.5	1.5	1.7
Rural/Total Population	percent	96	92	92	929	92	91
Density	Inh/sq km	161	240	244	248	251	
Agricultural Labour Force	1000	2 106	3 002	3 050	3 091	3 132	3 178
Agric. Labour Force/Total Labour Force	percent	93	91	91	91	91	90
Land Use							
Total Land	1000 HA	2 568	2 568	2 568	2 568	2 568	
Arable Land + Permanent Crops	1000 HA	1 180	1 100	1 100	1 100	1 100	
Arable Land	1000 HA	923	770	770	770	770	
Irrigated Land	1000 HA	53	74	74	74	74	
Agric. Production – Major Items*							
Bananas	1000 MT	1 175	1 421	1 544	1 543	1 399	1 511
Beans, dry	1000 MT	286	319	288	271	275	227
Sweet potatoes	1000 MT	488	674	670	681	590	734
Food Production *							
Food Production Index	1989-91=100	80	97	98	97	92	92
Per caput Food Production Index	1989-91=100	106	86	85	83	77	76
Foreign Trade – Exports							
Total	MLN US$	82.2	104.3	37.4	87.6	85.0	
Agricultural	MLN US$	79.8	96.6	35.7	86.4	63.1	
Major Exports (share in Agriculture)							
Coffee, green	percent	91.9	83.9	71.0	89.0	80.9	
Tea	percent	2.5	10.0	15.2	10.5	17.4	
Sugar refined	percent	0.0	0.0	8.9	0.2	0.9	
Foreign Trade – Imports							
Total	MLN US$	160.5	233.6	123.8	123.2	156.9	
Agricultural	MLN US$	29.2	52.5	21.2	27.9	30.7	
Major Imports (share in Agriculture)							
Malt of barley	percent	18.4	24.3	32.4	30.3	35.2	
Flour of wheat	percent	18.7	7.8	9.7	10.3	12.8	
Food prepared NES	percent	2.7	5.6	7.1	7.1	9.1	
Agricultural trade balance							
Exports-imports	MLN US$	50.6	44.1	14.5	58.5	32.3	
Land & Inputs							
Total Population/Arable Land	Inh/HA	4	8	8	8	8	
Fertilizer use/Arable Land	kg/nutrs/HA	1.1	3.9	3.6	1.3	2.7	
Tractors/Arable Land	no/1000 HA	0.1	0.2	0.2	0.2	0.2	
Food Supply		1979-81	1989-91	1996-98			
Per caput Dietary Energy Supply	kcal/day	2 030	1 910	1 640			
Per caput Dietary Protein Supply	g/day	68	59	50			

Source: derived from data extracted from FAOSTAT

* 1999 provisional

INDICATORS	UNIT	1998	INDICATORS	UNIT	1990-1998
Gross Domestic Product (GDP)	MLN US$	885	Annual growth rate:		
Agric. GDP as share of total GDP	percent	54	GDP	percent	-3.3
Gross National Product per caput	US$	139	Agricultural GDP	percent	-2.3

Note: Agricultural GDP includes Forestry & Fisheries

Source: World Bank 2000. World Development Indicators (CD ROM)

CAMBODIA							
INDICATORS	UNIT	1979-81	1995	1996	1997	1998	1999
Population & Agric. Labour Force							
Population	1000	6 530	9 982	10 234	10 478	10 716	10 945
Population annual growth	percent	0.1	2.6	2.5	2.4	2.2	2.1
Rural/Total Population	percent	88	80	79	78	78	77
Density	Inh/sq km	37	57	58	59	61	
Agricultural Labour Force	1000	2 664	3 745	3 817	3 886	3 950	4 011
Agric. Labour Force/Total Labour Force	percent	76	72	72	71	71	70
Land Use							
Total Land	1000 HA	17 652	17 652	17 652	17 652	17 652	
Arable Land + Permanent Crops	1000 HA	2 053	3 807	3 807	3 807	3 807	
Arable Land	1000 HA	1 983	3 700	3 700	3 700	3 700	
Irrigated Land	1000 HA	120	270	270	270	270	
Agric. Production – Major Items*							
Rice, paddy	1000 MT	1 248	3 318	3 390	3 415	3 510	3 800
Indigenous pigmeat	1000 MT	7	82	86	88	88	88
Indigenous cattle meat	1000 MT	9	40	41	41	41	41
Food Production *							
Food Production Index	1989-91=100	49	125	128	131	132	138
Per caput Food Production Index	1989-91=100	65	108	109	108	196	109
Foreign Trade – Exports							
Total	MLN US$	13.3	342.0	300.0	330.0	340.0	
Agricultural	MLN US$	6.5	39.2	40.7	49.1	3.9.8	
Major Exports (share in Agriculture)							
Rubber natural dry	percent	40.7	94.4	75.6	77.4	72.9	
Crude organic materls.	percent	0.0	0.0	5.8	4.8	6.0	
Must of grapes	percent	0.0	0.0	4.8	3.9	4..9	
Foreign Trade – Imports							
Total	MLN US$	200.0	630.9	466.7	660.0	660.0	
Agricultural	MLN US$	66.2	107.7	115.4	123.2	106.9	
Major Imports (share in Agriculture)							
Cigars cheroots	percent	0.0	0.0	17.3	16.2	18.7	
Sugar refined	percent	3.7	10.2	11.4	11.4	13.1	
Flour of mustard	percent	0.0	0.0	10.4	9.7	11.2	
Agricultural trade balance							
Exports-imports	MLN US$	-60.7	-68.5	-74.7	-74.1	-67.1	
Land & Inputs							
Total Population/Arable Land	Inh/HA	3	3	3	3	3	
Fertilizer use/Arable Land	kg/nutrs/HA	4.6	2.6	2.1	2.2	3.4	
Tractors/Arable Land	no/1000 HA	0.6	0.3	0.3	0.3	0.3	
Food Supply		1979-81	1989-91	1996-98			
Per caput Dietary Energy Supply	kcal/day	1 720	1 940	2 060			
Per caput Dietary Protein Supply	g/day	39	47	47			

Source: derived from data extracted from FAOSTAT

* 1999 provisional

INDICATORS	UNIT	1998	INDICATORS	UNIT	1990-1998
Gross Domestic Product (GDP)	MLN US$	2 871	Annual growth rate:		
Agric. GDP as share of total GDP	percent	51	GDP	percent	5.1
Gross National Product per caput	US$	256	Agricultural GDP	percent	2.1

Note: Agricultural GDP includes Forestry & Fisheries

Source: World Bank 2000. World Development Indicators (CD ROM)

CAPE VERDE							
INDICATORS	UNIT	1979-81	1995	1996	1997	1998	1999
Population & Agric. Labour Force							
Population	1000	289	381	389	399	408	418
Population annual growth	percent	1.0	2.4	2.1	2.5	2.2	2.4
Rural/Total Population	percent	76	46	44	43	41	39
Density	Inh/sq km	72	95	97	99	101	
Agricultural Labour Force	1000	35	39	39	40	40	40
Agric. Labour Force/Total Labour Force	percent	37	27	26	25	25	24
Land Use							
Total Land	1000 HA	403	403	403	403	403	
Arable Land + Permanent Crops	1000 HA	40	41	41	41	41	
Arable Land	1000 HA	38	39	39	39	39	
Irrigated Land	1000 HA	2	3	3	3	3	
Agric. Production – Major Items*							
Indigenous pigmeat	1000 MT	1	8	3	5	6	6
Pimento, allspice	1000 MT	0	1	1	1	1	1
Hen eggs	1000 MT	0	2	2	2	2	2
Food Production *							
Food Production Index	1989-91=100	46	126	125	128	140	139
Per caput Food Production Index	1989-91=100	55	113	110	108	117	113
Foreign Trade – Exports							
Total	MLN US$	3.3	9.0	12.7	14.0	10.0	
Agricultural	MLN US$	1.2	0.3	0.1	0.1	0.1	
Major Exports (share in Agriculture)							
Beverages non-alcoholic	percent	0.0	20.5	43.1	43.1	41.7	
Hides wet-salted cattle	percent	0.6	15.4	32.5	32.5	31.5	
Beverages dist. alcoholic	percent	0.0	3.1	12.2	12.2	11.8	
Foreign Trade – Imports							
Total	MLN US$	64.1	252.5	234.4	235.4	240.0	
Agricultural	MLN US$	26.1	75.5	66.0	62.7	69.6	
Major Imports (share in Agriculture)							
Sugar refined	percent	11.7	8.2	5.8	7.2	11.5	
Oil of soya beans	percent	0.7	2.2	5.3	4.5	9.3	
Dry whole cow milk	percent	0.0	8.8	7.6	8.0	7.2	
Agricultural trade balance							
Exports-imports	MLN US$	-24.9	-75.3	-65.9	-62.6	-69.5	
Land & Inputs							
Total Population/Arable Land	Inh/HA	8	10	10	10	10	
Fertilizer use/Arable Land	kg/nutrs/HA	18	0.0	0.0	0.0	00.0	
Tractors/Arable Land	no/1000 HA	0.4	0.4	0.4	0.4	0.4	
Food Supply		1979-81	1989-91	1996-98			
Per caput Dietary Energy Supply	kcal/day	2 500	2 960	3 050			
Per caput Dietary Protein Supply	g/day	67	71	68			

Source: derived from data extracted from FAOSTAT

* 1999 provisional

INDICATORS	UNIT	1998	INDICATORS	UNIT	1990-1998
Gross Domestic Product (GDP)	MLN US$	496	Annual growth rate:		
Agric. GDP as share of total GDP	percent	12	GDP	percent	5.4
Gross National Product per caput	US$	1 199	Agricultural GDP	percent	0.6

Note: Agricultural GDP includes Forestry & Fisheries

Source: World Bank 2000. World Development Indicators (CD ROM)

CENTRAL AFRICAN REPUBLIC							
INDICATORS	UNIT	1979-81	1995	1996	1997	1998	1999
Population & Agric. Labour Force							
Population	1000	2 314	3 288	3 354	3 420	3 485	3 550
Population annual growth	percent	2.4	2.1	2.0	1.9	1.9	1.8
Rural/Total Population	percent	65	61	60	60	60	59
Density	Inh/sq km	4	5	5	5	6	
Agricultural Labour Force	1000	1 029	1 213	1 222	1 231	1 238	1 244
Agric. Labour Force/Total Labour Force	percent	85	77	76	75	74	74
Land Use							
Total Land	1000 HA	62 298	62 298	62 298	62 298	62 298	
Arable Land + Permanent Crops	1000 HA	1 940	2 020	2 020	2 020	2 020	
Arable Land	1000 HA	1 867	1 930	1 930	1 930	1 930	
Irrigated Land	1000 HA	…	…	…	…	…	
Agric. Production – Major Items*							
Indigenous cattle meat	1000 MT	16	46	59	47	49	49
Groundouts in shell	1000 MT	123	86	91	97	102	110
Yams	1000 MT	153	320	340	340	360	360
Food Production *							
Food Production Index	1989-91=100	80	115	129	125	129	135
Per caput Food Production Index	1989-91=100	101	103	113	108	109	112
Foreign Trade – Exports							
Total	MLN US$	105.5	178.6	146.8	173.7	160.0	
Agricultural	MLN US$	51.2	51.2	36.3	33.5	35.9	
Major Exports (share in Agriculture)							
Cotton lint	percent	31.4	39.0	68.9	41.8	64.1	
Coffee, green	percent	46.1	55.6	24.0	53.7	27.9	
Cattle	percent	1.1	1.7	4.4	1.2	4.2	
Foreign Trade – Imports							
Total	MLN US$	80.7	188.9	179.9	232.0	280.0	
Agricultural	MLN US$	24.8	64.7	52.0	56.2	38.1	
Major Imports (share in Agriculture)							
Flour of wheat	percent	14.7	12.2	6.6	15.1	21.0	
Cattle	percent	29.6	9.1	10.0	9.5	14.0	
Tobacco leaves	percent	2.6	13.1	7.0	6.5	9.5	
Agricultural trade balance							
Exports-imports	MLN US$	26.4	-13.5	-15.7	-22.7	-2.3	
Land & Inputs							
Total Population/Arable Land	Inh/HA	1	2	2	2	2	
Fertilizer use/Arable Land	kg/nutrs/HA	0.5	0.2	0.2	0.2	0.3	
Tractors/Arable Land	no/1000 HA	0.0	0.0	0.0	0.0	0.0	
Food Supply		1979-81	1989-91	1996-98			
Per caput Dietary Energy Supply	kcal/day	2 320	1 920	2 000			
Per caput Dietary Protein Supply	g/day	35	39	44			

Source: derived from data extracted from FAOSTAT

* 1999 provisional

INDICATORS	UNIT	1998	INDICATORS	UNIT	1990-1998
Gross Domestic Product (GDP)	MLN US$	1 057	Annual growth rate:		
Agric. GDP as share of total GDP	percent	53	GDP	percent	1.5
Gross National Product per caput	US$	303	Agricultural GDP	percent	3.5

Note: Agricultural GDP includes Forestry & Fisheries

Source: World Bank 2000. World Development Indicators (CD ROM)

CHAD							
INDICATORS	UNIT	1979-81	1995	1996	1997	1998	1999
Population & Agric. Labour Force							
Population	1000	4 481	6 707	6 899	7 086	7 270	7 458
Population annual growth	percent	2.5	3.0	2.8	2.7	2.6	2.6
Rural/Total Population	percent	81	78	77	77	77	77
Density	Inh/sq km	4	5	5	6	6	
Agricultural Labour Force	1000	1 960	2 484	2 528	2 567	2 604	2 639
Agric. Labour Force/Total Labour Force	percent	88	80	79	78	77	76
Land Use							
Total Land	1000 HA	125 920	125 920	125 920	125 920	125 920	
Arable Land + Permanent Crops	1000 HA	3 150	3 450	3 500	3 530	3 550	
Arable Land	1000 HA	3 137	3 420	3 470	3 500	3 520	
Irrigated Land	1000 HA	13	20	20	20	20	
Agric. Production – Major Items*							
Groundnuts in shell	1000 MT	93	293	305	352	471	471
Cotton lint	1000 MT	30	61	86	86	103	103
Indigenous cattle meat	1000 MT	61	43	45	46	46	46
Food Production *							
Food Production Index	1989-91=100	91	120	125	135	159	159
Per caput Food Production Index	1989-91=100	117	103	105	110	126	123
Foreign Trade – Exports							
Total	MLN US$	142.3	184.0	238.3	236.6	261.6	
Agricultural	MLN US$	114.6	145.1	127.9	135.1	113.4	
Major Exports (share in Agriculture)							
Cotton lint	percent	36.9	75.3	71.1	73.3	67.9	
Cattle	percent	59.0	13.8	15.6	14.8	17.6	
Goats	percent	1.4	4.1	4.7	4.4	5.3	
Foreign Trade – Imports							
Total	MLN US$	89.0	283.8	228.7	239.9	255.0	
Agricultural	MLN US$	9.3	53.0	54.1	49.2	44.1	
Major Imports (share in Agriculture)							
Flour of wheat	percent	23.8	17.3	25.9	28.5	16.8	
Sugar refined	percent	10.8	34.0	19.0	9.2	15.7	
Milled paddy rice	percent	17.8	8.5	8.3	9.1	10.2	
Agricultural trade balance							
Exports-imports	MLN US$	105.3	92.1	73.8	86.0	69.3	
Land & Inputs							
Total Population/Arable Land	Inh/HA	1	2	2	2	2	
Fertilizer use/Arable Land	kg/nutrs/HA	0.6	2.5	3.4	2.2	4.8	
Tractors/Arable Land	no/1000 HA	0.1	0.0	0.0	0.0	0.0	
Food Supply		1979-81	1989-91	1996-98			
Per caput Dietary Energy Supply	kcal/day	1 650	1 740	2 070			
Per caput Dietary Protein Supply	g/day	51	49	61			

Source: derived from data extracted from FAOSTAT

* 1999 provisional

INDICATORS	UNIT	1998	INDICATORS	UNIT	1990-1998
Gross Domestic Product (GDP)	MLN US$	1 694	Annual growth rate:		
Agric. GDP as share of total GDP	percent	40	GDP	percent	2.2
Gross National Product per caput	US$	228	Agricultural GDP	percent	5.4

Note: Agricultural GDP includes Forestry & Fisheries

Source: World Bank 2000. World Development Indicators (CD ROM)

COMOROS							
INDICATORS	UNIT	1979-81	1995	1996	1997	1998	1999
Population & Agric. Labour Force							
Population	1000	387	606	623	640	658	677
Population annual growth	percent	3.7	2.8	2.8	2.7	2.7	2.9
Rural/Total Population	percent	77	70	69	69	68	67
Density	Inh/sq km	174	272	279	287	295	
Agricultural Labour Force	1000	141	212	218	224	231	237
Agric. Labour Force/Total Labour Force	percent	81	76	75	75	75	74
Land Use							
Total Land	1000 HA	223	223	223	223	223	
Arable Land + Permanent Crops	1000 HA	95	118	118	118	118	
Arable Land	1000 HA	75	78	78	78	78	
Irrigated Land	1000 HA	...	...	...	...	...	
Agric. Production – Major Items*							
Bananas	1000 MT	32	56	57	58	59	59
Coconuts	1000 MT	53	71	73	74	75	75
Cloves, whole & stems	1000 MT	1	2	1	1	2	1
Food Production *							
Food Production Index	1989-91=100	81	114	112	114	122	118
Per caput Food Production Index	1989-91=100	110	99	94	94	98	92
Foreign Trade – Exports							
Total	MLN US$	14.4	11.3	6.4	8.7	8.8	
Agricultural	MLN US$	12.0	6.6	3.3	3.4	2.2	
Major Exports (share in Agriculture)							
Vanilla	percent	54.5	93.6	81.8	74.5	82.8	
Cloves, whole & stems	percent	39.0	5.4	16.6	23.9	14.7	
Copra	percent	5.6	0.9	1.5	1.5	2.3	
Foreign Trade – Imports							
Total	MLN US$	30.2	62.6	64.3	55.4	54.3	
Agricultural	MLN US$	13.0	28.6	23.3	23.0	23.7	
Major Imports (share in Agriculture)							
Milled paddy rice	percent	51.8	49.1	37.1	39.2	38.1	
Beef & veal	percent	18.3	16.4	15.9	16.1	15.6	
Chicken meat	percent	0.0	7.0	12.9	13.0	12.7	
Agricultural trade balance							
Exports-imports	MLN US$	-1.0	-22.0	-20.0	-19.6	-21.5	
Land & Inputs							
Total Population/Arable Land	Inh/HA	5	8	8	8	8	
Fertilizer use/Arable Land	kg/nutrs/HA	0.0	3.8	3.8	3.8	3.8	
Tractors/Arable Land	no/1000 HA						
Food Supply		1979-81	1989-91	1996-98			
Per caput Dietary Energy Supply	kcal/day	1 790	1 870	1 850			
Per caput Dietary Protein Supply	g/day	39	44	42			

Source: derived from data extracted from FAOSTAT

* 1999 provisional

INDICATORS	UNIT	1998	INDICATORS	UNIT	1990-1998
Gross Domestic Product (GDP)	MLN US$	196	Annual growth rate:		
Agric. GDP as share of total GDP	percent	39	GDP	percent	-0.6
Gross National Product per caput	US$	371	Agricultural GDP	percent	-0.6

Note: Agricultural GDP includes Forestry & Fisheries

Source: World Bank 2000. World Development Indicators (CD ROM)

CONGO, DEMOCRATIC REPUBLIC OF							
INDICATORS	UNIT	1979-81	1995	1996	1997	1998	1999
Population & Agric. Labour Force							
Population	1000	27 022	45 421	46 772	47 987	49 139	50 335
Population annual growth	percent	3.1	3.4	2.9	2.6	2.4	2.4
Rural/Total Population	percent	71	71	71	71	70	70
Density	Inh/sq km	12	20	21	21	22	
Agricultural Labour Force	1000	8 605	12 423	12 656	12 845	13 011	13 182
Agric. Labour Force/Total Labour Force	percent	72	66	65	65	64	64
Land Use							
Total Land	1000 HA	226 705	226 705	226 705	226 705	226 705	
Arable Land + Permanent Crops	1000 HA	7 600	7 900	7 890	7 880	7 880	
Arable Land	1000 HA	6 623	6 700	6 700	6 700	6 700	
Irrigated Land	1000 HA	6	11	11	11	11	
Agric. Production – Major Items*							
Cassava	1000 MT	12 942	19 378	16 887	16 973	17 060	16 500
Groundnuts in shell	1000 MT	334	598	388	400	412	395
Plantains	1000 MT	1 555	2 424	2 140	1 889	1 850	1 800
Food Production *							
Food Production Index	1989-91=100	72	109	95	95	95	92
Per caput Food Production Index	1989-91=100	100	90	76	74	72	68
Foreign Trade – Exports							
Total	MLN US$	1 217.8	461.0	432.0	450.0	450.0	
Agricultural	MLN US$	204.9	137.3	104.4	4.0	98.9	
Major Exports (share in Agriculture)							
Coffee, green	percent	68.5	74.3	66.1	64.9	69.8	
Crude organic materls.	percent	7.6	11.7	15.3	19.0	16.2	
Rubber natural dry	percent	10.3	6.0	8.1	7.3	6.2	
Foreign Trade – Imports							
Total	MLN US$	729.0	390.0	417.0	450.0	350.0	
Agricultural	MLN US$	185.7	260.1	241.5	251.3	195.4	
Major Imports (share in Agriculture)							
Flour of wheat	percent	1.2	11.5	9.1	16.6	18.4	
Wheat	percent	18.2	14.6	17.0	11.1	7.7	
Chicken meat	percent	3.7	10.4	11.2	9.6	6.1	
Agricultural trade balance							
Exports-imports	MLN US$	19.2	--122.8	-137,1	-167,3	-96,5	
Land & Inputs							
Total Population/Arable Land	Inh/HA	4	7	7	7	7	
Fertilizer use/Arable Land	kg/nutrs/HA	1.2	1.3	0.9	0.0	0.0	
Tractors/Arable Land	no/1000 HA	0.3	0.4	0.4	0.4	0.4	
Food Supply		1979-81	1989-91	1996-98			
Per caput Dietary Energy Supply	kcal/day	2 070	2 100	1 750			
Per caput Dietary Protein Supply	g/day	34	33	28			

Source: derived from data extracted from FAOSTAT

* 1999 provisional

INDICATORS	UNIT	1998	INDICATORS	UNIT	1990-1998
Gross Domestic Product (GDP)	MLN US$	6 964	Annual growth rate:		
Agric. GDP as share of total GDP	percent	58	GDP	percent	-5.1
Gross National Product per caput	US$	113	Agricultural GDP	percent	2.9

Note: Agricultural GDP includes Forestry & Fisheries

Source: World Bank 2000. World Development Indicators (CD ROM)

DJIBOUTI							
INDICATORS	UNIT	1979-81	1995	1996	1997	1998	1999
Population & Agric. Labour Force							
Population	1000	282	601	610	617	623	629
Population annual growth	percent	6.6	2.0	1.5	1.1	1.0	1.0
Rural/Total Population	percent	26	18	18	18	17	17
Density	Inh/sq km	12	26	26	27	27	
Agricultural Labour Force	1000	…	…	...	…	…	…
Agric. Labour Force/Total Labour Force	percent	…	…	…	…	…	…
Land Use							
Total Land	1000 HA	2 318	2 318	2 318	2 318	2 318	
Arable Land + Permanent Crops	1000 HA	…	…	...	…	…	
Arable Land	1000 HA	…	…	...	…	…	
Irrigated Land	1000 HA	1	1	1	1	1	
Agric. Production – Major Items*							
Indigenous cattle meat	1000 MT	3	7	7	7	7	7
Indigenous goat meat	1000 MT	2	2	2	2	2	2
Indigenous sheep meat	1000 MT	2	2	2	2	2	2
Food Production *							
Food Production Index	1989-91=100	49	84	86	86	87	87
Per caput Food Production Index	1989-91=100	90	72	72	72	72	71
Foreign Trade – Exports							
Total	MLN US$	9.4	17.0	23.0	23.0	23.0	
Agricultural	MLN US$	2.8	4.8	4.8	4.8	8.3	
Major Exports (share in Agriculture)							
Cattle	percent	54.6	89.2	89.2	89.2	51.7	
Sugar refined	percent	0.0	0.0	0.0	0.0	42.1	
Crude organic materls.	percent	0.0	4.4	4.4	4.4	2.5	
Foreign Trade – Imports							
Total	MLN US$	197.1	275.0	308.0	310.0	320.0	
Agricultural	MLN US$	74.2	92.5	91.5	90.7	100.2	
Major Imports (share in Agriculture)							
Crude organic materls.	percent	20.6	18.4	18.6	18.7	17.0	
Palm oil	percent	0.0	8.0	17.5	13.8	14.0	
Sugar refined	percent	3.8	9.4	2.0	4.4	9.6	
Agricultural trade balance							
Exports-imports	MLN US$	-71.4	-87.7	-86.7	-85.9	-91.9	
Land & Inputs							
Total Population/Arable Land	Inh/HA	…	…	...	…	…	
Fertilizer use/Arable Land	kg/nutrs/HA	…	…	...	…	…	
Tractors/Arable Land	no/1000 HA	…	…	...	…	…	
Food Supply		1979-81	1989-91	1996-98			
Per caput Dietary Energy Supply	kcal/day	1 810	1 810	2 060			
Per caput Dietary Protein Supply	g/day	46	44	43			

Source: derived from data extracted from FAOSTAT

* 1999 provisional

INDICATORS	UNIT	1998	INDICATORS	UNIT	1990-1998
Gross Domestic Product (GDP)	MLN US$	500	Annual growth rate:		
Agric. GDP as share of total GDP	percent	4	GDP	percent	-2.5
Gross National Product per caput	US$	…	Agricultural GDP	percent	-0.5

Note: Agricultural GDP includes Forestry & Fisheries

Source: World Bank 2000. World Development Indicators (CD ROM)

EQUATORIAL GUINEA							
INDICATORS	UNIT	1979-81	1995	1996	1997	1998	1999
Population & Agric. Labour Force							
Population	1000	219	399	410	420	431	442
Population annual growth	percent	4.9	2.6	2.5	2.5	2.5	2.5
Rural/Total Population	percent	73	58	57	55	54	53
Density	Inh/sq km	8	14	15	15	15	
Agricultural Labour Force	1000	77	122	124	126	129	131
Agric. Labour Force/Total Labour Force	percent	78	73	72	72	72	71
Land Use							
Total Land	1000 HA	2 805	2 805	2 805	2 805	2 805	
Arable Land + Permanent Crops	1000 HA	230	230	230	230	230	
Arable Land	1000 HA	130	130	130	130	130	
Irrigated Land	1000 HA	...	...	...	...	...	
Agric. Production – Major Items*							
Cocoa beans	1000 MT	8	3	5	4	5	6
Coffee, green	1000 MT	6	5	4	3	3	4
Cassava	1000 MT	32	47	48	45	43	45
Food Production *							
Food Production Index	1989-91=100	88	89	99	91	94	100
Per caput Food Production Index	1989-91=100	141	78	85	76	77	80
Foreign Trade – Exports							
Total	MLN US$	22.6	83.7	72.0	73.0	73.0	
Agricultural	MLN US$	18.0	3.9	7.1	4.5	7.1	
Major Exports (share in Agriculture)							
Cocoa beans	percent	97.0	94.1	98.3	98.7	99.7	
Cocoa husks & shells	percent	0.0	1.3	0.3	0.4	0.3	
Foreign Trade – Imports							
Total	MLN US$	30.6	58.0	100.0	103.0	103.0	
Agricultural	MLN US$	6.8	11.3	11.7	13.7	14.8	
Major Imports (share in Agriculture)							
Chicken meat	percent	12.5	19.5	25.7	22.7	30.3	
Beer of barley	percent	0.0	17.7	21.3	18.2	16.7	
Flour of wheat	percent	3.1	9.7	5.9	16.1	15.5	
Agricultural trade balance							
Exports-imports	MLN US$	11.2	-7.4	-4.5	-9.2	-7.7	
Land & Inputs							
Total Population/Arable Land	Inh/HA	2	3	3	3	3	
Fertilizer use/Arable Land	kg/nutrs/HA	0.5	0.0	0.0	0.0	0.0	
Tractors/Arable Land	no/1000 HA	0.8	0.8	0.8	0.8	0.8	
Food Supply		1979-81	1989-91	1996-98			
Per caput Dietary Energy Supply	kcal/day	...	...	...			
Per caput Dietary Protein Supply	g/day	...	...	...			

Source: derived from data extracted from FAOSTAT

* 1999 provisional

INDICATORS	UNIT	1998	INDICATORS	UNIT	1990-1998
Gross Domestic Product (GDP)	MLN US$	456	Annual growth rate:		
Agric. GDP as share of total GDP	percent	22	GDP	percent	18.3
Gross National Product per caput	US$	1 108	Agricultural GDP	percent	7.8

Note: Agricultural GDP includes Forestry & Fisheries

Source: World Bank 2000. World Development Indicators (CD ROM)

ERITREA							
INDICATORS	UNIT	1979-81	1995	1996	1997	1998	1999
Population & Agric. Labour Force							
Population	1000		3 187	3 300	3 433	3 577	3 719
Population annual growth	percent		2.9	3.5	4.9	4.1	3.9
Rural/Total Population	percent		83	83	82	82	82
Density	Inh/sq km		32	33	34	35	
Agricultural Labour Force	1000		1 259	1 297	1 343	1 393	1 441
Agric. Labour Force/Total Labour Force	percent		79	79	78	78	78
Land Use							
Total Land	1000 HA		10 100	10 100	10 100	10 100	
Arable Land + Permanent Crops	1000 HA		440	371	393	500	
Arable Land	1000 HA		438	369	391	498	
Irrigated Land	1000 HA		22	22	22	22	
Agric. Production – Major Items*							
Sorghum	1000 MT		68	50	59	270	150
Indigenous cattle meat	1000 MT		10	11	11	11	13
Roots & Tubes NES	1000 MT		82	80	85	85	87
Food Production *							
Food Production Index	1989-91=100		110	102	105	148	127
Per caput Food Production Index	1989-91=100		99	89	88	119	98
Foreign Trade – Exports							
Total	MLN US$		80.6	81.9	85.0	85.0	
Agricultural	MLN US$		2.2	2.3	2.2	2.2	
Major Exports (share in Agriculture)							
Sesame seed	percent		93.0	86.1	90.7	90.7	
Butter of cow milk	percent		3.7	3.4	3.6	3.6	
Flour of cereals	percent		3.3	3.0	3.2	3.2	
Foreign Trade – Imports							
Total	MLN US$		403.8	482.2	500.0	500.0	
Agricultural	MLN US$		29.3	70.0	78.6	65.2	
Major Imports (share in Agriculture)							
Wheat	percent		35.8	37.1	36.9	43.6	
Cereals NES	percent		0.0	13.6	15.3	18.4	
Sugar refined	percent		11.9	7.1	10.8	7.4	
Agricultural trade balance							
Exports-imports	MLN US$		-27.2	-67.7	-76.4	-62.9	
Land & Inputs							
Total Population/Arable Land	Inh/HA		7	9	9	7	
Fertilizer use/Arable Land	kg/nutrs/HA		3.7	13.5	15.3	13.1	
Tractors/Arable Land	no/1000 HA		0.7	0.9	1.1	1.2	
Food Supply		1979-81	1989-91	1996-98			
Per caput Dietary Energy Supply	kcal/day			1 650			
Per caput Dietary Protein Supply	g/day			53			

Source: derived from data extracted from FAOSTAT

* 1999 provisional

INDICATORS	UNIT	1998	INDICATORS	UNIT	1990-1998
Gross Domestic Product (GDP)	MLN US$	650	Annual growth rate:		
Agric. GDP as share of total GDP	percent	9	GDP	percent	5.2
Gross National Product per caput	US$	201	Agricultural GDP	percent	...

Note: Agricultural GDP includes Forestry & Fisheries

Source: World Bank 2000. World Development Indicators (CD ROM)

ETHIOPIA							
INDICATORS	UNIT	1979-81	1995	1996	1997	1998	1999
Population & Agric. Labour Force							
Population	1000		55 354	56 789	58 218	59 649	61 095
Population annual growth	percent		2.6	2.6	2.5	2.4	2.4
Rural/Total Population	percent		85	84	84	83	83
Density	Inh/sq km		55	57	58	60	
Agricultural Labour Force	1000		20 607	21 010	21 403	21 788	22 170
Agric. Labour Force/Total Labour Force	percent		84	84	84	83	83
Land Use							
Total Land	1000 HA		100 000	100 000	100 000	100 000	
Arable Land + Permanent Crops	1000 HA		10 500	10 500	10 560	10 600	
Arable Land	1000 HA		9 850	9 850	9 900	9 950	
Irrigated Land	1000 HA		190	190	190	190	
Agric. Production – Major Items*							
Indigenous cattle meat	1000 MT		235	267	270	274	290
Roots & Tubers NES	1000 MT		3 200	3 300	3 394	3 400	3 450
Cereals NES	1000 MT		1 343	1 793	2 037	1 329	1 670
Food Production *							
Food Production Index	1989-91=100		108	125	126	116	123
Per caput Food Production Index	1989-91=100		94	106	104	94	97
Foreign Trade – Exports							
Total	MLN US$		422.5	438.3	588.3	568.3	
Agricultural	MLN US$		408.6	426.1	534.2	552.8	
Major Exports (share in Agriculture)							
Coffee, green	percent		67.5	65.4	71.9	68.7	
Skin dry-salted sheep	percent		8.5	9.2	8.4	8.1	
Sesame seed	percent		1.5	2.1	3.0	6..9	
Foreign Trade – Imports							
Total	MLN US$		1 142.0	1 030.9	1 100.0	1 420.0	
Agricultural	MLN US$		256.3	195.9	125.1	181.2	
Major Imports (share in Agriculture)							
Wheat	percent		51.5	38.8	27.5	44.7	
Oil of maize	percent		5.9	6.5	11.0	8.0	
Sorghum	percent		8.9	5.9	1.9	5.5	
Agricultural trade balance							
Exports-imports	MLN US$		152.3	230.2	409.1	371.5	
Land & Inputs							
Total Population/Arable Land	Inh/HA		6	6	6	6	
Fertilizer use/Arable Land	kg/nutrs/HA		13.3	18.0	13.3	16.5	
Tractors/Arable Land	no/1000 HA		0.3	0.3	0.3	0.3	
Food Supply		1979-81	1989-91	1996-98			
Per caput Dietary Energy Supply	kcal/day			1 850			
Per caput Dietary Protein Supply	g/day			54			

Source: derived from data extracted from FAOSTAT

* 1999 provisional

INDICATORS	UNIT	1998	INDICATORS	UNIT	1990-1998
Gross Domestic Product (GDP)	MLN US$	6 544	Annual growth rate:		
Agric. GDP as share of total GDP	percent	50	GDP	percent	4.8
Gross National Product per caput	US$	101	Agricultural GDP	percent	3.6

Note: Agricultural GDP includes Forestry & Fisheries

Source: World Bank 2000. World Development Indicators (CD ROM)

GAMBIA							
INDICATORS	UNIT	1979-81	1995	1996	1997	1998	1999
Population & Agric. Labour Force							
Population	1000	641	1 111	1 150	1 189	1 229	1 268
Population annual growth	percent	2.9	3.6	3.5	3.3	3.3	3.1
Rural/Total Population	percent	80	71	70	70	69	68
Density	Inh/sq km	64	111	115	119	123	
Agricultural Labour Force	1000	278	455	470	485	500	514
Agric. Labour Force/Total Labour Force	percent	84	80	80	80	80	79
Land Use							
Total Land	1000 HA	1 000	1 000	1 000	1 000	1 000	
Arable Land + Permanent Crops	1000 HA	169	185	190	200	200	
Arable Land	1000 HA	165	180	185	195	195	
Irrigated Land	1000 HA	1	2	2	2	2	
Agric. Production – Major Items*							
Groundnuts in Shell	1000 MT	79	75	46	78	73	126
Millet	1000 MT	18	54	61	66	65	76
Indigenous cattle meat	1000 MT	3	3	3	3	3	3
Food Production *							
Food Production Index	1989-91=100	83	88	70	92	91	129
Per caput Food Production Index	1989-91=100	118	72	56	71	68	93
Foreign Trade – Exports							
Total	MLN US$	41.2	22.8	30.0	22.0	40.0	
Agricultural	MLN US$	26.0	15.5	16.0	11.3	11.5	
Major Exports (share in Agriculture)							
Groundnuts shelled	percent	57.8	57.4	55.9	44.2	42.8	
Oil of groundnuts	percent	30.9	12.2	11.9	16.8	15.7	
Cake of groundnuts	percent	9.5	8.7	8.3	11.5	11.3	
Foreign Trade – Imports							
Total	MLN US$	141.2	245.4	239.0	252.0	245.0	
Agricultural	MLN US$	37.4	2.9	77.5	84.1	96.0	
Major Imports (share in Agriculture)							
Oil of soya beans	percent	0.0	0.4	0.7	7.7	24.0	
Milled paddy rice	percent	16.8	28.4	29..6	21.9	19.2	
Sugar refined	percent	15.9.	19.5	15.5	23.8	11.5	
Agricultural trade balance							
Exports-imports	MLN US$	-11.4	-67.4	-61.6	-72.8	-84.5	
Land & Inputs							
Total Population/Arable Land	Inh/HA	4	6	6	6	6	
Fertilizer use/Arable Land	kg/nutrs/HA	13.4	5.2	4.4	5.6	7.7	
Tractors/Arable Land	no/1000 HA	0.3	0.3	0.2	0.2	0.2	
Food Supply		1979-81	1989-91	1996-98			
Per caput Dietary Energy Supply	kcal/day	1 800	2 440	2 520			
Per caput Dietary Protein Supply	g/day	44	52	53			

Source: derived from data extracted from FAOSTAT

* 1999 provisional

INDICATORS	UNIT	1998	INDICATORS	UNIT	1990-1998
Gross Domestic Product (GDP)	MLN US$	416	Annual growth rate:		
Agric. GDP as share of total GDP	percent	27	GDP	percent	2.4
Gross National Product per caput	US$	336	Agricultural GDP	percent	0.4

Note: Agricultural GDP includes Forestry & Fisheries

Source: World Bank 2000. World Development Indicators (CD ROM)

GUINEA							
INDICATORS	UNIT	1979-81	1995	1996	1997	1998	1999
Population & Agric. Labour Force							
Population	1000	4 465	7 153	7 275	7 325	7 337	7 360
Population annual growth	percent	1.8	3.0	1.7	0.7	0.2	0.3
Rural/Total Population	percent	81	71	70	69	69	68
Density	Inh/sq km	18	29	30	30	30	
Agricultural Labour Force	1000	2 083	3 032	3 078	3 093	3 091	3 094
Agric. Labour Force/Total Labour Force	percent	91	86	85	85	85	84
Land Use							
Total Land	1000 HA	24 572	24 572	24 572	24 572	24 572	
Arable Land + Permanent Crops	1000 HA	1 146	1 483	1 485	1 485	1 485	
Arable Land	1000 HA	705	883	885	885	885	
Irrigated Land	1000 HA	90	93	95	95	95	
Agric. Production – Major Items*							
Rice, paddy	1000 MT	438	631	673	716	764	750
Groundnuts in Shell	1000 MT	83	132	145	158	174	174
Cassava	1000 MT	480	601	667	732	812	812
Food Production *							
Food Production Index	1989-91=100	96	128	132	137	144	143
Per caput Food Production Index	1989-91=100	125	103	105	108	113	112
Foreign Trade – Exports							
Total	MLN US$	386.6	650.0	758.8	730.0	800.0	
Agricultural	MLN US$	30.7	61.1	43.3	48.0	40.1	
Major Exports (share in Agriculture)							
Coffee, green	percent	27.1	50. 8	31.9	47.9	34.9	
Cattle	percent	29.8	16.4	23.1	29.8	24.9	
Cotton lint	percent	0.0	19.6	23.9	15.0	19.2	
Foreign Trade – Imports							
Total	MLN US$	308.5	750.0	858..6	1 000.0	1 090.0	
Agricultural	MLN US$	57.4	210.7	205.1	194.6	185.6	
Major Imports (share in Agriculture)							
Milled paddy rice	percent	62.8	40.7	27.7	25.7	20.9	
Sugar reefed	percent	4.6	9.6	9.8	16.4	18.0	
Flour of wheat	percent	11.2	10.4	7.3	12.8	15.2	
Agricultural trade balance							
Exports-imports	MLN US$	-26.7	-149.7	-161.8	-146.5	-145.4	
Land & Inputs							
Total Population/Arable Land	Inh/HA	6	8	8	8	8	
Fertilizer use/Arable Land	kg/nutrs/HA	1.6	5.8	4.8	2.0	3.7	
Tractors/Arable Land	no/1000 HA	0.2	0.6	0.6	0.6	0.6	
Food Supply		1979-81	1989-91	1996-98			
Per caput Dietary Energy Supply	kcal/day	2 270	2 050	2 310			
Per caput Dietary Protein Supply	g/day	50	47	49			

Source: derived from data extracted from FAOSTAT

* 1999 provisional

INDICATORS	UNIT	1998	INDICATORS	UNIT	1990-1998
Gross Domestic Product (GDP)	MLN US$	3 598	Annual growth rate:		
Agric. GDP as share of total GDP	percent	22	GDP	percent	4.2
Gross National Product per caput	US$	533	Agricultural GDP	percent	4.4

Note: Agricultural GDP includes Forestry & Fisheries

Source: World Bank 2000. World Development Indicators (CD ROM)

GUINEA-BISSAU							
INDICATORS	UNIT	1979-81	1995	1996	1997	1998	1999
Population & Agric. Labour Force							
Population	1000	793	1 086	1 111	1 136	1 161	1 187
Population annual growth	percent	3.3	2.2	2.3	2.2	2.2	2.2
Rural/Total Population	percent	83	78	78	77	77	77
Density	Inh/sq km	28	39	40	40	41	
Agricultural Labour Force	1000	347	428	435	442	450	457
Agric. Labour Force/Total Labour Force	percent	88	84	84	84	83	83
Land Use							
Total Land	1000 HA	2 812	2 812	2 812	2 812	2 812	
Arable Land + Permanent Crops	1000 HA	286	345	348	350	350	
Arable Land	1000 HA	256	300	300	300	300	
Irrigated Land	1000 HA	17	17	17	17	17	
Agric. Production – Major Items*							
Cashew nuts	1000 MT	4	37	38	38	38	38
Rice, paddy	1000 MT	54	133	120	125	130	130
Indigenous pigmeat	1000 MT	8	10	10	10	10	10
Food Production *							
Food Production Index	1989-91=100	68	118	115	118	120	120
Per caput Food Production Index	1989-91=100	84	105	101	101	100	98
Foreign Trade – Exports							
Total	MLN US$	13.7	31.0	21.5	48.6	26.8	
Agricultural	MLN US$	7.9	21.5	22.5	21.6	21.9	
Major Exports (share in Agriculture)							
Cashew nuts	percent	9.5	92.5	88.2	91.8	90.9	
Cotton lint	percent	5.5	6.0	8.9	6.0	5.9	
Palm kernels	percent	32.3	0.5	1.3	0.5	1.4	
Foreign Trade – Imports							
Total	MLN US$	57.2	66.4	63.0	73.3	55.0	
Agricultural	MLN US$	16.8	31.9	36.6	37.3	34.1	
Major Imports (share in Agriculture)							
Milled paddy rice	percent	46.9	56.4	54.6	53.6	58.7	
Beer of barley	percent	0.0	6.9	5.5	5.4	5.9	
Wine	percent	2.5	4.7	4.9	4.8	5.3	
Agricultural trade balance							
Exports-imports	MLN US$	-9.0	-10.4	-14.1	-15.7	-12.2	
Land & Inputs							
Total Population/Arable Land	Inh/HA	3	4	4	4	4	
Fertilizer use/Arable Land	kg/nutrs/HA	2.4	1.0	1.0	1.0	2.0	
Tractors/Arable Land	no/1000 HA	0.1	0.1	0.1	0.1	0.1	
Food Supply		1979-81	1989-91	1996-98			
Per caput Dietary Energy Supply	kcal/day	2 010	2 400	2 420			
Per caput Dietary Protein Supply	g/day	42	48	47			

Source: derived from data extracted from FAOSTAT

* 1999 provisional

INDICATORS	UNIT	1998	INDICATORS	UNIT	1990-1998
Gross Domestic Product (GDP)	MLN US$	206	Annual growth rate:		
Agric. GDP as share of total GDP	percent	62	GDP	percent	1.1
Gross National Product per caput	US$	158	Agricultural GDP	percent	4.0

Note: Agricultural GDP includes Forestry & Fisheries

Source: World Bank 2000. World Development Indicators (CD ROM)

HAITI							
INDICATORS	UNIT	1979-81	1995	1996	1997	1998	1999
Population & Agric. Labour Force							
Population	1000	5 456	7 560	7 689	7 820	7 952	8 087
Population annual growth	percent	2.2	1.7	1.7	1.7	1.7	1.7
Rural/Total Population	percent	76	68	68	67	66	66
Density	Inh/sq km	198	274	279	284	289	
Agricultural Labour Force	1000	1 799	2 097	2 121	2 144	2 168	2 191
Agric. Labour Force/Total Labour Force	percent	71	65	65	64	63	63
Land Use							
Total Land	1000 HA	2 756	2 756	2 756	2 756	2 756	
Arable Land + Permanent Crops	1000 HA	890	910	910	910	910	
Arable Land	1000 HA	546	560	560	560	560	
Irrigated Land	1000 HA	70	75	75	75	75	
Agric. Production – Major Items*							
Indigenous cattle meat	1000 MT	25	24	28	28	31	31
Mangoes	1000 MT	325	220	210	210	225	225
Bananas	1000 MT	217	235	239	250	288	290
Food Production *							
Food Production Index	1989-91=100	101	89	93	96	95	96
Per caput Food Production Index	1989-91=100	128	81	83	85	82	82
Foreign Trade – Exports							
Total	MLN US$	176.4	169.0	110.0	120.0	175.0	
Agricultural	MLN US$	70.9	33.0	26.9	25.8	25.3	
Major Exports (share in Agriculture)							
Coffee, green	percent	76.6	66.7	63.2	46.5	47.5	
Cocoa beans	percent	6.9	8.6	10.8	17.8	18.2	
Mangoes	percent	1.3	11.8	14.5	29.2	25.3	
Foreign Trade – Imports							
Total	MLN US$	356.1	652.0	665.0	648.0	797.0	
Agricultural	MLN US$	113.2	365.8	301.2	301.1	273.9	
Major Imports (share in Agriculture)							
Milled paddy rice	percent	6.2	19.4	23.2	25.2	23.0	
Flour of wheat	percent	7.2	12.6	19.6	15.6	16.8	
Oil of soya beans	percent	13.0	12.0	4.4	12.0	9.5	
Agricultural trade balance							
Exports-imports	MLN US$	-42.3	-332.8	-274.3	-275.3	-248.7	
Land & Inputs							
Total Population/Arable Land	Inh/HA	10	14	14	14	14	
Fertilizer use/Arable Land	kg/nutrs/HA	6.2	13.2	12.5	22.4	14.4	
Tractors/Arable Land	no/1000 HA	0.3	0.3	0.2	0.2	0.3	
Food Supply		1979-81	1989-91	1996-98			
Per caput Dietary Energy Supply	kcal/day	2 040	1 770	1 840			
Per caput Dietary Protein Supply	g/day	48	44	42			

Source: derived from data extracted from FAOSTAT

* 1999 provisional

INDICATORS	UNIT	1998	INDICATORS	UNIT	1990-1998
Gross Domestic Product (GDP)	MLN US$	3 871	Annual growth rate:		
Agric. GDP as share of total GDP	percent	30	GDP	percent	-1.7
Gross National Product per caput	US$	414	Agricultural GDP	percent	-4.3

Note: Agricultural GDP includes Forestry & Fisheries

Source: World Bank 2000. World Development Indicators (CD ROM)

KIRIBATI							
INDICATORS	UNIT	1979-81	1995	1996	1997	1998	1999
Population & Agric. Labour Force							
Population	1000	61	78	79	80	81	82
Population annual growth	percent	1.9	1.4	1.4	1.4	1.4	1.4
Rural/Total Population	percent	69	64	63	64	63	63
Density	Inh/sq km	84	106	108	108	111	
Agricultural Labour Force	1000	…	…	…	…	…	…
Agric. Labour Force/Total Labour Force	percent	…	…	…	…	…	…
Land Use							
Total Land	1000 HA	73	73	73	73	73	
Arable Land + Permanent Crops	1000 HA	36	37	37	37	37	
Arable Land	1000 HA	…	…	…	…	…	…
Irrigated Land	1000 HA	…	…	…	…	…	…
Agric. Production – Major Items*							
Coconuts	1000 MT	72	81	85	85	85	85
Roots & Tubers NES	1000 MT	7	6	7	7	7	7
Indigenous pigmeat	1000 MT	1	1	1	1	1	1
Food Production *							
Food Production Index	1989-91=100	98	109	114	114	114	114
Per caput Food Production Index	1989-91=100	116	101	104	102	101	100
Foreign Trade – Exports							
Total	MLN US$	10.6	7.4	5.3	6.3	6.5	
Agricultural	MLN US$	3.0	11.6	9.7	9.9	9.3	
Major Exports (share in Agriculture)							
Mangoes	percent	0.0	59.4	71.0	69.7	74.2	
Copra	percent	100.0	40.6	29.0	30.3	25.8	
Foreign Trade – Imports							
Total	MLN US$	21.5	35.3	38.0	39.1	40.0	
Agricultural	MLN US$	7.0	18.4	15.3	12.9	13.1	
Major Imports (share in Agriculture)							
Tobacco products NES	percent	8.8	7.5	6.2	5.8	18.0	
Milled paddy rice	percent	18.0	10.6	16.4	14.6	14.5	
Beef preparations	percent	12.1	9.9	9.9	8.7	6.2	
Agricultural trade balance							
Exports-imports	MLN US$	-4.0	-6.7	-5.6	-3.0	-3.8	
Land & Inputs							
Total Population/Arable Land	Inh/HA	…	…	…	…	…	…
Fertilizer use/Arable Land	kg/nutrs/HA	…	…	…	…	…	…
Tractors/Arable Land	no/1000 HA	…	…	…	…	…	…
Food Supply		1979-81	1989-91	1996-98			
Per caput Dietary Energy Supply	kcal/day	2 600	2 580	2 920			
Per caput Dietary Protein Supply	g/day	62	64	71			

Source: derived from data extracted from FAOSTAT
* 1999 provisional

INDICATORS	UNIT	1998	INDICATORS	UNIT	1990-1998
Gross Domestic Product (GDP)	MLN US$	45	Annual growth rate:		
Agric. GDP as share of total GDP	percent	21	GDP	percent	3.1
Gross National Product per caput	US$	1 174	Agricultural GDP	percent	-0.4

Note: Agricultural GDP includes Forestry & Fisheries
Source: World Bank 2000. World Development Indicators (CD ROM)

LAO PDR							
INDICATORS	UNIT	1979-81	1995	1996	1997	1998	1999
Population & Agric. Labour Force							
Population	1000	3 209	4 773	4 902	5 032	5 163	5 297
Population annual growth	percent	1.6	2.7	2.7	2.6	2.6	2.6
Rural/Total Population	percent	87	79	79	78	78	77
Density	Inh/sq km	14	21	21	22	22	
Agricultural Labour Force	1000	1 316	1 816	1 858	1 900	1 942	1 985
Agric. Labour Force/Total Labour Force	percent	80	77	77	77	77	77
Land Use							
Total Land	1000 HA	23 080	23 080	23 080	23 080	23 080	
Arable Land + Permanent Crops	1000 HA	693	850	852	852	852	
Arable Land	1000 HA	673	800	800	800	800	
Irrigated Land	1000 HA	107	155	156	164	164	
Agric. Production – Major Items*							
Rice, paddy	1000 MT	1 025	1 418	1 414	1 660	1 675	2 103
Indigenous cattle meat	1000 MT	3	19	17	19	20	25
Indigenous pigmeat	1000 MT	17	30	31	32	33	33
Food Production *							
Food Production Index	1989-91=100	71	114	116	130	135	156
Per caput Food Production Index	1989-91=100	91	99	98	107	108	122
Foreign Trade – Exports							
Total	MLN US$	21.2	372.6	325.9	359.0	370.0	
Agricultural	MLN US$	1.4	72.0	56.5	59.4	60.4	
Major Exports (share in Agriculture)							
Cattle	percent	0.0	27.8	35.4	33.7	33.1	
Buffaloes	percent	0.0	24.7	31.5	30.0	29.5	
Coffee, green	percent	99.9	34.9	23.2	27.9	28.2	
Foreign Trade – Imports							
Total	MLN US$	90.7	697.7	689.5	706.0	553.0	
Agricultural	MLN US$	31.6	22.0	27.9	33.1	50.8	
Major Imports (share in Agriculture)							
Milled paddy rice	percent	74.4	23.7	33.3	46.6	72.4	
Whole milk, condensed	percent	0.0	23.2	18.3	15.4	11.5	
Sugar refined	percent	5.3	32.8	27.6	24.2	8.1	
Agricultural trade balance							
Exports-imports	MLN US$	-30.2	50.0	28.6	26.3	9.5	
Land & Inputs							
Total Population/Arable Land	Inh/HA	5	6	6	6	6	
Fertilizer use/Arable Land	kg/nutrs/HA	4.0	7.7	4.8	9.7	12.7	
Tractors/Arable Land	no/1000 HA	0.8	1.1	1.1	1.1	1.1	
Food Supply		1979-81	1989-91	1996-98			
Per caput Dietary Energy Supply	kcal/day	2 080	2 090	2 120			
Per caput Dietary Protein Supply	g/day	51	50	52			

Source: derived from data extracted from FAOSTAT

* 1999 provisional

INDICATORS	UNIT	1998	INDICATORS	UNIT	1990-1998
Gross Domestic Product (GDP)	MLN US$	1 2661	Annual growth rate:		
Agric. GDP as share of total GDP	percent	53	GDP	percent	6.6
Gross National Product per caput	US$	318	Agricultural GDP	percent	4.6

Note: Agricultural GDP includes Forestry & Fisheries

Source: World Bank 2000. World Development Indicators (CD ROM)

LESOTHO							
INDICATORS	UNIT	1979-81	1995	1996	1997	1998	1999
Population & Agric. Labour Force							
Population	1000	1 346	1 926	1 970	2 016	2 062	2 108
Population annual growth	percent	2.6	2.2	2.3	2.3	2.3	2.2
Rural/Total Population	percent	87	76	75	75	74	73
Density	Inh/sq km	44	63	65	66	68	
Agricultural Labour Force	1000	228	313	319	325	331	337
Agric. Labour Force/Total Labour Force	percent	40	39	39	39	38	38
Land Use							
Total Land	1000 HA	3 035	3 035	3 035	3 035	3 035	
Arable Land + Permanent Crops	1000 HA	298	320	322	325	325	
Arable Land	1000 HA	298	320	322	325	325	
Irrigated Land	1000 HA	1	1	1	1	1	
Agric. Production – Major Items*							
Indigenous cattle meat	1000 MT	11	12	11	14	14	11
Maize	1000 MT	112	63	188	142	119	125
Roots & Tubers NES	1000 MT	17	70	70	75	80	85
Food Production *							
Food Production Index	1989-91=100	89	90	111	116	87	101
Per caput Food Production Index	1989-91=100	114	80	97	99	81	83
Foreign Trade – Exports							
Total	MLN US$	52.0	160.2	190.0	196.2	193.9	
Agricultural	MLN US$	14.9	12.0	9.5	9.3	9.2	
Major Exports (share in Agriculture)							
Wool, greasy	percent	32.3	63.0	48.6	55.1	55.7	
Food wastes	percent	4.8	9.2	11.8	11.8	12.0	
Hair fine animal	percent	22.9	11.9	23.0	11.3	11.4	
Foreign Trade – Imports							
Total	MLN US$	456.5	1 102.5	1 126.9	1 188.2	945.0	
Agricultural	MLN US$	107.2	175.0	170.3	170.3	170.3	
Major Imports (share in Agriculture)							
Flour of maize	percent	13.2	16.0	16.4	16.4	16.4	
Maize	percent	5.3	15.3	13.5	13.5	13.5	
Cabbages	percent	0.0	5.7	5.9	5.9	5.9	
Agricultural trade balance							
Exports-imports	MLN US$	-92.3	-163.0	-160.8	-161.0	-161.1	
Land & Inputs							
Total Population/Arable Land	Inh/HA	5	6	6	6	6	
Fertilizer use/Arable Land	kg/nutrs/HA	15.0	18.5	18.9	17.2	18.5	
Tractors/Arable Land	no/1000 HA	4.7	6.3	6.2	6.2	6.2	
Food Supply		1979-81	1989-91	1996-98			
Per caput Dietary Energy Supply	kcal/day	2 250	2 220	2 230			
Per caput Dietary Protein Supply	g/day	66	63	62			

Source: derived from data extracted from FAOSTAT

* 1999 provisional

INDICATORS	UNIT	1998	INDICATORS	UNIT	1990-1998
Gross Domestic Product (GDP)	MLN US$	792	Annual growth rate:		
Agric. GDP as share of total GDP	percent	11	GDP	percent	7.2
Gross National Product per caput	US$	567	Agricultural GDP	percent	6.0

Note: Agricultural GDP includes Forestry & Fisheries

Source: World Bank 2000. World Development Indicators (CD ROM)

LIBERIA							
INDICATORS	UNIT	1979-81	1995	1996	1997	1998	1999
Population & Agric. Labour Force							
Population	1000	1 876	2 090	2 198	2 402	2 666	2 930
Population annual growth	percent	3.0	-0.4	5.0	8.9	10.4	9.4
Rural/Total Population	percent	65	55	54	54	53	53
Density	Inh/sq km	19	22	23	25	28	
Agricultural Labour Force	1000	603	592	620	675	747	817
Agric. Labour Force/Total Labour Force	percent	76	70	70	69	69	68
Land Use							
Total Land	1000 HA	9 632	9 632	9 632	9 632	9 632	
Arable Land + Permanent Crops	1000 HA	371	390	390	390	390	
Arable Land	1000 HA	126	190	190	190	190	
Irrigated Land	1000 HA	2	3	3	3	3	
Agric. Production – Major Items*							
Rice, paddy	1000 MT	254	56	94	168	210	210
Cassava	1000 MT	300	175	213	283	313	313
Natural rubber	1000 MT	81	13	25	52	35	35
Food Production *							
Food Production Index	1989-91=100	98	72	78	93	101	101
Per caput Food Production Index	1989-91=100	134	89	90	99	97	88
Foreign Trade – Exports							
Total	MLN US$	55.4	400.0	512.0	500.0	500.0	
Agricultural	MLN US$	135.6	12.9	24.6	45.2	13.3	
Major Exports (share in Agriculture)							
Rubber natural dry	percent	68.0	87.2	89.6	95.2	82.8	
Palm oil	percent	1.7	11.7	6.1	3.3	12.0	
Cocoa beans	percent	8.7	0.3	3.9	1.3	4.4	
Foreign Trade – Imports							
Total	MLN US$	505.9	350.0	405.0	400.0	400.0	
Agricultural	MLN US$	97.3	91.8	84.9	75.3	83.3	
Major Imports (share in Agriculture)							
Milled paddy rice	percent	34.9	21.8	16.5	5.3	15.6	
Flour of wheat	percent	0.5	7.5	11.9	5.3	9.8	
Wheat	percent	4.4	10.8	17.7	15.1	9.2	
Agricultural trade balance							
Exports-imports	MLN US$	38.3	-78.9	-60.4	-30.1	-70.0	
Land & Inputs							
Total Population/Arable Land	Inh/HA	15	11	12	13	14	
Fertilizer use/Arable Land	kg/nutrs/HA	36.3	0.0	0.0	0.0	0.0	
Tractors/Arable Land	no/1000 HA	2.4	1.7	1.7	1.7	1.7	
Food Supply		1979-81	1989-91	1996-98			
Per caput Dietary Energy Supply	kcal/day	2 520	2 120	2 000			
Per caput Dietary Protein Supply	g/day	49	38	37			

Source: derived from data extracted from FAOSTAT

* 1999 provisional

INDICATORS	UNIT	1998	INDICATORS	UNIT	1990-1998
Gross Domestic Product (GDP)	MLN US$	…	Annual growth rate:		
Agric. GDP as share of total GDP	percent	…	GDP	percent	…
Gross National Product per caput	US$	…	Agricultural GDP	percent	…

Note: Agricultural GDP includes Forestry & Fisheries

Source: World Bank 2000. World Development Indicators (CD ROM)

MADAGASCAR							
INDICATORS	UNIT	1979-81	1995	1996	1997	1998	1999
Population & Agric. Labour Force							
Population	1000	8 876	13 744	14 183	14 620	15 057	15 497
Population annual growth	percent	2.6	3.3	3.1	3.0	2.9	2.9
Rural/Total Population	percent	82	74	73	72	72	71
Density	Inh/sq km	15	24	24	25	26	
Agricultural Labour Force	1000	3 616	5 169	5 280	5 388	5 492	5 594
Agric. Labour Force/Total Labour Force	percent	82	76	76	76	75	75
Land Use							
Total Land	1000 HA	58 154	58 154	58 154	58 154	58 154	
Arable Land + Permanent Crops	1000 HA	3 000	3 105	3 105	3 108	3 108	
Arable Land	1000 HA	2 495	2 565	2 565	2 565	2 565	
Irrigated Land	1000 HA	646	1 087	1 087	1 090	1 090	
Agric. Production – Major Items*							
Rice, paddy	1000 MT	2 055	2 450	2 500	2 558	2 447	2 637
Indigenous cattle meat	1000 MT	132	146	147	147	148	149
Cassava	1000 MT	1 641	2 400	2 353	2 418	2 404	2 435
Food Production *							
Food Production Index	1989-91=100	84	107	109	111	111	114
Per caput Food Production Index	1989-91=100	111	91	89	89	85	85
Foreign Trade – Exports							
Total	MLN US$	366.0	368.8	300.3	224.4	257.6	
Agricultural	MLN US$	303.4	199.9	137.9	91.6	85.2	
Major Exports (share in Agriculture)							
Coffee, green	percent	55.6	40.7	41.6	35.8	47.3	
Cloves, whole & stems	percent	18.4	5.5	4.1	13.4	10.8	
Vanilla	percent	6.7	16.7	8.6	10.5	8.4	
Foreign Trade – Imports							
Total	MLN US$	576.8	548.5	507.9	471.3	513.4	
Agricultural	MLN US$	103.1	86.7	66.2	88.0	79.4	
Major Imports (share in Agriculture)							
Milled paddy rice	percent	47.1	18.6	8.6	13.9	20.7	
Wheat	percent	0.0	14.3	21.7	3.9	19.7	
Oil of soya beans	percent	0.0	3.4	6.1	18.8	8.9	
Agricultural trade balance							
Exports-imports	MLN US$	200.3	113.2	71.7	3.6	5.8	
Land & Inputs							
Total Population/Arable Land	Inh/HA	4	5	6	6	6	
Fertilizer use/Arable Land	kg/nutrs/HA	3.1	4.9	6.5	3.7	3.4	
Tractors/Arable Land	no/1000 HA	1.1	1.4	1.4	1.4	1.4	
Food Supply		1979-81	1989-91	1996-98			
Per caput Dietary Energy Supply	kcal/day	2 420	2 160	2 010			
Per caput Dietary Protein Supply	g/day	58	51	47			

Source: derived from data extracted from FAOSTAT

* 1999 provisional

INDICATORS	UNIT	1998	INDICATORS	UNIT	1990-1998
Gross Domestic Product (GDP)	MLN US$	3 749	Annual growth rate:		
Agric. GDP as share of total GDP	percent	31	GDP	percent	1.3
Gross National Product per caput	US$	256	Agricultural GDP	percent	1.5

Note: Agricultural GDP includes Forestry & Fisheries

Source: World Bank 2000. World Development Indicators (CD ROM)

MALAWI							
INDICATORS	UNIT	1979-81	1995	1996	1997	1998	1999
Population & Agric. Labour Force							
Population	1000	6 178	9 670	9 835	10 067	10 346	10 640
Population annual growth	percent	2.9	0.8	1.7	2.3	2.7	2.8
Rural/Total Population	percent	91	87	86	86	85	85
Density	Inh/sq km	66	103	105	107	110	
Agricultural Labour Force	1000	2 718	3 960	3 996	4 059	4 138	4 222
Agric. Labour Force/Total Labour Force	percent	87	85	84	84	84	83
Land Use							
Total Land	1000 HA	9 408	9 408	9 408	9 408	9 408	
Arable Land + Permanent Crops	1000 HA	1 600	2 000	2 000	2 000	2 000	
Arable Land	1000 HA	1 518	1 875	1 875	1 875	1 875	
Irrigated Land	1000 HA	18	28	28	28	28	
Agric. Production – Major Items*							
Maize	1000 MT	1 275	1 661	1 793	1 226	1 772	2 480
Tobacco leaves	1000 MT	53	129	142	158	125	113
Pigeon peas	1000 MT	84	98	99	98	99	100
Food Production *							
Food Production Index	1989-91=100	91	105	112	101	116	131
Per caput Food Production Index	1989-91=100	137	101	106	93	104	114
Foreign Trade – Exports							
Total	MLN US$	259.9	439.8	517.1	568.8	460.0	
Agricultural	MLN US$	232.4	389.4	386.2	396.8	372.7	
Major Exports (share in Agriculture)							
Tobacco leaves	percent	51.7	75.4	77.4	74.8	68.4	
Tea	percent	15.6	6.8	6.6	12.2	13.7	
Sugar (centrifugal, raw)	percent	16.6	4.1	8.3	5.8	10.2	
Foreign Trade – Imports							
Total	MLN US$	395.7	511.5	623.3	580.2	530.0	
Agricultural	MLN US$	32.5	98.2	78.8	61.0	61.0	
Major Imports (share in Agriculture)							
Maize	percent	12.6	57.0	35.5	4.9	26.2	
Tobacco leaves	percent	4.7	0.9	11.4	14.8	8.7	
Sugar (centrifugal, raw)	percent	1.0	0.0	0.0	1.0	8.2	
Agricultural trade balance							
Exports-imports	MLN US$	199.9	291.2	307.3	335.8	311.7	
Land & Inputs							
Total Population/Arable Land	Inh/HA	4	5	5	5	6	
Fertilizer use/Arable Land	kg/nutrs/HA	20.3	23.2	31.0	30.3	26.8	
Tractors/Arable Land	no/1000 HA	0.8	0.8	0.8	0.8	0.8	
Food Supply		1979-81	1989-91	1996-98			
Per caput Dietary Energy Supply	kcal/day	2 270	1 960	2 170			
Per caput Dietary Protein Supply	g/day	66	54	55			

Source: derived from data extracted from FAOSTAT

* 1999 provisional

INDICATORS	UNIT	1998	INDICATORS	UNIT	1990-1998
Gross Domestic Product (GDP)	MLN US$	1 688	Annual growth rate:		
Agric. GDP as share of total GDP	percent	36	GDP	percent	3.8
Gross National Product per caput	US$	206	Agricultural GDP	percent	8.9

Note: Agricultural GDP includes Forestry & Fisheries

Source: World Bank 2000. World Development Indicators (CD ROM)

MALDIVES							
INDICATORS	UNIT	1979-81	1995	1996	1997	1998	1999
Population & Agric. Labour Force							
Population	1000	158	249	256	263	271	278
Population annual growth	percent	2.9	2.8	2.8	2..8	2.8	2.8
Rural/Total Population	percent	78	73	73	73	72	72
Density	Inh/sq km	527	830	854	878	903	
Agricultural Labour Force	1000	37	28	28	28	28	28
Agric. Labour Force/Total Labour Force	percent	50	27	26	25	24	24
Land Use							
Total Land	1000 HA	30	30	30	30	30	
Arable Land + Permanent Crops	1000 HA	3	3	3	3	3	
Arable Land	1000 HA	1	1	1	1	1	
Irrigated Land	1000 HA	...	...	...	...	...	...
Agric. Production – Major Items*							
Vegetables fresh NES	1000 MT	15	24	24	25	25	25
Nuts NES	1000 MT	1	2	2	2	2	2
Fruit fresh NES	1000 MT	7	8	8	9	9	9
Food Production *							
Food Production Index	1989-91=100	78	113	112	115	115	115
Per caput Food Production Index	1989-91=100	107	98	95	95	92	89
Foreign Trade – Exports							
Total	MLN US$	7.0	50.0	59.2	73.0	76.0	
Agricultural	MLN US$	0.0	0.0	0.0	0.0	0.0	
Major Exports (share in Agriculture)							
Foreign Trade – Imports							
Total	MLN US$	24.5	268.0	300.4	349.0	354.0	
Agricultural	MLN US$	8.1	57.9	62.9	55.6	55.6	
Major Imports (share in Agriculture)							
Milled paddy rice	percent	39.4	5.6	9.2	10.4	10.4	
Cigarettes	percent	0.0	7.6	8.3	9.3	9.3	
Dry whole cow milk	percent	0.0	7.7	8.6	8.3	9.0	
Agricultural trade balance							
Exports-imports	MLN US$	-8.0	-57.9	-62.9	-55.6	-55.6	
Land & Inputs							
Total Population/Arable Land	Inh/HA	...	...	...	...	...	
Fertilizer use/Arable Land	kg/nutrs/HA	...	...	...	...	...	
Tractors/Arable Land	no/1000 HA	...	...	...	...	...	
Food Supply		1979-81	1989-91	1996-98			
Per caput Dietary Energy Supply	kcal/day	2 160	2 370	2 470			
Per caput Dietary Protein Supply	g/day	69	78	93			

Source: derived from data extracted from FAOSTAT

* 1999 provisional

INDICATORS	UNIT	1998	INDICATORS	UNIT	1990-1998
Gross Domestic Product (GDP)	MLN US$	368	Annual growth rate:		
Agric. GDP as share of total GDP	percent	16	GDP	percent	6.6
Gross National Product per caput	US$	1 127	Agricultural GDP	percent	-2.7

Note: Agricultural GDP includes Forestry & Fisheries

Source: World Bank 2000. World Development Indicators (CD ROM)

MALI							
INDICATORS	UNIT	1979-81	1995	1996	1997	1998	1999
Population & Agric. Labour Force							
Population	1000	6 871	9 944	10 186	10 436	10 694	10 960
Population annual growth	percent	2.6	2.4	2.4	2.4	2.4	2.5
Rural/Total Population	percent	82	73	73	72	71	71
Density	Inh/sq km	6	8	8	9	9	
Agricultural Labour Force	1000	3 149	4 121	4 187	4 253	4 321	4 390
Agric. Labour Force/Total Labour Force	percent	89	84	83	83	82	82
Land Use							
Total Land	1000 HA	122 019	122 019	122 019	122 019	122 019	
Arable Land + Permanent Crops	1000 HA	2 051	3 419	4 650	4 650	4 650	
Arable Land	1000 HA	2 011	3 379	4 606	4 606	4 606	
Irrigated Land	1000 HA	92	138	138	138	138	
Agric. Production – Major Items*							
Cotton lint	1000 MT	48	128	169	190	218	218
Indigenous cattle meat	1000 MT	89	113	116	116	121	121
Rice, paddy	1000 MT	169	469	463	576	589	589
Food Production *							
Food Production Index	1989-91=100	78	117	113	114	119	119
Per caput Food Production Index	1989-91=100	100	104	98	96	98	96
Foreign Trade – Exports							
Total	MLN US$	200.7	442.1	439.5	561.5	556.2	
Agricultural	MLN US$	182.8	269.6	311.9	271.1	242.9	
Major Exports (share in Agriculture)							
Cotton lint	percent	36.1	57.9	63.8	57.5	53.5	
Cattle	percent	44.8	27.8	24.0	27.7	30.9	
Sheep	percent	7.0	6.5	5.6	6.5	7.2	
Foreign Trade – Imports							
Total	MLN US$	395.9	773.0	768.0	689.0	750.0	
Agricultural	MLN US$	59.5	113.4	95.7	87.6	104.8	
Major Imports (share in Agriculture)							
Sugar refined	percent	19.1	20.3	216.2	183.6	138.1	
Milled paddy rice	percent	29.1	14.1	10.4	18.3	15.3	
Tea	percent	5.1	15.0	8.6	6.4	12.4	
Agricultural trade balance							
Exports-imports	MLN US$	123.3	156.2	8.6	6.4	12.4	
Land & Inputs							
Total Population/Arable Land	Inh/HA	3	3	2	2	2	
Fertilizer use/Arable Land	kg/nutrs/HA	6.1	8.0	5.9	10.4	11.4	
Tractors/Arable Land	no/1000 HA	0.5	0.7	0.5	0.6	0.6	
Food Supply		1979-81	1989-91	1996-98			
Per caput Dietary Energy Supply	kcal/day	1 760	2 270	2 150			
Per caput Dietary Protein Supply	g/day	53	63	64			

Source: derived from data extracted from FAOSTAT

* 1999 provisional

INDICATORS	UNIT	1998	INDICATORS	UNIT	1990-1998
Gross Domestic Product (GDP)	MLN US$	2 695	Annual growth rate:		
Agric. GDP as share of total GDP	percent	47	GDP	percent	3.7
Gross National Product per caput	US$	250	Agricultural GDP	percent	3.3

Note: Agricultural GDP includes Forestry & Fisheries

Source: World Bank 2000. World Development Indicators (CD ROM)

MAURITANIA							
INDICATORS	UNIT	1979-81	1995	1996	1997	1998	1999
Population & Agric. Labour Force							
Population	1000	1 551	2 329	2 394	2 461	2 529	2 598
Population annual growth	percent	2.5	2.8	2.8	2.8	2.7	2.7
Rural/Total Population	percent	73	49	48	46	45	44
Density	Inh/sq km	2	2	2	2	2	
Agricultural Labour Force	1000	532	565	578	591	605	618
Agric. Labour Force/Total Labour Force	percent	71	54	54	54	53	53
Land Use							
Total Land	1000 HA	102 522	102 522	102 522	102 522	102 522	
Arable Land + Permanent Crops	1000 HA	216	510	500	500	500	
Arable Land	1000 HA	212	498	488	488	488	
Irrigated Land	1000 HA	49	49	49	49	49	
Agric. Production – Major Items*							
Indigenous camel meat	1000 MT	11	25	25	25	25	25
Indigenous cattle meat	1000 MT	29	17	19	19	19	19
Indigenous sheep meat	1000 MT	16	16	18	18	18	18
Food Production *							
Food Production Index	1989-91=100	87	101	107	106	107	106
Per caput Food Production Index	1989-91=100	113	88	91	87	86	83
Foreign Trade – Exports							
Total	MLN US$	201.0	471.9	462.9	447.9	447.9	
Agricultural	MLN US$	39.7	38.0	40.4	40.4	40.3	
Major Exports (share in Agriculture)							
Cattle	percent	56.1	52.6	55.0	55.0	55.2	
Sheep	percent	26.9	23.7	22.3	22.3	22.4	
Goats	percent	14.7	14.5	13.6	13.6	13.7	
Foreign Trade – Imports							
Total	MLN US$	269.9	245.0	250.0	240.0	240.0	
Agricultural	MLN US$	88.9	144.5	170.6	157.4	256.4	
Major Imports (share in Agriculture)							
Wheat	percent	4.5	0.0	8.8	13.1	41.7	
Sugar (centrifugal, raw)	percent	0.0	15.2	13.1	17.2	17.2	
Flour of wheat	percent	7.0	14.5	17.0	15.9	11.3	
Agricultural trade balance							
Exports-imports	MLN US$	-49.2	-106.5	-130.2	-117.0	-216.2	
Land & Inputs							
Total Population/Arable Land	Inh/HA	7	5	5	5	5	
Fertilizer use/Arable Land	kg/nutrs/HA	5.4	8.0	10.2	3.5	4.3	
Tractors/Arable Land	no/1000 HA	1.3	0.7	0.7	0.8	0.8	
Food Supply		1979-81	1989-91	1996-98			
Per caput Dietary Energy Supply	kcal/day	2 120	2 540	2 630			
Per caput Dietary Protein Supply	g/day	73	79	75			

Source: derived from data extracted from FAOSTAT

* 1999 provisional

INDICATORS	UNIT	1998	INDICATORS	UNIT	1990-1998
Gross Domestic Product (GDP)	MLN US$	989	Annual growth rate:		
Agric. GDP as share of total GDP	percent	25	GDP	percent	4.2
Gross National Product per caput	US$	408	Agricultural GDP	percent	4.8

Note: Agricultural GDP includes Forestry & Fisheries

Source: World Bank 2000. World Development Indicators (CD ROM)

MOZAMBIQUE							
INDICATORS	UNIT	1979-81	1995	1996	1997	1998	1999
Population & Agric. Labour Force							
Population	1000	12 095	17 388	17 950	18 443	18 880	19 286
Population annual growth	percent	2.7	3.8	3.2	2.7	2.3	2.1
Rural/Total Population	percent	87	66	65	64	62	61
Density	Inh/sq km	15	22	23	24	24	
Agricultural Labour Force	1000	5 629	7 428	7 629	7798	7 941	8 069
Agric. Labour Force/Total Labour Force	percent	84	82	81	81	81	81
Land Use							
Total Land	1000 HA	78 409	78 409	78 409	78 409	78 409	
Arable Land + Permanent Crops	1000 HA	3 117	3 350	3 350	3 350	3 350	
Arable Land	1000 HA	2 887	3 120	3 120	3 120	3 120	
Irrigated Land	1000 HA	65	107	107	107	107	
Agric. Production – Major Items*							
Cassava	1000 MT	3 567	4 178	4 734	5 337	5 639	5 650
Maize	1000 MT	383	734	947	1 042	1 124	1 185
Indigenous cattle meat	1000 MT	36	36	37	37	38	38
Food Production *							
Food Production Index	1989-91=100	100	109	123	130	139	141
Per caput Food Production Index	1989-91=100	118	89	98	100	105	104
Foreign Trade – Exports							
Total	MLN US$	271.8	169.0	193.0	200.0	210.0	
Agricultural	MLN US$	155.3	65.5	49.4	47.3	40.7	
Major Exports (share in Agriculture)							
Cotton lint	percent	12.1	26.7	36.4	31.7	36.8	
Cashew nuts shelled	percent	34.9	27.5	26.3	21.1	24.6	
Sugar (centrifugal, raw)	percent	16.9	35.1	20.2	31.3	14.0	
Foreign Trade – Imports							
Total	MLN US$	723.0	784.0	744.0	760.0	910.0	
Agricultural	MLN US$	98.1	231.1	178.7	154.0	186.0	
Major Imports (share in Agriculture)							
Wheat	percent	29.0	12.1	15.9	16.2	24.7	
Sugar refined	percent	0.0	7.8	11.2	11.4	15.6	
Beer of barley	percent	0.0	7.6	9.8	11.4	9.4	
Agricultural trade balance							
Exports-imports	MLN US$	57.2	-165.6	-129.3	-106.7	-145.3	
Land & Inputs							
Total Population/Arable Land	Inh/HA	4	6	6	6	6	
Fertilizer use/Arable Land	kg/nutrs/HA	10.7	2.5	2.6	2.1	1.6	
Tractors/Arable Land	no/1000 HA	2.0	1.8	1.8	1.8	1.8	
Food Supply		1979-81	1989-91	1996-98			
Per caput Dietary Energy Supply	kcal/day	1 920	1 780	1 860			
Per caput Dietary Protein Supply	g/day	33	32	36			

Source: derived from data extracted from FAOSTAT

* 1999 provisional

INDICATORS	UNIT	1998	INDICATORS	UNIT	1990-1998
Gross Domestic Product (GDP)	MLN US$	3 893	Annual growth rate:		
Agric. GDP as share of total GDP	percent	34	GDP	percent	5.7
Gross National Product per caput	US$	205	Agricultural GDP	percent	4.8

Note: Agricultural GDP includes Forestry & Fisheries

Source: World Bank 2000. World Development Indicators (CD ROM)

MYANMAR							
INDICATORS	UNIT	1979-81	1995	1996	1997	1998	1999
Population & Agric. Labour Force							
Population	1000	33 831	42 877	43 393	43 936	44 497	45 059
Population annual growth	percent	2.1	1.1	1.2	1.2	1.3	1.3
Rural/Total Population	percent	76	74	74	73	73	73
Density	Inh/sq km	51	65	66	67	68	
Agricultural Labour Force	1000	13 011	16 986	17 269	17 564	17 868	18 173
Agric. Labour Force/Total Labour Force	percent	76	72	71	71	71	71
Land Use							
Total Land	1000 HA	65 755	65 755	65 755	65 755	65 755	
Arable Land + Permanent Crops	1000 HA	10 032	10 110	10 138	10 151	10 143	
Arable Land	1000 HA	9 582	9 540	9 543	9 556	9 548	
Irrigated Land	1000 HA	1 039	1 555	1 557	1 556	1 592	
Agric. Production – Major Items*							
Rice, paddy	1000 MT	12 637	17 957	17 835	17 673	16 651	17 075
Beans, dry	1000 MT	239	746	935	844	1 078	1 207
Vegetables fresh NES	1000 MT	1 217	2 260	2 430	2 480	2 480	2 480
Food Production *							
Food Production Index	1989-91=100	88	132	139	138	137	145
Per caput Food Production Index	1989-91=100	105	125	130	128	125	130
Foreign Trade – Exports							
Total	MLN US$	437.5	883.0	880.7	1 002.0	1 200.0	
Agricultural	MLN US$	237.3	410.6	334.6	237.3	232.4	
Major Exports (share in Agriculture)							
Beans, dry	percent	9.7	58.2	63.7	52.7	64.5	
Natural rubber	percent	5.1	7.7	8.5	10.5	10.8	
Milled paddy rice	percent	75.0	18.8	6.2	8.4	8.6	
Foreign Trade – Imports							
Total	MLN US$	478.1	1 813.1	1 905.6	2 261.0	2 900.0	
Agricultural	MLN US$	39.8	418.8	259.0	117.9	278.8	
Major Imports (share in Agriculture)							
Palm oil	percent	39.2	49.3	25.1	55.4	58.5	
Cigarettes	percent	0.0	33.4	54.1	1.0	20.4	
Flour of wheat	percent	5.6	3.9	3.6	7.9	4.7	
Agricultural trade balance							
Exports-imports	MLN US$	197.4	-8.3	75.6	119.4	-46.3	
Land & Inputs							
Total Population/Arable Land	Inh/HA	4	4	5	5	5	
Fertilizer use/Arable Land	kg/nutrs/HA	11.1	18.8	18.2	18.4	18.0	
Tractors/Arable Land	no/1000 HA	0.9	0.8	0.8	0.9	0.9	
Food Supply		1979-81	1989-91	1996-98			
Per caput Dietary Energy Supply	kcal/day	2 320	2 630	2 830			
Per caput Dietary Protein Supply	g/day	60	65	72			

Source: derived from data extracted from FAOSTAT

* 1999 provisional

INDICATORS	UNIT	1998	INDICATORS	UNIT	1990-1998
Gross Domestic Product (GDP)	MLN US$	245 940	Annual growth rate:		
Agric. GDP as share of total GDP	percent	53	GDP	percent	6.3
Gross National Product per caput	US$	5 204	Agricultural GDP	percent	5.0

Note: Agricultural GDP includes Forestry & Fisheries

Source: World Bank 2000. World Development Indicators (CD ROM)

NEPAL							
INDICATORS	UNIT	1979-81	1995	1996	1997	1998	1999
Population & Agric. Labour Force							
Population	1000	14 503	21 272	21 791	22 316	22 847	23 385
Population annual growth	percent	2.6	2.4	2.4	2.4	2.4	2.3
Rural/Total Population	percent	93	90	89	89	89	88
Density	Inh/sq km	101	149	152	156	160	
Agricultural Labour Force	1000	6 598	9 308	9 545	9 785	10 028	10 275
Agric. Labour Force/Total Labour Force	percent	94	93	93	93	93	93
Land Use							
Total Land	1000 HA	14 300	14 300	14 300	14 300	14 300	
Arable Land + Permanent Crops	1000 HA	2 321	2 969	2 968	2 969	2 969	
Arable Land	1000 HA	2 290	2 898	2 898	2 898	2 898	
Irrigated Land	1000 HA	521	1 134	1 135	1 135	1 135	
Agric. Production – Major Items*							
Rice, paddy	1000 MT	2 361	3 579	3 699	3 579	3 641	3 710
Vegetables fresh NES	1000 MT	517	1 257	1 327	1 357	1 449	1 449
Buffalo milk	1000 MT	500	653	665	702	729	744
Food Production *							
Food Production Index	1989-91=100	66	111	115	117	120	122
Per caput Food Production Index	1989-91=100	85	98	99	99	98	98
Foreign Trade – Exports							
Total	MLN US$	129.9	353.9	355.4	394.1	416.3	
Agricultural	MLN US$	51.3	60.1	66.7	67.4	72.1	
Major Exports (share in Agriculture)							
Sugar cane	percent	15.3	36.6	33.0	32.7	30.5	
Lentils	percent	0.0	1.7	10.2	12.9	18.3	
Pulses NES	percent	7.7	13.3	8.6	13.0	12.2	
Foreign Trade – Imports							
Total	MLN US$	314.8	1 273.2	1 386.9	1 647.0	1 345.8	
Agricultural	MLN US$	37.0	185.9	201.2	194.2	156.2	
Major Imports (share in Agriculture)							
Oil of rapeseed	percent	0.0	4.3	11.4	7.9	9.8	
Wool, scoured	percent	0.0	14.7	21.1	19.7	9.6	
Areca nuts (betel)	percent	0.0	5.9	2.0	4.5	5.6	
Agricultural trade balance							
Exports-imports	MLN US$	14.3	-125.7	-134.5	-126.8	-84.1	
Land & Inputs							
Total Population/Arable Land	Inh/HA	6	7	8	8	8	
Fertilizer use/Arable Land	kg/nutrs/HA	9.8	32.3	35.5	37.6	41.9	
Tractors/Arable Land	no/1000 HA	1.0	1.6	1.6	1.6	1.6	
Food Supply		1979-81	1989-91	1996-98			
Per caput Dietary Energy Supply	kcal/day	1 900	2 360	2 190			
Per caput Dietary Protein Supply	g/day	50	61	57			

Source: derived from data extracted from FAOSTAT

* 1999 provisional

INDICATORS	UNIT	1998	INDICATORS	UNIT	1990-1998
Gross Domestic Product (GDP)	MLN US$	4 783	Annual growth rate:		
Agric. GDP as share of total GDP	percent	40	GDP	percent	5.0
Gross National Product per caput	US$	214	Agricultural GDP	percent	2.3

Note: Agricultural GDP includes Forestry & Fisheries

Source: World Bank 2000. World Development Indicators (CD ROM)

NIGER							
INDICATORS	UNIT	1979-81	1995	1996	1997	1998	1999
Population & Agric. Labour Force							
Population	1000	5 589	9 150	9 454	9 764	10 078	10 400
Population annual growth	percent	3.3	3.3	3.3	3.2	3.2	3.1
Rural/Total Population	percent	87	82	81	81	80	80
Density	Inh/sq km	4	7	7	8	8	
Agricultural Labour Force	1000	2 547	3 903	4 013	4 124	4 236	4 349
Agric. Labour Force/Total Labour Force	percent	91	89	89	89	88	88
Land Use							
Total Land	1000 HA	126 670	126 670	126 670	126 670	126 670	
Arable Land + Permanent Crops	1000 HA	3 467	5 000	5 000	5 000	5 000	
Arable Land	1000 HA	3 464	4 994	4 994	4 994	4 994	
Irrigated Land	1000 HA	23	66	66	66	66	
Agric. Production – Major Items*							
Millet	1000 MT	1 311	1 769	1 761	1 352	2 391	2 253
Cow peas, dry	1000 MT	282	184	295	192	775	641
Indigenous cattle meat	1000 MT	52	46	43	44	44	45
Food Production *							
Food Production Index	1989-91=100	98	106	121	97	146	139
Per caput Food Production Index	1989-91=100	136	90	99	77	112	103
Foreign Trade – Exports							
Total	MLN US$	494.2	286.7	301.7	269.1	297.6	
Agricultural	MLN US$	77.9	58.8	53.3	51.1	44.7	
Major Exports (share in Agriculture)							
Cattle	percent	42.1	59.5	50.6	48.9	44.7	
Sheep	percent	11.5	9.9	10.9	11.3	13.0	
Camels	percent	0.0	5.4	5.6	5.5	10.5	
Foreign Trade – Imports							
Total	MLN US$	526.4	438.0	433.3	436.7	383.4	
Agricultural	MLN US$	88.6	108.3	99.7	97.1	102.8	
Major Imports (share in Agriculture)							
Milled paddy rice	percent	23.2	15.2	16.6	17.0	16.0	
Sugar refined	percent	9.5	14.8	13.0	10.3	15.5	
Kolanuts	percent	2.2	13.8	15.0	15.4	14.6	
Agricultural trade balance							
Exports-imports	MLN US$	-10.7	-49,5	-46,4	-46.0	-58.1	
Land & Inputs							
Total Population/Arable Land	Inh/HA	2	2	2	2	2	
Fertilizer use/Arable Land	kg/nutrs/HA	1.0	2.0	1.8	0.1	0.2	
Tractors/Arable Land	no/1000 HA	0.0	0.0	0.0	0.0	0.0	
Food Supply		1979-81	1989-91	1996-98			
Per caput Dietary Energy Supply	kcal/day	2 140	2 050	1 940			
Per caput Dietary Protein Supply	g/day	64	54	53			

Source: derived from data extracted from FAOSTAT
* 1999 provisional

INDICATORS	UNIT	1998	INDICATORS	UNIT	1990-1998
Gross Domestic Product (GDP)	MLN US$	2 048	Annual growth rate:		
Agric. GDP as share of total GDP	percent	41	GDP	percent	2.1
Gross National Product per caput	US$	199	Agricultural GDP	percent	3.1

Note: Agricultural GDP includes Forestry & Fisheries
Source: World Bank 2000. World Development Indicators (CD ROM)

RWANDA							
INDICATORS	UNIT	1979-81	1995	1996	1997	1998	1999
Population & Agric. Labour Force							
Population	1000	5 162	5 259	5 475	5 962	6 604	7 235
Population annual growth	percent	3.2	-2.0	4.0	8.5	10.2	9.1
Rural/Total Population	percent	95	94	94	94	94	94
Density	Inh/sq km	209	213	222	242	268	
Agricultural Labour Force	1000	2 452	2 528	2 637	2 875	3 190	3 499
Agric. Labour Force/Total Labour Force	percent	93	91	91	91	91	91
Land Use							
Total Land	1000 HA	2 467	2 467	2 467	2 467	2 467	
Arable Land + Permanent Crops	1000 HA	1 024	940	1 000	1 050	1 070	
Arable Land	1000 HA	760	700	750	800	820	
Irrigated Land	1000 HA	4	4	4	4	4	
Agric. Production – Major Items*							
Plantains	1000 MT	2 136	2 002	2 105	2 248	2 625	2 897
Beans, dry	1000 MT	185	118	105	134	154	140
Sweet potatoes	1000 MT	899	551	665	742	751	863
Food Production *							
Food Production Index	1989-91=100	85	65	70	78	84	90
Per caput Food Production Index	1989-91=100	114	86	88	90	88	86
Foreign Trade – Exports							
Total	MLN US$	88.5	71.8	112.1	93.0	64.4	
Agricultural	MLN US$	82.3	37.4	36.7	38.6	36.5	
Major Exports (share in Agriculture)							
Coffee, green	percent	79.3	80.0	73.5	72.5	70.9	
Tea	percent	13.2	9.9	14.7	16.3	17.2	
Skins wet-salted goats	percent	2.4	4.8	4.8	4.6	4.9	
Foreign Trade – Imports							
Total	MLN US$	252.3	237.0	204.5	299.0	287.0	
Agricultural	MLN US$	36.5	82.6	99.9	80.6	90.6	
Major Imports (share in Agriculture)							
Maize	percent	0.0	25.4	39.6	22.3	16.6	
Palm oil	percent	1.8	12.1	10.0	13.0	12.1	
Wheat	percent	4.9	0.7	0.4	0.5	11.0	
Agricultural trade balance							
Exports-imports	MLN US$	45.8	-45.2	-63.1	-41.9	-54.1	
Land & Inputs							
Total Population/Arable Land	Inh/HA	7	8	7	7	8	
Fertilizer use/Arable Land	kg/nutrs/HA	0.3	0.0	0.4	0.5	0.4	
Tractors/Arable Land	no/1000 HA	0.1	0.1	0.1	0.1	0.1	
Food Supply		1979-81	1989-91	1996-98			
Per caput Dietary Energy Supply	kcal/day	2 290	2 000	2 030			
Per caput Dietary Protein Supply	g/day	54	47	47			

Source: derived from data extracted from FAOSTAT

* 1999 provisional

INDICATORS	UNIT	1998	INDICATORS	UNIT	1990-1998
Gross Domestic Product (GDP)	MLN US$	2 024	Annual growth rate:		
Agric. GDP as share of total GDP	percent	47	GDP	percent	-3.2
Gross National Product per caput	US$	230	Agricultural GDP	percent	-5.1

Note: Agricultural GDP includes Forestry & Fisheries

Source: World Bank 2000. World Development Indicators (CD ROM)

SAMOA							
INDICATORS	UNIT	1979-81	1995	1996	1997	1998	1999
Population & Agric. Labour Force							
Population	1000	155	168	170	172	174	177
Population annual growth	percent	0.3	1.1	1.2	1.3	1.4	1.5
Rural/Total Population	percent	79	79	79	78	79	78
Density	Inh/sq km	55	59	60	61	62	
Agricultural Labour Force	1000	...	...	...	...	...	...
Agric. Labour Force/Total Labour Force	percent	...	...	...	...	...	...
Land Use							
Total Land	1000 HA	283	283	283	283	283	
Arable Land + Permanent Crops	1000 HA	122	122	122	122	122	
Arable Land	1000 HA	55	55	55	55	55	
Irrigated Land	1000 HA	...	...	...	...	...	
Agric. Production – Major Items*							
Coconuts	1000 MT	169	130	130	130	130	130
Indigenous pigmeat	1000 MT	2	4	4	4	4	4
Taro (Coco Yam)	1000 MT	35	37	37	37	37	37
Food Production *							
Food Production Index	1989-91=100	103	94	94	94	94	94
Per caput Food Production Index	1989-91=100	106	89	88	87	86	85
Foreign Trade – Exports							
Total	MLN US$	15.7	8.8	9.8	14.0	12.0	
Agricultural	MLN US$	14.3	4.7	8.2	8.1	8.0	
Major Exports (share in Agriculture)							
Oil of coconuts	percent	0.5	27.8	43.3	43.7	43.6	
Fruit prepared NES	percent	4.2	38.1	21.9	22.1	22.2	
Copra	percent	55.1	9.4	19.1	19.3	19.9	
Foreign Trade – Imports							
Total	MLN US$	65.4	92.1	99.0	97.0	97.0	
Agricultural	MLN US$	14.3	26.0	30.3	28.9	27.0	
Major Imports (share in Agriculture)							
Milled paddy rice	percent	4.3	16.9	14.5	15.2	16.3	
Chicken meat	percent	5.7	19.2	22.5	23.5	15.2	
Mutton & lamb	percent	7.6	10.6	13.2	12.5	14.1	
Agricultural trade balance							
Exports-imports	MLN US$	0.0	-21.3	-22.1	-20.8	-19.0	
Land & Inputs							
Total Population/Arable Land	Inh/HA	3	3	3	3	3	
Fertilizer use/Arable Land	kg/nutrs/HA	4.0	0.0	0.0	0.0	0.0	
Tractors/Arable Land	no/1000 HA	0.6	1.4	1.4	1.4	1.4	
Food Supply		1979-81	1989-91	1996-98			
Per caput Dietary Energy Supply	kcal/day	...	...	...			
Per caput Dietary Protein Supply	g/day	...	...	...			

Source: derived from data extracted from FAOSTAT

* 1999 provisional

INDICATORS	UNIT	1998	INDICATORS	UNIT	1990-1998
Gross Domestic Product (GDP)	MLN US$	175	Annual growth rate:		
Agric. GDP as share of total GDP	percent	18	GDP	percent	2.0
Gross National Product per caput	US$	1 067	Agricultural GDP	percent	...

Note: Agricultural GDP includes Forestry & Fisheries

Source: World Bank 2000. World Development Indicators (CD ROM)

SAO TOME & PRINCIPE							
INDICATORS	UNIT	1979-81	1995	1996	1997	1998	1999
Population & Agric. Labour Force							
Population	1000	94	133	135	138	141	144
Population annual growth	percent	2.7	2.1	2.1	2.1	2.0	2.0
Rural/Total Population	percent	69	57	56	56	55	54
Density	Inh/sq km	98	138	141	144	147	
Agricultural Labour Force	1000	…	…	…	…	…	…
Agric. Labour Force/Total Labour Force	percent	…	…	…	…	…	…
Land Use							
Total Land	1000 HA	96	96	96	96	96	
Arable Land + Permanent Crops	1000 HA	36	41	41	41	41	
Arable Land	1000 HA	1	2	2	2	2	
Irrigated Land	1000 HA	10	10	10	10	10	
Agric. Production – Major Items*							
Bananas	1000 MT	3	18	25	35	36	38
Coconuts	1000 MT	35	24	25	26	27	28
Taro (Coco Yam)	1000 MT	3	11	16	20	22	23
Food Production *							
Food Production Index	1989-91=100	123	124	154	172	183	196
Per caput Food Production Index	1989-91=100	156	111	135	148	154	161
Foreign Trade – Exports							
Total	MLN US$	23.8	7.8	5.0	5.0	6.0	
Agricultural	MLN US$	20.6	3.8	5.1	4.2	7.1	
Major Exports (share in Agriculture)							
Cocoa beans	percent	92.8	95.6	97.4	96.0	98.5	
Copra	percent	5.9	1.3	1.0	1.2	0.7	
Coffee, green	percent	0.3	0.0	0.0	0.7	0.4	
Foreign Trade – Imports							
Total	MLN US$	26.1	34.0	28.0	16.0	20.0	
Agricultural	MLN US$	5.5	8.4	8.3	6.9	7.3	
Major Imports (share in Agriculture)							
Wine	percent	6.6	22.6	25.2	30.6	28.9	
Flour of wheat	percent	16.5	15.5	18.0	12.7	17.9	
Milled paddy rice	percent	19.3	16.6	13.2	16.1	15.1	
Agricultural trade balance							
Exports-imports	MLN US$	15.1	-4.6	-3.2	-2.7	-0.2	
Land & Inputs							
Total Population/Arable Land	Inh/HA	…	66	68	69	71	
Fertilizer use/Arable Land	kg/nutrs/HA	…	…	…	…	…	
Tractors/Arable Land	no/1000 HA	…	62.5	62.5	62.5	62.5	
Food Supply		1979-81	1989-91	1996-98			
Per caput Dietary Energy Supply	kcal/day	2 080	2 150	2 170			
Per caput Dietary Protein Supply	g/day	46	48	43			

Source: derived from data extracted from FAOSTAT

* 1999 provisional

INDICATORS	UNIT	1998	INDICATORS	UNIT	1990-1998
Gross Domestic Product (GDP)	MLN US$	41	Annual growth rate:		
Agric. GDP as share of total GDP	percent	21	GDP	percent	1.6
Gross National Product per caput	US$	268	Agricultural GDP	percent	3.6

Note: Agricultural GDP includes Forestry & Fisheries

Source: World Bank 2000. World Development Indicators (CD ROM)

SIERRA LEONE							
INDICATORS	UNIT	1979-81	1995	1996	1997	1998	1999
Population & Agric. Labour Force							
Population	1000	3 236	4 188	4 289	4 420	4 568	4 717
Population annual growth	percent	2.0	1.6	2.4	3.0	3.3	3.2
Rural/Total Population	percent	76	67	66	65	65	64
Density	Inh/sq km	45	58	60	62	64	
Agricultural Labour Force	1000	872	1 011	1 027	1 049	1 075	1 100
Agric. Labour Force/Total Labour Force	percent	70	65	64	64	63	63
Land Use							
Total Land	1000 HA	7 162	7 162	7 162	7 162	7 162	
Arable Land + Permanent Crops	1000 HA	499	541	541	540	540	
Arable Land	1000 HA	450	485	485	484	484	
Irrigated Land	1000 HA	20	29	29	29	29	
Agric. Production – Major Items*							
Rice, paddy	1000 MT	504	356	392	411	328	247
Coffee, green	1000 MT	11	25	25	31	31	15
Vegetables fresh NES	1000 MT	141	155	155	155	155	155
Food Production *							
Food Production Index	1989-91=100	85	91	97	101	94	81
Per caput Food Production Index	1989-91=100	104	87	90	91	82	69
Foreign Trade – Exports							
Total	MLN US$	187.4	100.0	110.0	100.0	110.0	
Agricultural	MLN US$	5.7	16.0	10.7	13.8	13.8	
Major Exports (share in Agriculture)							
Coffee, green	percent	46.1	58.0	24.2	47.2	47.0	
Cocoa beans	percent	38.1	22.5	46.6	29.1	28.9	
Cigarettes	percent	0.7	3.7	5.6	4.4	4.3	
Foreign Trade – Imports							
Total	MLN US$	346.8	150.0	212.0	150.0	150.0	
Agricultural	MLN US$	84.9	140.8	144.3	137.6	138.9	
Major Imports (share in Agriculture)							
Milled paddy rice	percent	27.6	54.7	53.4	56.0	55.4	
Cattle	percent	8.6	8.5	8.3	8.7	8.6	
Wheat	percent	3.8	1.8	2.9	3.6	5.1	
Agricultural trade balance							
Exports-imports	MLN US$	-27.2	-124.8	-133.6	-123.8	-125.1	
Land & Inputs							
Total Population/Arable Land	Inh/HA	7	9	9	9	9	
Fertilizer use/Arable Land	kg/nutrs/HA	5.8	6.2	6.2	6.2	6.2	
Tractors/Arable Land	no/1000 HA	0.8	0.2	0.2	0.2	0.2	
Food Supply		1979-81	1989-91	1996-98			
Per caput Dietary Energy Supply	kcal/day	2 110	2 020	2 050			
Per caput Dietary Protein Supply	g/day	46	43	44			

Source: derived from data extracted from FAOSTAT

* 1999 provisional

INDICATORS	UNIT	1998	INDICATORS	UNIT	1990-1998
Gross Domestic Product (GDP)	MLN US$	647	Annual growth rate:		
Agric. GDP as share of total GDP	percent	44	GDP	percent	-4.7
Gross National Product per caput	US$	145	Agricultural GDP	percent	1.5

Note: Agricultural GDP includes Forestry & Fisheries

Source: World Bank 2000. World Development Indicators (CD ROM)

SOLOMON ISLANDS							
INDICATORS	UNIT	1979-81	1995	1996	1997	1998	1999
Population & Agric. Labour Force							
Population	1000	227	379	392	404	417	430
Population annual growth	percent	3.5	3.3	3.2	3.2	3.1	3.1
Rural/Total Population	percent	89	83	82	82	82	81
Density	Inh/sq km	8	14	14	14	15	
Agricultural Labour Force	1000	92	146	150	154	158	163
Agric. Labour Force/Total Labour Force	percent	79	75	75	74	74	74
Land Use							
Total Land	1000 HA	2 799	2 799	2 799	2 799	2 799	
Arable Land + Permanent Crops	1000 HA	52	60	60	60	60	
Arable Land	1000 HA	40	42	42	42	42	
Irrigated Land	1000 HA	…	…	…	…	…	
Agric. Production – Major Items*							
Coconuts	1000 MT	228	224	230	238	240	240
Sweet potatoes	1000 MT	49	68	70	72	73	73
Palm oil	1000 MT	15	30	29	29	29	31
Food Production *							
Food Production Index	1989-91=100	99	110	113	118	120	122
Per caput Food Production Index	1989-91=100	139	93	92	94	92	91
Foreign Trade – Exports							
Total	MLN US$	69.1	168.5	162.0	155.9	141.4	
Agricultural	MLN US$	24.6	37.0	30.5	28.2	26.1	
Major Exports (share in Agriculture)							
Palm oil	percent	32.2	52.9	51.4	56.8	42.2	
Cocoa beans	percent	3.4	10.7	11.8	8.2	21.5	
Oil of coconuts	percent	0.0	3.3	5.2	6.1	17.6	
Foreign Trade – Imports							
Total	MLN US$	69.3	154.7	150.9	183.8	159.4	
Agricultural	MLN US$	10.2	19.2	21.1	21.6	19.9	
Major Imports (share in Agriculture)							
Milled paddy rice	percent	14.4	36.7	38.0	37.0	40.3	
Wheat	percent	0.0	3.1	7.1	11.8	12.6	
Cigarettes	percent	4.2	5.2	5.7	6.5	5.5	
Agricultural trade balance							
Exports-imports	MLN US$	14.4	17.8	9.4	6.5	6.2	
Land & Inputs							
Total Population/Arable Land	Inh/HA	6	9	9	10	10	
Fertilizer use/Arable Land	kg/nutrs/HA	…	…	…	…	…	
Tractors/Arable Land	no/1000 HA	…	…	…	…	…	
Food Supply		1979-81	1989-91	1996-98			
Per caput Dietary Energy Supply	kcal/day	2 230	2 110	2 170			
Per caput Dietary Protein Supply	g/day	58	53	51			

Source: derived from data extracted from FAOSTAT

* 1999 provisional

INDICATORS	UNIT	1998	INDICATORS	UNIT	1990-1998
Gross Domestic Product (GDP)	MLN US$	301	Annual growth rate:		
Agric. GDP as share of total GDP	percent	…	GDP	percent	3.6
Gross National Product per caput	US$	756	Agricultural GDP	percent	…

Note: Agricultural GDP includes Forestry & Fisheries

Source: World Bank 2000. World Development Indicators (CD ROM)

SOMALIA							
INDICATORS	UNIT	1979-81	1995	1996	1997	1998	1999
Population & Agric. Labour Force							
Population	1000	5 823	8 201	8 467	8 821	9 237	9 672
Population annual growth	percent	4.3	2..0	3.2	4.1	4.6	4.6
Rural/Total Population	percent	78	74	74	74	73	73
Density	Inh/sq km	9	13	13	14	15	
Agricultural Labour Force	1000	2 063	2 599	2 663	2 753	2 859	2 970
Agric. Labour Force/Total Labour Force	percent	78	73	73	72	72	72
Land Use							
Total Land	1000 HA	62 734	62 734	62 734	62 734	62 734	
Arable Land + Permanent Crops	1000 HA	1 000	1 056	2 060	1 061	1 062	
Arable Land	1000 HA	984	1 035	1 038	1 039	1 040	
Irrigated Land	1000 HA	133	200	200	200	200	
Agric. Production – Major Items*							
Sheep milk	1000 MT	315	430	440	450	430	410
Cow milk, whole, fresh	1000 MT	477	560	570	580	540	500
Indigenous cattle meat	1000 MT	48	50	54	59	56	53
Food Production *							
Food Production Index	1989-91=100	91	97	100	102	97	94
Per caput Food Production Index	1989-91=100	121	91	91	90	81	75
Foreign Trade – Exports							
Total	MLN US$	142.6	145.0	150.0	150.0	150.0	
Agricultural	MLN US$	129.0	74.6	75.9	75.7	75.7	
Major Exports (share in Agriculture)							
Sheep	percent	29.1	46.9	46.1	46.2	46.2	
Goats	percent	31.2	30.8	30.3	30.4	30.4	
Bananas	percent	8.6	13.4	14.5	14.3	14.3	
Foreign Trade – Imports							
Total	MLN US$	368.8	193.0	170.0	180.0	180.0	
Agricultural	MLN US$	147.7	73.3	86.9	87.9	103.7	
Major Imports (share in Agriculture)							
Sugar refined	percent	6.8	42.3	49.5	47.8	35.7	
Milled paddy rice	percent	13.9	20.5	24.2	23.9	20.3	
Maize	percent	7.3	0.1	0.6	0.2	18.3	
Agricultural trade balance							
Exports-imports	MLN US$	-18.7	1.3	-11.0	-12.2	-27.9	
Land & Inputs							
Total Population/Arable Land	Inh/HA	6	8	8	8	9	
Fertilizer use/Arable Land	kg/nutrs/HA	0.9	0.0	0.5	0.5	0.5	
Tractors/Arable Land	no/1000 HA	1.7	1.8	1.8	1.8	1.8	
Food Supply		1979-81	1989-91	1996-98			
Per caput Dietary Energy Supply	kcal/day	1 820	1 760	1 550			
Per caput Dietary Protein Supply	g/day	60	58	50			

Source: derived from data extracted from FAOSTAT

* 1999 provisional

INDICATORS	UNIT	1998	INDICATORS	UNIT	1990-1998
Gross Domestic Product (GDP)	MLN US$	…	Annual growth rate:		
Agric. GDP as share of total GDP	percent	…	GDP	percent	…
Gross National Product per caput	US$	…	Agricultural GDP	percent	…

Note: Agricultural GDP includes Forestry & Fisheries

Source: World Bank 2000. World Development Indicators (CD ROM)

SUDAN							
INDICATORS	UNIT	1979-81	1995	1996	1997	1998	1999
Population & Agric. Labour Force							
Population	1000	18 682	26 617	27 260	27 718	28 292	28 883
Population annual growth	percent	3.0	2.0	2.0	2.0	2.0	2.1
Rural/Total Population	percent	80	69	68	67	66	65
Density	Inh/sq km	8	11	11	12	12	
Agricultural Labour Force	1000	4 948	6 669	6 762	6 856	6 950	7 044
Agric. Labour Force/Total Labour Force	percent	72	65	65	64	63	62
Land Use							
Total Land	1000 HA	237 600	237 600	237 600	237 600	237 600	
Arable Land + Permanent Crops	1000 HA	12 465	16 367	16 872	16 900	16 900	
Arable Land	1000 HA	12 365	16 157	16 672	16 700	16 700	
Irrigated Land	1000 HA	1 800	1 946	1 946	1 950	1 950	
Agric. Production – Major Items*							
Cow milk, whole, fresh	1000 MT	1 352	2 760	2 880	2 928	2 952	2 976
Sorghum	1000 MT	2 293	2 450	4 179	3 159	4 781	3 045
Indigenous cattle meat	1000 MT	241	225	227	231	236	241
Food Production *							
Food Production Index	1989-91=100	105	141	155	157	158	154
Per caput Food Production Index	1989-91=100	136	128	137	136	135	128
Foreign Trade – Exports							
Total	MLN US$	574.3	507.0	620.2	594.2	596.0	
Agricultural	MLN US$	533.0	501.0	564.6	555.9	498.7	
Major Exports (share in Agriculture)							
Cotton lint	percent	43.3	24.5	22.7	19.0	21.2	
Sheep	percent	6.2	13.9	13.2	12.8	14.2	
Crude organic materls.	percent	8.8	14.0	12.4	12.6	14.0	
Foreign Trade – Imports							
Total	MLN US$	1 565.0	1 025.0	1 504.4	1 579.7	1 915.0	
Agricultural	MLN US$	296.8	259.4	282.2	327.6	308.0	
Major Imports (share in Agriculture)							
Wheat	percent	15.8	11.7	16.8	23.7	26.6	
Flour of wheat	percent	4.2	23.0	17.8	18.5	14.6	
Tea	percent	7.1	10.2	11.8	9.8	10.5	
Agricultural trade balance							
Exports-imports	MLN US$	236.2	241.6	282.3	228.3	190.7	
Land & Inputs							
Total Population/Arable Land	Inh/HA	1	2	2	2	2	
Fertilizer use/Arable Land	kg/nutrs/HA	5.1	3.2	5.7	4.6	2.2	
Tractors/Arable Land	no/1000 HA	0.8	0.6	0.6	0.6	0.6	
Food Supply		1979-81	1989-91	1996-98			
Per caput Dietary Energy Supply	kcal/day	2 270	2 190	2 430			
Per caput Dietary Protein Supply	g/day	65	68	77			

Source: derived from data extracted from FAOSTAT

* 1999 provisional

INDICATORS	UNIT	1998	INDICATORS	UNIT	1990-1998
Gross Domestic Product (GDP)	MLN US$	10 366	Annual growth rate:		
Agric. GDP as share of total GDP	percent	39	GDP	percent	8.0
Gross National Product per caput	US$	290	Agricultural GDP	percent	8.2

Note: Agricultural GDP includes Forestry & Fisheries

Source: World Bank 2000. World Development Indicators (CD ROM)

TANZANIA, UNITED REPUBLIC OF							
INDICATORS	UNIT	1979-81	1995	1996	1997	1998	1999
Population & Agric. Labour Force							
Population	1000	18 588	29 925	30 700	31 417	32 102	32 793
Population annual growth	percent	3.2	2.9	2.6	2.3	2.2	2.1
Rural/Total Population	percent	85	76	75	74	74	73
Density	Inh/sq km	21	34	35	36	36	
Agricultural Labour Force	1000	8 181	12 659	12 916	13 143	13 353	13 561
Agric. Labour Force/Total Labour Force	percent	86	83	82	82	81	81
Land Use							
Total Land	1000 HA	88 359	88 359	88 359	88 359	88 359	
Arable Land + Permanent Crops	1000 HA	3 800	4 648	4 650	4 650	4 650	
Arable Land	1000 HA	2 900	3 748	3 750	3 750	3 750	
Irrigated Land	1000 HA	117	150	150	155	155	
Agric. Production – Major Items*							
Indigenous cattle meat	1000 MT	129	206	209	211	213	214
Cassava	1000 MT	5 432	5 969	5 992	5 700	6 128	7 182
Maize	1000 MT	1 762	2 567	2 663	1 879	2 750	2 458
Food Production *							
Food Production Index	1989-91=100	77	100	103	97	104	106
Per caput Food Production Index	1989-91=100	105	86	85	79	83	82
Foreign Trade – Exports							
Total	MLN US$	571.5	682.9	761.7	718.8	676.2	
Agricultural	MLN US$	422.3	431.1	498.6	439.7	423.1	
Major Exports (share in Agriculture)							
Coffee, green	percent	35.4	33.1	227.6	26.7	27.2	
Cashew nuts	percent	4.7	14.8	18.8	17.1	26.5	
Cotton lint	percent	13.8	27.9	27.6	26.5	12.8	
Foreign Trade – Imports							
Total	MLN US$	1 183.4	1 540.8	1 393.8	1 337.7	1 453.4	
Agricultural	MLN US$	115.6	194.3	178.5	277.5	264.8	
Major Imports (share in Agriculture)							
Palm oil	percent	1.7	27.8	21.1	23.8	25.7	
Maize	percent	25.8	6.2	0.1	1.6	10.2	
Sugar (centrifugal, raw)	percent	0.0	3.4	9.8	5.1	6.4	
Agricultural trade balance							
Exports-imports	MLN US$	306.8	236.8	320.1	162.1	158.4	
Land & Inputs							
Total Population/Arable Land	Inh/HA	6	8	8	8	8	
Fertilizer use/Arable Land	kg/nutrs/HA	10.9	7.2	8.3	10.2	7.4	
Tractors/Arable Land	no/1000 HA	3.4	2.0	2.0	2.0	2.0	
Food Supply		1979-81	1989-91	1996-98			
Per caput Dietary Energy Supply	kcal/day	2 280	2 220	2 000			
Per caput Dietary Protein Supply	g/day	56	55	49			

Source: derived from data extracted from FAOSTAT

* 1999 provisional

INDICATORS	UNIT	1998	INDICATORS	UNIT	1990-1998
Gross Domestic Product (GDP)	MLN US$	8 016	Annual growth rate:		
Agric. GDP as share of total GDP	percent	46	GDP	percent	3.0
Gross National Product per caput	US$	223	Agricultural GDP	percent	3.6

Note: Agricultural GDP includes Forestry & Fisheries

Source: World Bank 2000. World Development Indicators (CD ROM)

TOGO							
INDICATORS	UNIT	1979-81	1995	1996	1997	1998	1999
Population & Agric. Labour Force							
Population	1000	2 616	4 060	4 172	4 284	4 397	4 512
Population annual growth	percent	2.8	2.8	2.7	2.6	2.6	2.6
Rural/Total Population	percent	77	69	69	68	68	67
Density	Inh/sq km	48	75	77	79	81	
Agricultural Labour Force	1000	785	1 056	1 073	1 090	1 106	1 122
Agric. Labour Force/Total Labour Force	percent	69	63	62	62	61	60
Land Use							
Total Land	1000 HA	5 439	5 439	5 439	5 439	5 439	
Arable Land + Permanent Crops	1000 HA	2 033	2 300	2 400	2 350	2 300	
Arable Land	1000 HA	1 950	2 200	2 300	2 250	2 200	
Irrigated Land	1000 HA		7	7	7	7	
Agric. Production – Major Items*							
Yams	1000 MT	498	531	605	683	696	696
Cotton lint	1000 MT	7	42	52	65	69	69
Maize	1000 MT	150	290	388	452	350	350
Food Production *							
Food Production Index	1989-91=100	77	117	136	141	134	134
Per caput Food Production Index	1989-91=100	103	101	114	116	107	104
Foreign Trade – Exports							
Total	MLN US$	253.8	222.0	238.7	224.0	240.0	
Agricultural	MLN US$	71.6	127.2	132.7	128.4	85.0	
Major Exports (share in Agriculture)							
Cotton lint	percent	10.9	71.0	58.1	49.2	36.5	
Cotton carded combed	percent	0.0	0.0	12.1	12.5	18.9	
Cocoa beans	percent	47.7	4.7	11.8	10.9	16.4	
Foreign Trade – Imports							
Total	MLN US$	501.5	506.9	425.1	400.7	446.5	
Agricultural	MLN US$	85.9	67.5	76.9	68.1	67.2	
Major Imports (share in Agriculture)							
Wheat	percent	9.3	18.2	16.5	21.5	25.3	
Cigarettes	percent	15.3	12.6	11.8	18.5	18.8	
Milled paddy rice	percent	5.5	0.9	4.4	7.1	7.2	
Agricultural trade balance							
Exports-imports	MLN US$	-14.2	59.7	55.8	60.3	17.8	
Land & Inputs							
Total Population/Arable Land	Inh/HA	1	2	2	2	2	
Fertilizer use/Arable Land	kg/nutrs/HA	1.4	7.5	7.7	7.5	7.8	
Tractors/Arable Land	no/1000 HA	0.0	0.0	0.0	0.0	0.0	
Food Supply		1979-81	1989-91	1996-98			
Per caput Dietary Energy Supply	kcal/day	2 190	2 290	2 460			
Per caput Dietary Protein Supply	g/day	48	53	60			

Source: derived from data extracted from FAOSTAT

* 1999 provisional

INDICATORS	UNIT	1998	INDICATORS	UNIT	1990-1998
Gross Domestic Product (GDP)	MLN US$	1 510	Annual growth rate:		
Agric. GDP as share of total GDP	percent	42	GDP	percent	2.3
Gross National Product per caput	US$	326	Agricultural GDP	percent	4.5

Note: Agricultural GDP includes Forestry & Fisheries

Source: World Bank 2000. World Development Indicators (CD ROM)

TUVALU							
INDICATORS	UNIT	1979-81	1995	1996	1997	1998	1999
Population & Agric. Labour Force							
Population	1000	8	10	11	11	12	11
Population annual growth	percent	2.2	2.8	2.8	2.7	7.0	-1.6
Rural/Total Population	percent	74	59	57	55	52	53
Density	Inh/sq km	255	341	351	361	387	
Agricultural Labour Force	1000	…	…	…	…	…	…
Agric. Labour Force/Total Labour Force	percent	…	…	…	…	…	…
Land Use							
Total Land	1000 HA	3	3	3	3	3	
Arable Land + Permanent Crops	1000 HA	…	…	…	…	…	
Arable Land	1000 HA	…	…	…	…	…	
Irrigated Land	1000 HA	…	…	…	…	…	
Agric. Production – Major Items*							
Coconuts	1000 MT	5	2	2	2	2	2
Food Production *							
Food Production Index	1989-91=100	138	99	99	99	99	99
Per caput Food Production Index	1989-91=100	163	89	81	81	81	81
Foreign Trade – Exports							
Total	MLN US$	1.2	0.1	0.1	0.1	0.1	
Agricultural	MLN US$	0.1	0.0	0.0	0.0	0.0	
Major Exports (share in Agriculture)							
Foreign Trade – Imports							
Total	MLN US$	2.9	9.3	8.2	10.0	10.0	
Agricultural	MLN US$	1.1	1.3	1.2	1.3	1.3	
Major Imports (share in Agriculture)							
Chicken meat	percent	1.7	21.4	13.8	17.1	17.8	
Milled/husked rice	percent	5.1	12.8	17.6	16.9	16.8	
Beer of barley	percent	5.0	10.5	8.5	8.1	12.4	
Agricultural trade balance							
Exports-imports	MLN US$	-1.0	-1.3	-1.2	-1.3	-1.3	
Land & Inputs							
Total Population/Arable Land	Inh/HA	…	…	…	…	…	
Fertilizer use/Arable Land	kg/nutrs/HA	…	…	…	…	…	
Tractors/Arable Land	no/1000 HA	…	…	…	…	…	
Food Supply		1979-81	1989-91	1996-98			
Per caput Dietary Energy Supply	kcal/day	…	…	…			
Per caput Dietary Protein Supply	g/day	…	…	…			

Source: derived from data extracted from FAOSTAT

* 1999 provisional

INDICATORS	UNIT	1998	INDICATORS	UNIT	1990-1998
Gross Domestic Product (GDP)	MLN US$	…	Annual growth rate:		
Agric. GDP as share of total GDP	percent	…	GDP	percent	…
Gross National Product per caput	US$	…	Agricultural GDP	percent	…

Note: Agricultural GDP includes Forestry & Fisheries

Source: World Bank 2000. World Development Indicators (CD ROM)

UGANDA							
INDICATORS	UNIT	1979-81	1995	1996	1997	1998	1999
Population & Agric. Labour Force							
Population	1000	13 110	18 935	19 464	20 000	20 554	21 143
Population annual growth	percent	2.8	2.8	2.7	2.7	2.8	2.8
Rural/Total Population	percent	91	87	87	87	87	86
Density	Inh/sq km	66	95	97	100	103	
Agricultural Labour Force	1000	5 901	7 722	7 857	7 990	8 125	8 269
Agric. Labour Force/Total Labour Force	percent	87	82	82	82	81	81
Land Use							
Total Land	1000 HA	19 965	19 965	19 965	19 965	19 965	
Arable Land + Permanent Crops	1000 HA	5 683	6 800	6 810	6 810	6 810	
Arable Land	1000 HA	4 093	5 060	5 060	5 060	5 060	
Irrigated Land	1000 HA	6	9	9	9	9	
Agric. Production – Major Items*							
Plantains	1000 MT	5 896	9 012	9 144	9 303	9 318	9 400
Indigenous cattle meat	1000 MT	88	86	87	88	93	94
Cassava	1000 MT	2 133	2 224	2 245	2 291	3 204	3 400
Food Production *							
Food Production Index	1989-91=100	70	111	102	106	114	119
Per caput Food Production Index	1989-91=100	88	97	87	87	91	93
Foreign Trade – Exports							
Total	MLN US$	343.8	575.9	665.3	558.0	512.0	
Agricultural	MLN US$	341.2	469.0	491.1	408.0	417.5	
Major Exports (share in Agriculture)							
Coffee, green	percent	98.3	81.9	80.7	76.0	75.2	
Tea	percent	0.2	1.9	3.5	6.4	9.3	
Maize	percent	0.0	4.9	3.6	4.4	4.3	
Foreign Trade – Imports							
Total	MLN US$	322.1	1 047.6	729.4	800.0	850.0	
Agricultural	MLN US$	36.1	66.3	36.4	74.3	69.2	
Major Imports (share in Agriculture)							
Flour of wheat	percent	2.9	2.6	5.2	26.1	25.3	
Sugar refined	percent	46.0	37.7	10.4	15.9	17.1	
Malt of barley	percent	1.5	10.9	27.4	13.5	14.5	
Agricultural trade balance							
Exports-imports	MLN US$	305.2	402.6	454.7	333.6	348.3	
Land & Inputs							
Total Population/Arable Land	Inh/HA	3	4	4	4	4	
Fertilizer use/Arable Land	kg/nutrs/HA	0.1	0.3	0.1	0.1	0.4	
Tractors/Arable Land	no/1000 HA	0.5	0.9	0.9	0.9	0.9	
Food Supply		1979-81	1989-91	1996-98			
Per caput Dietary Energy Supply	kcal/day	2 120	2 300	2 140			
Per caput Dietary Protein Supply	g/day	48	55	47			

Source: derived from data extracted from FAOSTAT

* 1999 provisional

INDICATORS	UNIT	1998	INDICATORS	UNIT	1990-1998
Gross Domestic Product (GDP)	MLN US$	6 775	Annual growth rate:		
Agric. GDP as share of total GDP	percent	45	GDP	percent	1.9
Gross National Product per caput	US$	1 259	Agricultural GDP	percent	3.6

Note: Agricultural GDP includes Forestry & Fisheries

Source: World Bank 2000. World Development Indicators (CD ROM)

VANUATU							
INDICATORS	UNIT	1979-81	1995	1996	1997	1998	1999
Population & Agric. Labour Force							
Population	1000	117	169	173	177	182	186
Population annual growth	percent	2.6	2.4	2.4	2.4	2.4	2.4
Rural/Total Population	percent	82	81	81	81	80	80
Density	Inh/sq km	10	14	14	15	15	
Agricultural Labour Force	1000	…	…	…	…	…	…
Agric. Labour Force/Total Labour Force	percent	…	…	…	…	…	…
Land Use							
Total Land	1000 HA	1 219	1 219	1 219	1 219	1 219	
Arable Land + Permanent Crops	1000 HA	108	120	120	120	120	
Arable Land	1000 HA	18	30	30	30	30	
Irrigated Land	1000 HA	…	…	…	…	…	
Agric. Production – Major Items*							
Coconuts	1000 MT	326	280	280	407	339	339
Roots & Tubers NES	1000 MT	32	50	55	60	65	65
Indigenous cattle meat	1000 MT	2	4	4	4	4	4
Food Production *							
Food Production Index	1989-91=100	94	104	104	132	119	119
Per caput Food Production Index	1989-91=100	120	92	90	111	98	95
Foreign Trade – Exports							
Total	MLN US$	36.7	28.3	30.1	35.3	33.9	
Agricultural	MLN US$	17.7	19.0	19.7	26.9	28.5	
Major Exports (share in Agriculture)							
Copra	percent	75.8	51.7	56.3	64.4	51.6	
Veg. prod. fresh or dried	percent	0.0	2.3	2.9	3.3	24.4	
Beef & veal, boneless	percent	2.2	20.1	19.1	13.4	8.9	
Foreign Trade – Imports							
Total	MLN US$	65.5	95.0	100.3	96.9	91.5	
Agricultural	MLN US$	13.2	16.3	21.4	19.6	15.9	
Major Imports (share in Agriculture)							
Milled paddy rice	percent	18.5	21.5	24.8	27.0	22.0	
Wine	percent	3.8	6.1	4.8	5.1	5.6	
Sugar refined	percent	6.8	4.6	4.3	4.7	4.7	
Agricultural trade balance							
Exports-imports	MLN US$	4.5	2.7	-1.7	7.3	12.6	
Land & Inputs							
Total Population/Arable Land	Inh/HA	6	6	6	6	6	
Fertilizer use/Arable Land	kg/nutrs/HA	…	…	…	…	…	
Tractors/Arable Land	no/1000 HA	3.1	2.5	2.5	2.5	2.5	
Food Supply		1979-81	1989-91	1996-98			
Per caput Dietary Energy Supply	kcal/day	2 560	2 730	2 730			
Per caput Dietary Protein Supply	g/day	65	62	60			

Source: derived from data extracted from FAOSTAT

* 1999 provisional

INDICATORS	UNIT	1998	INDICATORS	UNIT	1990-1998
Gross Domestic Product (GDP)	MLN US$	241	Annual growth rate:		
Agric. GDP as share of total GDP	percent	…	GDP	percent	3.8
Gross National Product per caput	US$	279	Agricultural GDP	percent	3.9

Note: Agricultural GDP includes Forestry & Fisheries

Source: World Bank 2000. World Development Indicators (CD ROM)

YEMEN							
INDICATORS	UNIT	1979-81	1995	1996	1997	1998	1999
Population & Agric. Labour Force							
Population	1000	8 221	15 022	15 674	16 290	16 887	17 488
Population annual growth	percent	3.4	4.8	4.2	3.9	3.6	3.5
Rural/Total Population	percent	80	67	66	65	64	63
Density	Inh/sq km	16	28	30	31	32	
Agricultural Labour Force	1000	1 743	2 583	2 658	2 722	2 779	2 832
Agric. Labour Force/Total Labour Force	percent	72	56	55	54	53	52
Land Use							
Total Land	1000 HA	52 797	52 797	52 797	52 797	52 797	
Arable Land + Permanent Crops	1000 HA	1 464	1 543	1 553	1 563	1 613	
Arable Land	1000 HA	1 367	1 440	1 445	1 450	1 500	
Irrigated Land	1000 HA	291	485	485	490	490	
Agric. Production – Major Items*							
Indigenous cattle meat	1000 MT	30	34	37	36	39	39
Indigenous chicken meat	1000 MT	3	47	55	56	61	61
Sorghum	1000 MT	613	464	365	358	474	321
Food Production *							
Food Production Index	1989-91=100	75	114	114	120	132	130
Per caput Food Production Index	1989-91=100	106	88	84	85	91	86
Foreign Trade – Exports							
Total	MLN US$	697.5	1 587.4	1 964.3	2 480.8	2 570.0	
Agricultural	MLN US$	28.8	89.3	42.8	42.8	42.8	
Major Exports (share in Agriculture)							
Coffee roasted	percent	1.1	36.9	42.1	42.1	42.1	
Hide NES	percent	2.3	12.4	18.5	18.5	18.5	
Cigarettes	percent	0.7	3.9	10.5	10.5	10.5	
Foreign Trade – Imports							
Total	MLN US$	3 001.4	1 290.8	1 511.8	2 015.5	2 167.3	
Agricultural	MLN US$	714.1	908.6	1 197.7	1 105.2	911.7	
Major Imports (share in Agriculture)							
Flour of wheat	percent	5.0	13.4	13.1	13.7	14.7	
Sugar refined	percent	9.4	9.9	19.7	18.5	13.3	
Wheat	percent	13.6	16.6	12.8	19.3	13.2	
Agricultural trade balance							
Exports-imports	MLN US$	-685.3	-819.3	-1 154.9	-1 062.4	-869.0	
Land & Inputs							
Total Population/Arable Land	Inh/HA	6	10	11	11	11	
Fertilizer use/Arable Land	kg/nutrs/HA	9.3	9.1	5.6	13.3	14.5	
Tractors/Arable Land	no/1000 HA	3.3	4.0	4.0	4.0	3.9	
Food Supply		1979-81	1989-91	1996-98			
Per caput Dietary Energy Supply	kcal/day	1 950	2 050	2 050			
Per caput Dietary Protein Supply	g/day	59	58	56			

Source: derived from data extracted from FAOSTAT

* 1999 provisional

INDICATORS	UNIT	1998	INDICATORS	UNIT	1990-1998
Gross Domestic Product (GDP)	MLN US$	4 318	Annual growth rate:		
Agric. GDP as share of total GDP	percent	18	GDP	percent	1.0
Gross National Product per caput	US$	335	Agricultural GDP	percent	4.3

Note: Agricultural GDP includes Forestry & Fisheries

Source: World Bank 2000. World Development Indicators (CD ROM)

ZAMBIA							
INDICATORS	UNIT	1979-81	1995	1996	1997	1998	1999
Population & Agric. Labour Force							
Population	1000	5 732	8 193	8 389	8 585	8 781	8 976
Population annual growth	percent	2.8	2.4	2.4	2.3	2.3	2.2
Rural/Total Population	percent	60	57	57	56	56	56
Density	Inh/sq km	8	11	11	12	12	
Agricultural Labour Force	1000	1 828	2 443	2 490	2 535	2 580	2 623
Agric. Labour Force/Total Labour Force	percent	76	72	72	71	71	70
Land Use							
Total Land	1000 HA	74 339	74 339	74 339	74 339	74 339	
Arable Land + Permanent Crops	1000 HA	5 108	5 279	5 279	5 279	5 279	
Arable Land	1000 HA	5 094	5 260	5 260	5 260	5 260	
Irrigated Land	1000 HA	19	46	46	46	46	
Agric. Production – Major Items*							
Maize	1000 MT	941	738	1 409	960	638	856
Indigenous cattle meat	1000 MT	29	37	39	28	27	29
Cassava	1000 MT	288	590	620	702	817	850
Food Production *							
Food Production Index	1989-91=100	74	93	113	98	93	102
Per caput Food Production Index	1989-91=100	93	82	98	82	77	83
Foreign Trade – Exports							
Total	MLN US$	1 249.1	1.185.9	1 252.7	1 100.0	900.0	
Agricultural	MLN US$	9.1	31.7	47.6	81.8	89.7	
Major Exports (share in Agriculture)							
Sugar (centrifugal, raw)	percent	0.0	66.9	61.0	30.6	33.5	
Cotton lint	percent	39.9	0.0	0.0	23.5	21.4	
Tobacco leaves	percent	41.1	4.7	12.0	8.6	9.8	
Foreign Trade – Imports							
Total	MLN US$	973.7	950.0	1 194.5	700.0	650.0	
Agricultural	MLN US$	102.3	64.9	71.2	101.4	160.8	
Major Imports (share in Agriculture)							
Maize	percent	37.3	29.8	18.5	17.3	44.8	
Wheat	percent	21.8	6.4	21.5	4.2	6.8	
Food prepared NES	percent	1.5	3.0	2.8	7.7	4.8	
Agricultural trade balance							
Exports-imports	MLN US$	-93.2	-33.2	-23.7	-19.6	-71.1	
Land & Inputs							
Total Population/Arable Land	Inh/HA	1	2	2	2	2	
Fertilizer use/Arable Land	kg/nutrs/HA	14.5	10.5	9.8	10.8	7.7	
Tractors/Arable Land	no/1000 HA	0.9	1.1	1.1	1.1	1.1	
Food Supply		1979-81	1989-91	1996-98			
Per caput Dietary Energy Supply	kcal/day	2 180	2 060	1 960			
Per caput Dietary Protein Supply	g/day	58	53	50			

Source: derived from data extracted from FAOSTAT

* 1999 provisional

INDICATORS	UNIT	1998	INDICATORS	UNIT	1990-1998
Gross Domestic Product (GDP)	MLN US$	3 352	Annual growth rate:		
Agric. GDP as share of total GDP	percent	17	GDP	percent	7.3
Gross National Product per caput	US$	314	Agricultural GDP	percent	-4.9

Note: Agricultural GDP includes Forestry & Fisheries

Source: World Bank 2000. World Development Indicators (CD ROM)