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Trade in Food and Food Products in Africa

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ABSTRACT

The sub-Saharan African Region, unlike other developing regions, has made little progress in the past 20-30 years towards improving its food security situation. Indeed, in terms of average aggregate *per caput* availability of food, sub-Saharan Africa is now worse off than in the past. Apart from the growing number of chronically food insecure people, projected to grow to one third of the population of the Region in the year 2002, the number of refugees and displaced persons, as a result of man-made problems, is growing. Immediate emergency needs are taking a considerable amount of national and international resources at the expense of longer-term development. In order to focus the efforts to alleviate food insecurity prevalent in the Region, so that the greatest sustainable impact can be realized, the paper discusses the current situation and prospects for the future, following broad areas within which appropriate actions by all concerned ought to be planned and implemented.

The scale of food insecurity and poverty in sub-Saharan Africa underscores the importance of economic growth in general and agricultural growth in particular, in view of the high dependence of the economies on agriculture. A growing and productive agricultural sector in the Region would be the driving force for their economies, providing food, jobs, savings and market for food from the industrial sector. The Region has considerable untapped potential for increasing agricultural and food production.

Exploiting this potential should be the number one priority, and calls for concrete agricultural and food policy initiatives. measures should be taken to eliminate the inequities in the distribution of land, income, political power, education and training and access to inputs, including those embodying new technology to services, markets and finance.

Almost all of a these issues are of a long-term nature; the acute hunger that exists now needs to be addressed immediately. Direct interventions that avoid where possible, distortions of economic incentives are needed. It is important to develop food security interventions that target the poorest and most food insecure, particularly those who do not benefit from economic growth and social security interventions that also have a development pay-off. These include, public works schemes which simultaneously provide an income transfer to poor employees, while contributing to development through tree planting, soil erosion control or road building.

Key Words: Food insecurity, food aid, disasters household, food security, nutritional status, export crop sector, Uruguay Round, soil mining, green revolution, off-the-shelf technology, agriculture research

Introduction - The Global Setting

Over the past three decades, world food production grew faster than the world's population. *Per caput* food production is today about 20% above that of 30 years ago. Food availabilities (for direct human consumption) are equivalent to some 2700 kilocalories per person per day, up from 2300 kilocalories 30 years ago. Yet such food availabilities are not distributed equally. At the one extreme, Western Europe's average *per caput* availabilities stand at some 3500 kilocalories and those of North America at some 3600 kilocalories. At the other extreme, average *per caput* availabilities are only 2100 kilocalories in sub-Saharan Africa. Although there are undernourished people even in countries with relatively high national averages - and not all people in countries with low national averages are subject to under-nutrition - by and large, most food insecure people are to be found in countries with inadequate total supplies. At the end of the 1980s, some 800 million people, amounting 20% of the population of the developing countries with nearly 40% in sub-Saharan Africa, were under-nourished¹. The Near East, North Africa Region, Latin America and the Caribbean had the lowest percentage of those undernourished - about 13%. The largest number, though declining, were to be found in Asia, but those in sub-Saharan Africa have been increasing rapidly, both in total and as a proportion of the region's population.

The prospects for the future, as they emerge from FAO's AT2010 Study, indicate that trends towards increasing *per caput* food supplies in most developing countries will continue. In developing countries as a whole, average *per caput* food supplies are

expected to reach 2740 kilocalories in 2010 - a substantial increase from 2470 kilocalories in 1989-1990. However, again, not all countries would share in this increase and the incidence of undernutrition is likely to remain high, particularly in terms of the number of persons affected. Overall, the developing countries are projected to have some 730 million people undernourished by 2010, with the number of chronically undernourished people in sub-Saharan Africa increasing by more than 100 million, to just over 300 million². This level of undernutrition would exist at the same time as the net food deficits of the developing countries continue to grow. Thus, their net cereal imports may grow from the 90 million tons in 1988-1990, to some 162 million tons in 2010. the aggregate cereal self-sufficiency ratio may decline from 92 to 90%. Although the largest increases are foreseen for the Near East and North Africa (33 million tons) and Latin America and the Caribbean (15 million tons), only a small number of countries in these regions currently face serious foreign exchange shortages and food security problems. The doubling in the net cereal trade deficit (from 8 to 19 million tons) foreseen for the sub-Saharan Region, may be far more ominous, given the precarious balance of payments situation in many of the countries in the region and the unfavourable prospects for many of them. This is especially true for those that must continue to finance their growing food import requirements from agricultural export earnings.

MAJOR FOOD SECURITY PROBLEMS IN THE SUB-SAHARAN AFRICAN REGION

Food security is the result of developments in a large number of usually inter-connected areas³. particularly important are the frequent and acute food security crises that have their roots in political and climatological instability, so pervasive in the sub-Saharan African Region. However, longer- term developmental issues, such as those concerned with increasing access of food to the poor (i.e., higher and more stable incomes, greater equity in distribution of income and productive resources), are equally important. issues related to the availability of appropriate technology, the supply and use of external inputs, land tenure regularization, extension services and investment in infrastructure, as well as the policy environment, are also of direct importance for generating and sustaining food security.

Food Emergencies

The Region's immediate and most urgent food insecurity problems are often temporary and transitory in nature. The number, scale and intensity of emergencies are all increasing, caused by both natural factors, especially drought which is a prominent feature of many areas in the Region and civil strife and conflict. The costs of both are particularly high, because of the scale of human suffering involved. However, both, but especially the latter, can also cause the destruction of the human and social resource base of the countries concerned, reversing in some cases past gains in development.

Experience has shown that it is relatively easier to fend off potential food emergencies resulting from natural causes. Countries in Southern Africa experienced an unprecedented decline in staple food production in their 1991-1992 growing seasons, largely on account of drought, which put at least 18 million people at risk. Mechanisms to deal with the large-scale relief operations that were necessary to alleviate hunger, did not exist. Yet the capacity of what one could term "the world food security system" to act in a timely and effective manner during all phases of the response process was remarkable. The early warning signals on the extent and seriousness of the situation provided by FAO's Global information and Early Warning System (GIEWS), supported by the Regional Early Warning Unit of Southern Africa Development Community (SADC), were followed up with generous pledges by the international community and by the co-ordinated delivery and distribution of supplies by the World Food Programme (WFP) to those in need. Human suffering was kept to a minimum and losses of productive capacity and capital, so essential for a speedy recovery, were minimized.

A very disquieting trend, however, has been the growing number of man-made food emergencies in the Region, that have led to a large number of food insecure households. Wars and related factors have become the single most serious cause of food insecurity in the Region, often producing large urban concentrations of displaced persons. In the region covered by the Intergovernmental Authority on Drought and Development (IGADD), for example, some 45 million people (nearly half of the population) were estimated to be subject to food insecurity in 1990. Some 45% of these were classified as refugees and affected by war⁴. More recently in 1994, victims of all types of disasters receiving relief assistance from the WFP, 21 million were living in Africa and 14.2 million (nearly two-thirds), were the victims of man-made disasters, fairly equally distributed were those among West and Central Africa (4.6 million), the Horn and East Africa (3.9 million) and southern Africa (5.6 million); the rest were victims of natural disasters.⁵ In general, food aid and other resources have been used flexibly as needs have been dictated. Bilateral donors, the international community and the UN system, have built institutions and mechanisms (e.g. IEFRR, special funding for Protracted Refugee Operations), which have the capacity to act in a timely fashion. However, the international community is often faced with tragedies whose proportions far outstrip the means available to tackle them.

STATUS OF HOUSEHOLD FOOD SECURITY AND ADEQUACY AND STABILITY IN FOOD SUPPLIES AT THE NATIONAL LEVEL

The consequences of food insecurity are ultimately articulated at the level of the individual, essentially as reflected in his or her nutritional status. Current estimates of the incidence of chronic undernutrition mostly ignore the factors that affect nutritional well-being through processes that determine the intake of food and its physiological utilisation by the individual. Approximately 40% of the sub-Saharan African Region's population, or some 200 million people, are currently chronically undernourished. This situation reflects

an increasing trend in both absolute and relative terms since the late 1960s. Within the global context, this translated into the fact that of the 25 countries considered to have the lowest status of household food security at the end of the 1980s, all but three were from sub-Saharan Africa⁶, as shown by the overall picture of the food security index⁷. Without underplaying the importance of the distributional issues, it must be stressed that the major contributor to this situation is the low levels of *per caput* daily dietary energy supplies in these countries. *Per caput* daily dietary energy supplies (DES) for the Region as a whole, for example, amounted to 2040 kilocalories in 1990-1992, which is less than the levels observed in 1961-1963. This is in sharp contrast to other developing regions, where aggregate food supplies increased significantly during the same period, reaching 2300 kilocalories in South Asia, 2670 kilocalories in East Asia, 2740 kilocalories in Latin America and the Caribbean, and 2960 kilocalories in Near East and North Africa. Moreover, the observed variability from the trend of cereal production which averaged more than 10% during the 1971-1992 period in more than 30 countries in the Region, is generally more than twice that observed in other developing regions. This translates into relatively high instability in consumption, because of the Region's inadequate import capacity.

A recent study by the International Fund for Agricultural Development (IFAD), singled out three distinct population groups (in terms of their relative size to total population) in rural areas of the Region as the most vulnerable:

1. small holder farmers (73% of the rural population of the Region)
2. nomadic pastoralists (13% of the rural population)
3. households headed by women (31% of the rural households)⁸

The sheer magnitude of food insecurity among the small holders is caused by a virtual stagnation in overall agricultural production. Food insecurity among the nomadic pastoralists is largely the result of the inherent low productivity of a livestock-production system that has remained out of mainstream development. the third major vulnerable group, the incidence of women-headed households was considered to be growing, because of a number of factors, including migration and civil wars. Indeed, this pattern of food insecurity tends to be a reflection of the general level of economic and social development. A recent FAO study that analyses the issue within a global context, indicates that the structure of food insecurity in the countries of sub-Saharan Africa is clearly discernible from those in the other regions of the world.⁹ Factors representing the extent of poverty, in close association with low levels of labour and land productivity, are most significant in discriminating the countries in the Region from those in the rest of the developing world.

As already noted, food insecurity in the Region is also exacerbated by year-to-year variability in production, caused essentially by natural factors. In the period covering

1970-1992, for example, the estimated coefficient of variation (CV) of cereal production was more than 10% in 30 countries of the Region, and more than 20% in 14 countries. Shortfalls in production were excessively high during some years. production shortfall in cereals, for example, was over 50% for Liberia during 1990-1992, close to 50% in Sudan in 1987, 1989 and 1990, and over 40% in Botswana in 1985 to 1987 and 1992. Moreover, production variability in the 1980s increased significantly compared to the 1970s by as much as 80% for the Region as a whole. At the individual country level, 16 countries had a variability of 20% or more in the 1980-1992 period, compared to 11 countries during the 1970s. In ten cases, notably in Angola, Central African Republic, Chad, Liberia, Namibia, Somalia, Sudan, Swaziland, Uganda and Zimbabwe, the CV increased by over 10% in the second period. In contrast, a significant drop in variability was noted in only three cases - Gambia, Mauritania and Nigeria.

In view of the high share of cereals in the diet and the inadequate import capacity of the Region, cereal production variability was translated into instability in available food supplies, leading in turn to consumption variability. An examination of year-to-year variation in DES, shows that variability in aggregate food availability increased in the 1980s in 20 countries; 13 of them by over 5%. Studies by FAO have shown that any shortfall in consumption of more than 5%, in terms of aggregate food supplies, could have serious food and nutritional consequences. A shortfall of this magnitude was experienced by many countries of the Region in various years, with likely, but largely unrecorded damaging consequences on household food security.

Apart from the lack of access to sufficient food, the overall nutritional situation remains poor, because of non-food factors. Increasing household food supply is important, but does not in itself solve the problem of poor nutritional status. Equally, necessary prerequisites are improved health services, better hygiene and education, which contribute to improved care. a study, based on a sample data set from Rwanda, notes that protection from infection by parasitic worms, would reduce stunting by the same degree, as doubling household calorie consumption from 1500 to 3000 kilocalories per adult-equivalent, while a clean latrine would have twice this impact¹⁰. These other non-food factors were also stressed during the two regional meetings held in the course of preparation for the International Conference on Nutrition (ICN).¹¹ Iodine deficiency disorder was considered to be a public health problem in 27 countries and the population at risk was estimated at 100 million people. Vitamin A deficiency was also observed in 12 countries and the population at risk was estimated at 50 million. The prevalence of anaemia was considered to be the highest among the developing regions.

THE PROSPECTS FOR ADDRESSING FOOD SECURITY PROBLEMS IN THE SUB- SAHARAN AFRICAN REGION

Raising Food Production

A recent assessment of the theoretical potential for food crop production in the Region indicates that 33 of the 41 countries for which appropriate data were available, have the physical potentials to meet or exceed likely food demand¹². In view of the records of food production in the Region, however, achievement of such theoretical potentials is not foreseen to be greater than that of population. Out of the total increase in crop production foreseen, 53% is expected to be due to crop yield increases, while the rest is accounted for by additional arable area (30%) and increased cropping intensity (17%). This assessment puts considerable demand on all major sources of production.

Increasing Area Cultivated

the AT2010 Study projects the cultivated area to grow by 20% and the harvested area by 34%, indicating some improvement in cropping intensity. Almost all of the increase in cultivated land is expected to be for rainfed crop production. About 800 million hectares of land are suitable for agriculture and have sufficient rainfall and water-holding characteristics for a growing period of 180-270 days. However, exploitation of land for farming has been slow, because of the constraints related to terrain and soil features in rainfed crop production systems. The fragility of the soil structure in most of these areas requires adoption of new technology and farming systems; this makes bringing additional land into production increasingly expensive, if sustainability problems are to be avoided. Further, most countries in the Region will have to regularize land tenure institutions. Existing land use rights will need to be clarified and given support by national institutions, before new farming techniques are adopted.

Increasing Productivity

the potential for extending the land under irrigation and increasing the use of mineral fertilizers, seem to be very large.

Currently, only about 6.3 million ha of land is under irrigation in sub-Saharan Africa, which could be increased to about 30 million ha. There are, however, constraints on how quickly such potentials can be exploited. The irrigated area has expanded by about 1% per year over the past 15 years. according to the AT2010 projections, by the year 2010, irrigated area will have increased by 2 million ha (or 3% of all arable area then). A number of factors point towards the slow-down in irrigation in the future:

1. increasingly higher costs in bringing new areas under irrigation as nearly all of the better sites are already exploited.
2. possible labour constraints and measures to avoid degradation problems, such as waterlogging and salinity, which add further to the costs of irrigation. In view of a

high degree of inefficiency in water use, priority is likely to be accorded to improving on-farm efficiency, rather than extending irrigation areas.

Fertilizer use in the Region, at 11 kg/ha, is very low; a large part of cultivated land is not fertilized at all. "Soil mining", the removal by plants of soil nutrients in excess of that returned to the land, is already considered to be a serious problem and will be a critical constraint for production growth. According to a study, a total of 9 million tons of plant nutrients were lost in 1983 and losses reached an estimated 13 million tons by the year 2000¹³. Soil mining has implications to both production and soil conservation. Vegetation cover, which is essential to minimize soil erosion and to conserve soil moisture, depends on soil fertility. Increased use of mineral fertilizers within improved management practices, such as integrated plant nutrition systems (IPNS) that optimise the contributions of organic matter and increase biological nitrogen fixation, can hinder soil mining and thus contribute to soil conservation. However, such techniques are yet to be tested on farms. Thus, how to increase the use of fertilizers remains a major policy issue since a significant turn-around in food production is not likely, unless chemical fertilizers are made accessible both physically and economically, to a large number of smallholders in the Region.

AGRICULTURAL RESEARCH, IMPROVED TECHNOLOGY AND ITS DISSEMINATION

Increased use of irrigated land, mineral fertilizers and other modern inputs and new management systems in food production, require significant research and improved technology dissemination techniques. However, the Region suffers from a bias dating back to the colonial era, whereby resources for agricultural research have emphasised export crops at the cost of indigenous food crops. Efforts to reverse this have been painfully slow. At the same time, most African staples (millet, sorghum, cassava, yams, cowpeas, bananas and plantains and traditional vegetables), have received little attention from advanced research institutions. As a result, the Region has lagged behind most other developing regions in generating improved varieties and technologies that are locally adaptable. Increasing research efforts in this direction are a major challenge for the future. Improvements in crops that are drought resistant and the development of diversified farming systems that can cope with insufficient and irregular rainfall, are also important from the perspective of stabilizing food production.

There is not a wide range of off-the-shelf agricultural technology that could be immediately applicable, even with modifications, to suit local conditions in Africa.¹⁴ The balance of opinion is that no "green revolution" is on the horizon, but there is improved genetic material for a range of ecological situations. Gaps of 60-100% between experimental yields and farm yields are not uncommon, but such gaps are unlikely to be closed appreciably without addressing a large number of components, that make the

technology attractive and accessible to a low-resource producer.¹⁵ The latter includes appropriate macro and sectoral policies that provide adequate incentives for an average small holder to benefit from the adoption of the technology. In 1991, the Consultative Group on International Agricultural Research (CGIAR) system allocated 43% of its core resources to the Region, the highest among all developing regions. This increased allocation reflects an urgency for tackling the chronic problems of the Region, namely, rapid population growth, stagnant *per caput* food production, tropical agro-ecological zone fragility, limited national research capacities, disease and pest problem severity and the relatively slow progress rate in technology diffusion. In addition, other positive developments in the CGIAR research agenda include:

1. a major upland rice improvement programme for the Region,
2. a greater concentration of research efforts in pearl millet - following the transferring of some of the millet responsibilities from the International Crops Research Institute for the Semi-Arid Tropics (ICRISAT) to West Africa and the SADC region,
3. the expansion of CGIAR activities in banana and plantain research,
4. an increased allocation of resources to livestock research in the Region, currently at about 70% of all CGIAR livestock research allocations¹⁶.

These considerations have raised the issue of the relevance of Asia's Green Revolution in Africa, since Asia's green revolution led to the largest increase in food production in human history. Three main factors have been attributed to this:

1. the creation, through scientific research, of high-yielding wheat, rice and maize varieties that responded profitably to water and fertilizer inputs.
2. the availability of increasing supplies of irrigation water and chemical fertilizers at prices that farmers could afford and the formulation of public policies that made it profitable for farmers to adopt the new technologies¹⁷.

The Asian green revolution was focused initially on high-potential areas and has been sometimes criticized on equity grounds. However, the technology generated was on the whole, scale-neutral. Initially taken up by progressive large farmers, the majority of farmers, regardless of farm size, eventually adopted it. Partly as a result of the green revolution, wheat and rice prices became about 50% lower in real terms in 1988 than they were 20 years previously, which is an immense relief to the majority poor who spend over 70% of their incomes on food. In addition, the green revolution is known to have induced strong rural linkages that created jobs and incomes for the poor in the rural areas.

The limitations on what can or cannot be transferred from one continent or one ecological zone to another are generally well known. Nevertheless, the nature of Africa's problems is different from Asia's, but the scientific principles that must be followed and utilized are

much the same and deserve serious analysis, with a view to their possible replication in Africa.

INCREASING LIVESTOCK PRODUCTION

Livestock production makes an important contribution to food security and can contribute to food variability in Africa. Economic stability at the farm level is enhanced with the inclusion of animals, which act as a cash buffer and capital reserve that can be readily accessed at any time and thus provide a hedge against inflation. Animal inclusion can also reduce the risks associated with crop production. In integrated farming systems, animals can utilize and add value to farm residues and wastes and draught animals can provide a renewable source of energy, produced in the farm. Animal manure can be used as a valuable organic fertilizer or as an important fuel - either directly or processed in biogas digesters.

Reducing the uncertainty in the production processes in sub-Saharan Africa requires measures such as promoting more efficient land use and water resources (including the expanding use of available water resources), developing integrated farming and livestock systems that could mitigate the effects of frequent droughts and promoting off-farm income opportunities to reduce dependence on agriculture. Since these in turn depend on factors underpinning the development process itself, the prospects for reducing instability do not look bright over the medium-term perspective.

IMPROVING AND STABILIZING FOOD CONSUMPTION IN SUB-SAHARAN AFRICA

improving and stabilizing food production is an important element of improving and stabilising food consumption, which can also be enhanced and stabilized through international trade and stocking policies. Generating the foreign exchange required for augmenting domestic food production through imports, is closely linked to the conditions of general economic development in the countries of the Region. This takes into account external debt, aid and net resource transfers; potential benefits will accrue to the Region from Regional trade blocs and co-operation in food security; and food security impact of the Uruguay Round experience in the 1980s. all these factors have shown that reduced external resources led to widespread import constraints, that checked imports of both food and inputs such as fertilizers, that were essential for increased food production.

Using Stock Policies to Stabilise Consumption

Over the recent past, a majority of countries in the Region have implemented policies, aimed at increasing the efficiency of parastatals and reducing government outlays towards stockholding and consumer subsidies, as part of economic restructuring. The costs and

benefits of building and utilizing food reserves or relying on the world market for food supplies, needs to be carefully weighed. Experience from both developed and developing countries with price stabilization schemes has shown that their effectiveness, as well as the costs and benefits obtained, vary greatly according to the scheme chosen¹⁸:

1. domestic price stabilization schemes should seek to distinguish between price support and purely stabilization objectives, aiming for the latter by maintaining as far as possible a firm link with international price movements.
2. Government intervention should aim at counterbalancing only the extreme points of price variability not attempting to smooth out price fluctuations within too narrow a range, since the latter requires frequent and often distorting interventions on the market. It is potentially also very costly.
3. governments should weigh carefully the costs of schemes that require the public sector to perform such activities as procuring, storing and distributing stocks. They should examine whether these functions could be better contracted out to the private sector.
4. stabilization schemes should be administratively simple and transparent
5. other mechanisms, such as crop insurance schemes, and forward and futures markets, could be explored before putting in place fully fledged price stabilization schemes.
6. sharing of crop production risks among neighbouring countries, through regional stockholding schemes, have been found to provide cost-effective protection against production variability.

REGIONAL TRADE BLOCS AND CO-OPERATION IN FOOD SECURITY

The Region is now covered by four trade agreements: the Economic Community of West African States (ECOWAS), the Economic Community of Central African States (ECCAS) and Union Douaniere et Economique del l'Afrique Central (UDEAC), the Preferential Trade Area for Eastern and Southern African States (PTA) and the Southern African Customs Union (SACU). The ultimate objective established by the Organisation of African Unity (OAU) is to work towards the African Economic Community, on the basis of such sub-regional groupings by the turn of the century. Regional trade, however, represents a small part of total external trade; for example, the intra-regional trade within UDEAC and ECOWAS amounted to 4.3 and 6.1% of total external trade of the member countries respectively in 1990¹⁹. There is insufficient quantitative analysis to determine if the gains from expanded intra-regional trade exceeds those from a greater integration of the Region with the world economy, but a number of reasons have been advanced in support of a regional approach²⁰:

1. a great deal of similarity in the range of commodities produced and consumed in various countries in the Region.

2. a sizeable, unrecorded trade in products that takes place across borders that are difficult to police and control.
3. the importance of co-ordinating production, pricing, and export policies of primary commodities, which face an inelastic demand in the world market (i.e., cocoa and coffee).
4. inadequate integration with the world market of large tracts of producing and consuming areas of countries because of a lack of infrastructure.
5. the attractiveness of a larger regional market for encouraging investment.
6. greater leverage in international trade negotiations and the fiscal and other advantages in pooling production and consumption risks through measures, such as regional stockholding schemes.

These perceived advantages with a regional approach need to be weighed through careful analysis, against those from a non-preferential, multilateral approach.

THE URUGUAY ROUND AGREEMENT AND PROSPECTS FOR TRADE

The environment for exports from the Region, which is heavily dependent on earnings from a few primary commodities, has deteriorated considerably during the 1980s. The index of Africa's agricultural terms of trade has fallen from 100 in 1980 to 64 in 1991, indicating a severe reduction in the purchasing power of its agricultural exports. The sharp decline reflects mainly a fall in the prices of key agricultural commodity exports; the prices of some mineral and forestry products held up better. the real export prices of coffee and cocoa had fallen 69% from the beginning of the eighties, and palm oil by 49% and sisal and cotton by 47% from 1992. The fall in real prices partly reflected cost-reducing technological change (mainly taking place in other regions), changes in tariff and non-tariff barriers in some of the main import markets, the low income elasticity of demand for commodities exported by Africa in most of the major import markets and the widespread adoption of policies by countries in the Region to reduce the direct and indirect taxation of export crops. Devaluation and lower commodity taxation have favoured the production of traditionally exported crops, even though world prices for these commodities were falling. Moreover, as many developing countries in Africa have been undertaking the same structural adjustment reforms; this has acted to increase supplies in aggregate and therefore depress prices. The irony is that, while Africa's exports have increased in volume, export earnings in real terms have declined.

The outlook is somewhat better for commodity prices, compared to the disaster of the 1980s. Recent projections showed that both oil and non-oil commodity prices were expected to rise. Coffee, cocoa and tea prices were projected to increase by the year 2002. the index of beverage prices would not reach the level attained in 1989 by then and would be well below the level reached in the peak year of 1984. Prices of non-food agricultural products such as cotton, rubber and timber are also expected to rise. However, securing sustained gains from international commodity markets will, in the future, require new

approaches and strategies, because of the changing structure and conduct of international commodity markets.

Firstly, in the case of tropical beverages, increased demand from the countries of the former USSR and the middle-income developing countries where *per caput* consumption of these commodities is low, could provide some additional markets, but, the prospects for sustained demand are poor. Secondly, countries of the Region singly or as a group may be able to wield global market power in the short-term, but their ability to influence prices in the longer-term is waning, because of an increasing number of significant entrants into the market. These for example, are East Asian countries in the cocoa market (their share increased from zero to 20% in 20 years) and Malaysia, in palm oil. Short-term spurts in commodity prices in the past and in many cases prompted by the major producers through measures such as export taxes and cartels, was one important factor that led to new entrants. High prices have also led to substitutions in use, for example, from tin to aluminium and from jute to synthetics. Thirdly, the margin between retail prices in the consuming markets and producer prices in the producing countries, already wide, is not likely to narrow further as exports of such commodities are increasingly handled by large international trading bodies. They include those who have over the past years, invested in advertising and acquired for themselves brand-name recognition. The high cost of processing, packaging, advertising, marketing, and distribution, means that the cost of the primary commodity as a share of the final product, will continue to be small.

The Uruguay Round Agreement (URA) has made some progress in reducing trade barriers for agricultural raw materials, for example, rubber, jute, hard fibres, and tropical wood, where the duty on final-stage processed products has been cut by almost 60%. trade barrier escalation still remains, rising more than 5% as one moves from unprocessed raw materials to finished industrial goods.²¹ Post-Uruguay Round tariffs escalate more sharply, averaging between 8 and 26% on the final-stage product for some specific commodities, including oilseeds, tropical nuts and fruits, tropical beverages and leather. This puts a brake on processed exports, at least for the short-term. Additionally, there are still substantial domestic consumption taxes for tropical products in some major developed countries.

The possible impact of the URA on individual developing countries will depend significantly on the pattern of their agricultural commodity trade and on the responses they make to the new trading opportunities. An OECD/World Bank study estimates global income in the year 2000 was US\$213 billion higher with implementation of the Uruguay Round, than otherwise²². Incomes would be boosted in all regions, except Africa and the Near East, where small losses were envisaged. FAO projections to the year 2002 using 1987-1989 as the base, were modified to allow for the changes in income as well as reductions in tariffs and export subsidies agreed under the URA²³. Commodities covered include main foods (except roots, tubers, and pulses) and other selected agricultural

products (tropical beverages, sugar, bananas, rubber and hides and skins). Prices of most food and non-food agricultural products are likely to be higher as a result of the Uruguay Round than they would have been in its absence, with perhaps the exception of tea. The growth rates of world production and consumption are not foreseen to be affected significantly, but those for food and agricultural trade would increase. There would also be significant shifts in the projected trade patterns at the regional level. By the year 2002, export volumes are expected to decline from Western Europe; and import volumes to rise in Japan and decline in Eastern Europe and the area of the former USSR. In contrast, export volumes would increase for North America and Oceania. Among the developing regions, the volume of imports would rise almost everywhere, but exports would only make significant gains in Latin America, the Caribbean Region and the Far East.

African countries tend to be importers of food, particularly wheat, rice and dairy products and exporters of tropical products such as cocoa, coffee, fruit and some agricultural raw materials. Most of these countries are least developed (28 out of over 50) and low-income food-deficit countries (43); they have preferential access for their exports under arrangements such as the Lome Convention. The increase in the prices of the temperate zone food commodities covered in the Study, point to a substantial rise in import bills. Assuming the other commodities not covered (another 5%) would behave in the same way, the agricultural import bill rose from US\$8.4 billion (f.o.b. basis) in 1987-1988 to US\$14.0 billion in the year 2000, with an estimated 15% of the rise due to the Uruguay Round. The increase is mainly on account of changes other than the Uruguay Round (particularly population growth). The effect on production is seen to be marginally positive at best, while consumption fell slightly. The net result of generally small declines in the volume of imports, would be outweighed by the rise in prices due to the Uruguay Round. In addition, the Uruguay Round leads to lower export subsidies on imports of wheat and livestock products, which boost import bills by perhaps something under US\$100 billion.

The *per caput* consumption levels of basic foodstuffs by the year 2002 would remain precarious, with increases in rice, maize, oilseed and poultry and reductions in other coarse grains, beef, sheep-meat and milk. The Uruguay Round would hardly change this pessimistic scenario, besides creating new barriers based on quality and packaging.

The possibilities for increased exports were expected to arise for maize, millet/sorghum, fats, oils and oil-meals, among the food commodities and all the tropical products covered. Overall, the value of agricultural exports from Africa would rise from US\$6.9 billion in 1987- 1989 to US\$10.1 billion in the year 2002. The effect of the Uruguay Round is to add US\$700 million to the value of exports, just under a quarter of the overall growth. Also to be taken into account, is the possible loss of the potential value deriving from reduced preferential markets - a loss that may be estimated at some US\$200 million.

The net result, therefore, for the African developing countries is that import bills of the

main agricultural commodities would rise by the year 2000 from their level in the late eighties by US\$5.5 billion, in addition to a US\$0.1 billion loss due to reduced export subsidies; while export earnings from the main agricultural commodities (but excluding many important ones), would rise by US\$3.2 billion, less the loss of potential preferences of US\$0.2 billion. On any interpretation, this is not a very satisfactory outcome. When allowance is made for the agricultural commodities not covered, assuming their values to grow at the same rate as the commodities covered, African developing countries would have moved from an export surplus of US\$1 billion in 1987-1989 (f.o.b. basis) to a deficit of US\$500 million in the year 2002, including the effects of the Uruguay Round.

The situation varies from sub-region to sub-region. In west and Central Africa, most countries are importers of grains and livestock products but are exporters of tropical beverages, oilseeds, agricultural raw materials, and tropical fruit. There is also a significant trade in live animals within the region. A substantial part of their exports are made under preferential arrangements with Europe. The current higher food prices, rather limited gains and even losses for some of their major export commodities, should encourage these countries to look afresh at the possibilities of expanding their food crop sector. This conclusion was also reached by an FAO/ECOWAS Expert Consultation on International Policy Change and Agricultural Trade in Africa South of the Sahara.

In Eastern Africa, most countries are importers of cereals, while they export coffee, tea, fibres, hides and skins and in some cases horticultural products. Mauritius is a large exporter of sugar and has a considerable textile and clothing industry. The rise in the import price of cereals and oilseeds should give a stimulus to their production, provided the increases are passed on to the farmers. In the case of hides and skins, much depends on tapping the potential of this sub-region by improving the quality of the produce. Production of hides and skins should expand substantially, if the forecast rise in meat production takes place.

Southern Africa is more self-sufficient than the Eastern Region in food, but has suffered from civil strife and drought which have led to large-scale imports in several recent years. Under normal circumstances, however, the region should be largely self-sufficient and an exporter of a wide range of agricultural products not only of tobacco, sugar and fibres, but also of fruit, vegetables and coffee. The land-locked nature of several of these countries, limits the extent to which world price changes can affect farmers' decisions, even when they are passed on in full. A combination of fostering intra-regional trade and relying on high value products for export to world markets, will continue to be among the policy options to be considered.

The upshot of these changes is that most African countries could well have to give a greater weight to a strategy of:

1. increasing food production and
2. promoting diversification for their export crop sector.

The rise in the world prices and decrease in export subsidies over the period to the year 2002, offers an opportunity to African countries to pass on the increase in prices to the producers of cereals, including part or all of the permissible degree of protection, at least for the period of implementation of the Uruguay Round. At the least, African developing countries could consider the feasibility of "capturing the surplus" for their farmers by raising farm prices to offset the domestic price depressing effect of the remaining export subsidies, within the limits set by the tariff bindings and included in their schedules. The extent of the increase should, however, be worked out on a country by country basis, taking into account changes in other sectors.

As regards the other sectors, it will be important for African countries to improve the quality and competitiveness of products for which new market opportunities may open up, for example in some horticultural products, oilseed products and hides and skins. In order for countries to diversify their exports, it is necessary for the right enabling environment to be developed and for adequate international support to be given for project development. However, it must be remembered that the bulk of Africa's agricultural exports are likely to come from traditional export crops, particularly coffee, cocoa, sugar and rubber, which together will account for well over half of total agricultural exports.

NET RESOURCE TRANSFERS

Foreign direct investment which brings with it access to technological know-how, is still very low with the bulk of it going to oil and mineral exporting countries.

All evidence suggests that resource inflows have been barely sufficient for the majority of countries in the Region to make up for the terms of trade losses, let alone to provide for new investment. An estimate shows that 21 of the 25 countries reviewed, experienced terms of trade losses, the average decline being close to 30% - equivalent to about 8% of the GDP.²⁴ In six of these 21 countries, official development aid (ODA) flows, covered their terms of trade losses. In 10 countries, ODA flows offset terms of trade losses only partially, while 5 countries suffered from both terms of trade losses and declines in ODA flows. The Region needs a considerable external transfer of resources. The World Bank's long-term perspective study, estimates that the Region would need about 9% of its GDP to be added from external sources of the 1990s in order to attain a growth rate of 1-2% *per capita*²⁵ ; even this is considered to be a conservative estimate.

POLICY FRAMEWORK FOR IMPROVING FOOD SECURITY

Ongoing Policy Reforms

Policy reforms in most of the countries of the Region are being conducted largely within the framework of structural adjustment programmes. The rate of success of such programmes is the subject of considerable debate. A recent World Bank study argues that improvements in the domestic macro-economic environment explained much of the economic growth of the countries in the Region, in the recent past²⁶. The study showed that *per caput* GDP in those countries that reformed their macro-economic policies increased by 1 to 2% more than in the non-adjusting countries between 1981-1986 and 1987-1991. While opinions differ on implementation issues (timing and sequencing of reforms and modalities of protection of weaker groups of the population), there are few arguments against the principal lessons:

1. on the fiscal side, countries should avoid large and persistent deviations of spending from the sustainable means of financing.
2. careful screening of public investments is required with regard to their economic and social returns.
3. conditions should be created for markets to work more efficiently and for prices to play their role as the major signals for resource allocation.
4. non-economic objectives should be pursued by direct interventions, avoiding where possible, distortions of economic incentives.

Some other lessons from the implementation of structural adjustment programmes in the Region are worth emphasizing. It is by now widely accepted that aggregate production response to price incentives is much lower than previously thought, as a result of aggregate resource constraints. Recent developments in the Region also have shown that where there is a history of limited private sector involvement in marketing and distribution activities the private sector may not "step forward" to cover the vacuum left by the withdrawal of the state - notably of agricultural parastatals in marketing - and the storage and processing of inputs and outputs.

As a result of this knowledge, a number of positive elements are emerging in the most recent approaches taken in policy and programme formulation. More emphasis is currently given by international funding institutions and donors in helping countries improve factors that contribute to reduce aggregate resource constraints and thus make production capable of responding to incentives. These factors have included, agricultural infrastructure interventions for poverty alleviation, improvements in education and health and measures to deal with environmental and natural resource degradation. Since these investments are largely of public goods nature, this emphasis reinforces the effective role that a State ought to play in development, though in a different form - namely, away from direct intervention in production and distribution, towards the provision of public goods and the creation of an enabling environment for competitive growth.

Safety Nets for Vulnerable Groups

The scope for food security in Africa is enormous, both to meet the needs of the chronically food insecure as well as for emergency relief. In principle, food security interventions should be targeted towards the poorest and most food insecure, particularly those who do not benefit from economic growth; households short of labour (especially those headed by women); vulnerable groups, such as pregnant and lactating women, children, the elderly, the disabled and often, those living in marginal areas. In practice, through implicit, hidden taxes, and subsidies on different groups, many national food systems in Africa also benefit the rich and the urban population rather than the poor, rural and marginalized households. This has increased the political support for such interventions in Africa, but also their cost, which is estimated in some countries to amount to 10-20% of GDP. Yet, targeting is difficult, because of the heavy demands that it puts on the local administration. Another challenge is to find ways which limit conflicts between social security and growth, a danger which always exists when apparently unproductive social expenditures are allowed to spiral at the expense of productive investment. This can be done by developing social security interventions, which have also a development pay-off.

Public works schemes are a good example. They simultaneously provide an income transfer to poor employees, while contributing to development through tree planting, soil-erosion control or road building. Experience in Ethiopia, Botswana, Cape Verde, Kenya and other African countries shows that public works can have a high benefit-cost ratio and ensure a high degree of targeting ²⁷. Geographic targeting, in which benefits are restricted to specific locations with high concentrations of vulnerable groups, is another way of containing costs, so is restricting subsidies to commodities that are favoured by the poor.

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