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TWENTY-EIGHTH FAO REGIONAL CONFERENCE FOR LATIN AMERICA AND THE CARIBBEAN

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FOOD SECURITY AS RURAL DEVELOPMENT STRATEGY

I. Introduction

1. **Latin America and global food security.** The international community has enshrined food security as a basic human rightⁱ and the United Nations Millennium Summitⁱⁱ recently established food security as one of its main goals. Back in 1996, the World Food Summit (WFS) had set humanity the target of halving by 2015 the number of people living with food insecurity. However, the present rate of reduction in food insecurityⁱⁱⁱ will prevent this target being achieved. As stated at the Monterrey Conference on Financing for Development^{iv} and the World Food Summit: *five years later* (WFS: *fy/l*)^v, the pressing need to step up global efforts and to include financing and development strategies will therefore have to be met by deploying a more immediate process that is more people-centred, more results-oriented and more effective in tackling the new challenges that could weaken or erode present efforts and achievements.

2. The latest estimates indicate 840 million undernourished people in the world in 1998-2000: 10 million in the industrialized countries, 34 million in the transition economies and 798 million in the developing countries^{vi}. As regards Latin America and the Caribbean (LAC) and its total population of 512 million people distributed over 33 countries, 53.4 million are estimated to be undernourished, 95 percent concentrated in 13 countries. To varying degrees, food insecurity continues to exist in LAC countries as a real and morally unacceptable scourge affecting large segments of the population.

3. **Advantages of an integrated approach to food security.** This document draws upon the experiences and specific needs of the LAC countries and seeks to elucidate the urgent need for food security, understood as a key dynamic process for economic growth and for the achievement of continuing and sustainable rural development. It sets out to demonstrate that achieving food security through the agency of a sustainable livelihoods' approach^{vii} contributes to economic growth, to environmental conservation, to human development and to dynamic and sustainable change. We argue that an integrated approach to food security can result not only in higher social and human capital and greater social, economic and environmental sustainability but also in continuing, sustainable rural development. Focusing on the establishment of a dynamic, iterative process of food security emerges as a basic requisite for successful identification and resolution of the problem. The process becomes a tool for the concurrent development of the policy, planning and programming framework and its implementation. On the one hand, evaluation of the state of food security serves as a diagnostic tool for identification of the most vulnerable groups and the root cause of their food insecurity; on the other, the process concentrates on individual and household capacities, especially their capacity to engage in the building of sustainable livelihoods.

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With this in mind, we need to focus on reducing vulnerability to disaster and increasing productivity. Information and analysis of all sorts is fundamentally important in this regard. These are the aspects that this document brings to light on the basis of selected FAO experiences and lessons in Latin America and the Caribbean.

II. Food security

4. **A broad interdisciplinary process.** Food security, which guarantees all human beings physical and economic access to the basic foods they need to lead active and healthy lives, bears multisectoral implications that go beyond the need for food production, supply and procurement. It is a dynamic process that is closely linked to the thematic topics of poverty, human capacity, creation of employment and generation of income in an ever changing spiral that can move upwards and downwards. The process also occurs at different levels: international, national, household and individual. It includes systematic analysis of food availability and stability of supply, of restrictions on universal access to provisions and of the biological utilization of basic food commodities. Interventions target individuals, providing tools in the form of capacity, from physical health and improved nutritional status, and in the form of information and knowledge for seizing opportunities and developing sustainable livelihoods. The concepts underlying the process of food security are presented in Box 1.

5. **Food security is an outcome of people's entitlements.** Amartya Sen identifies four main categories of individual entitlement: (i) entitlement to participate in trade, meaning that individuals can exchange their products and money to satisfy their needs; (ii) entitlement to production, where individuals have access to what they produce using their own resources; (iii) entitlement to work, in other words, the possibility and capacity of individuals to sell their own labour; and (iv) entitlement to transfer, that is, voluntary offerings such as remittances, state transfers and food distribution. The configuration of institutions regulating relations between economic and social agents are important factors in this process. The four "entitlements" identified by the author determine the control that individuals can exercise over resources to satisfy their needs^{viii}, acting within the bounds of society's rules and regulations. Sen then went on to emphasize how these entitlements influenced capacity to participate in development processes and to change personal conditions of life^{ix}.

6. **Risk factors.** Analysis of the risk factors that threaten food security is one of the most critical aspects of the process. It includes identification and characterization of vulnerable groups and the root causes of the risks that threaten their entitlements. A country's vulnerable groups generally include households at risk, those headed by single mothers or fathers or urban households headed by independent or casual workers, the unemployed, and rural households of unskilled landless agricultural workers, inhabitants in remote areas and generally low-income peasant farmers. The process classifies the types of risk that can threaten food security: natural (pest, disease, drought, fire), market (falling prices, unemployment, rising interest rates), public and state (reduced expenditure on public health, increased taxation, fewer nutritional programmes) and other (displacement of communities as a result of war or embargos).

7. **Poverty, nutrition and food security.** Poverty is undoubtedly a root cause of hunger but hunger can also cause poverty^x. The Nobel Prize winner Robert Fogel has demonstrated the close relationship between nutrition, health and economic growth^{xi}. According to Fogel, the 20% of the population of England and France living in extreme poverty in 1790 were effectively excluded from the workforce because too hungry to work. He concludes that better nutrition was responsible for half of Great Britain's economic growth between 1790 and 1890. The strong impact of improved nutrition on generation of human capital and increase in productivity has greater relevance in countries with the highest levels of food insecurity^{xii}. The central argument advanced in this document is that any progress towards reducing poverty will necessarily be slow unless food insecurity is reduced, and that a focus on food insecurity cannot be dissociated from an identification of opportunities to achieve poverty reduction and thus greater rural development.

Centring on food security has the advantage of underlining the predominant role of the food and agriculture sector in the lives of the poor.

III. Human development, food security and rural development

8. **A people-centred approach.** One element of the Rio Declaration^{xiii} recognizes that there can be no sustainable development without a people-centred approach, whatever the integrated strategy of sustainable development. The productivity of individuals – for working and learning better – begins with better health and nutrition and their ability to participate in a process of improving the standard of living. There is wide consensus^{xiv} that people living in hunger cannot escape poverty.

9. **Population growth.** It is estimated that the total LAC population will increase by 40% during the period 2000-2030, reaching a total of 725 million^{xv}. Despite heavy migration to urban areas, the proportion of rural poor continues to be high, estimated at 75% but higher among the most vulnerable groups, including women and indigenous populations^{xvi}. Approximately half (40 million) the rural poor are small farmers, with a further 26 million in indigenous communities (33%) and 13 million landless (16%), without any access to productive resources with which to generate income. Because of its limited mobility, the group with the scarcest agricultural potential will increase the most^{xvii}.

10. **Specific agricultural commodities and productivity.** One food security strategy focuses both on the poor and their products. In Mexico, the production of maize, a key crop grown on 8 million hectares and making up 63% of aggregate output of the five staple crops, increased 70% in the 1990s as a result of special projects and investment in new technology to improve productivity, mostly in the context of medium and large producers. In the rural areas, where maize remains central to livelihoods, generating income and ensuring access to staple foods, small producers continue to experience problems of low productivity. They generally work low-yield marginal land and have limited access to credit, training or extension programmes. As a result, fewer than 35% of family farmers are competitive, as they employ inefficient practices, lack of market information, have inadequate technology and account for less than 35% of household rural income.

11. **The gender situation.** Improving the situation of women, facilitating their access to education, health and the assets needed to raise productivity, is central to breaking the cycle of food insecurity and poverty. The findings of a recent study conducted by IFPRI^{xviii} in 63 developing countries between 1970 and 1995 indicate that the level of women's education and women's status in society have a 52 percent statistical bearing on the nutritional level of children and number of undernourished children. These factors have a greater impact than do national food availability, health and environment. Investing in women's education shows positive results in the indicators of number of children, spacing between births, childcare and feeding practices, and family income.

12. **Income distribution.** Inequality of access, in general, and of income, in particular, is an important determinant of continuing food insecurity and rural underdevelopment. LAC is the world's region with the greatest inequality of income, comprising 11 of the world's 20 least equitable nations in which 10% of the population receive a greater share of income. There are studies that single out Brazil as the most unequal country in the world, with 10% of the population controlling 47.9% of the country's resources^{xix}. Income distribution deteriorated in most LAC countries in the 1990s, with a percentage fall in income for the lowest groups and a percentage rise in income for the highest groups. Nicaragua, Guatemala and Bolivia follow Brazil as the least equitable countries.

13. **Basic services.** Quality of human resources is a critical factor in development, poverty reduction and food insecurity. Recent examples of health, education and nutrition in Costa Rica and Chile are particularly instructive in this regard. In the last 30 years Costa Rica has allocated 7% to 10% of its GDP to health and nutrition services^{xx}. It is no coincidence that Costa Rica

should feature among the five Latin America countries with the highest Human Development Index^{xxi}. The Chilean model with its heavy investment in education and primary health (combined with low inflation and unemployment and a significant increase in savings and investment) has been the Region's most successful experience in reducing poverty indices in a ten-year period^{xxii} – *per capita* income doubled in 1985-1998, poverty indices fell 44.8% between 1987 (38%) and 1996 (20%), and the percentage of extreme poor fell from 16.8% to 5.6% during the same period.

14. **Costa Rica and food security.** Despite the many challenges, Costa Rica's example continues to be instructive of the relationship between food security, human development and natural resources (Box 2).

IV. Economic growth, food security and rural development

15. **Economic benefits of food security.** Combating food insecurity is not only a moral imperative but also a source of significant economic benefit. Preliminary estimates indicate that achievement of the World Food Summit target would produce aggregate benefits valued at more than US\$120 billion per year^{xxiii}. Enhanced food security would clearly have significant positive repercussions on the world economy, as it would increase demand for domestic and imported goods and services. The report of the World Health Organization's Commission on Macroeconomics and Health indicates that the better nutrition resulting from achievement of the WFS objective would produce gains valued at hundreds of billions of dollars each year. A study by the United States Agency for International Development (USAID) concludes that achievement of the WFS target would reduce the cost of humanitarian operations and peacekeeping activities by about US\$2.5 billion each year. Clearly, the allocation of resources towards reducing food insecurity has the potential to generate more resources for the promotion of economic growth and development.

16. **The role of agriculture in the rural economy^{xxiv}.** Growth in the agricultural sector will spur overall economic growth^{xxv}. Evidence shows that the multiplier from growth in the agricultural sector is three times higher than that from non-agricultural sectors^{xxvi}. The negative correlation between agricultural growth and economic stagnation was partly reflected in falling agricultural growth in the economies of the LAC countries. Regional GDP grew by about 1% in 2001, less than half the rate in 2000, and LAC agricultural production grew by 2.1%^{xxvii}. Important are the intersectoral linkages that exist in rural areas and tie in with agricultural activity. These linkages mean the rural sector embraces an array of economic activities that extend beyond agriculture as such. The multiplier effects stem from the non-agricultural income that comes from the diversification of agro-industrial processing activity and from demand for services and technical support revolving around agriculture that generates income and improves food security.

17. **Rural employment, food security and rural development.** Studies of off-farm rural employment have shown that on Mexico's communal holdings (*ejidos*)^{xxviii} this can represent up to 55% of total income^{xxix}, 61%^{xxx} in Nicaragua and Panama; 67%^{xxxi} in Chile; 60% in Salvador; and 86% in Ecuador^{xxxii}. It is important to note, however, that this supplementation of income from primary activity in agriculture is very often not sufficient to lift farmers from poverty. Equally important is the fact that families have recently become increasingly dependent on off-farm rural income because of institutional and market shortcomings. Hence, the reliance on remittances in some countries, and investment in livestock and cereals in others as an important source of savings and ready-cash for emergency situations. Income from agricultural activity is spent on local goods, which generates crucial demand that vitalizes the off-farm rural sector^{xxxiii}. It is important therefore to increase investment in infrastructure, health, education and technological innovation that will facilitate both agricultural and non-agricultural activity, given the importance of off-farm income for food security.

18. **External competitiveness and food security.** Agriculture and agricultural trade play an important role in driving rural development and in satisfying the food security needs of resource-poor, low-income farmers. Trade is both a cause and an effect of increased agricultural production and export. One important feature is the instability of markets, with falling

commodity prices impacting heavily on food insecurity in Latin America, because undermining capacity to purchase, import and invest; another key issue is market access. Higher competitiveness of the developing countries requires a reduction in impact of the subsidies that the developed countries grant their production and exports, to the tune of almost 1 billion dollars per day^{xxxiv}. Export subsidies mean that goods are placed on the market at artificially low prices, preventing the growth of exports from developing countries and harming producers in importing countries who see their earnings slashed. The overall result is lower agricultural development in these countries. Agricultural exports accounted for 43% of overall LAC exports in the early 1970s but now account for approximately 20%. However, international trade in agricultural commodities represents a significant 9.5% of the world food trade, rising from US\$ 32 billion to US\$ 43 billion during the 1990s. These figures could have been higher with more liberal and equitable world trading policies. Countries needed to have effective inspection and certification systems to operate under the WTO food import and export framework, not only to promote trade but also to safeguard consumer health. This will also prevent the application of non-tariff barriers and facilitate fair practices in international food trade.

19. **Family farms and agricultural trade.** Raising the participation of family farms in agricultural trade would increase their incomes and therefore their food security. This would in turn raise investment in practices and technology to increase productivity which would strengthen competitiveness and stability. Given that family farms account for 80% of the Region's agricultural output, broadening their participation in trade is essential for growth of the agricultural sector and for economic growth in general. The success of programmes to increase productivity also depends on how these relate to agricultural exports and global market chains. The promotion of sustainable rural development requires more readily available investment to enhance the competitiveness of family farms, many of which are poorly equipped to compete because lacking appropriate infrastructure and efficient marketing systems, because hampered by poverty, undernutrition, limited human capital and institutional weakness, and because they operate on a very unequal footing.

20. **Food security and safety.** Trade liberalization and globalization have changed dietary patterns. Food insecurity at in the LAC household economic unit is linked to problems of access (lack of income) and of health (ignorance of proper food use). There have been problems of disease transmitted by food contamination, figuring among the five primary causes of death among children below the age of five. There is also a general trend towards obesity among more than one-third of the population, as a result of socioeconomic and urban development and associated preference for fast food. Greater emphasis needs to be placed on food safety to protect consumer health and on nutritional education to enhance appropriate food use. The *Codex Alimentarius* provides a suitable framework for the modernization of food legislation, the updating or standardization of food regulations and the strengthening of food control systems.

21. **Appropriate production systems.** Focusing on food security not only ensures that resources are used efficiently but also promotes sustainable production systems and technologies. In LAC, 25% the land is potentially arable and 31% of its freshwater reserves can be used sustainably by applying appropriate technology. The Region's irrigated 18 million hectares represent 10% of cropland, and only 13% of this is under technology-based irrigation^{xxxv}. There is growing consensus that low-cost agricultural biotechnology can help increase agricultural productivity and raise family-farm income. Genetic improvement and the reproduction of plants resistant to drought, pest and disease and with higher yields – accelerating traditional processes – manage to produce fewer negative impacts on the environment. Post-harvest losses in selection, handling and storage can be reduced by selecting late-maturing varieties, while the upgrading of seeds produces food with higher nutritional value. The Integrated Pest Management Programme (IPM) employs low-cost biological products to control pests and disease. A food security approach will ensure the promotion and use of new technologies in processes that facilitate the participation of family farmers (e.g. through strategic partnerships and access to credit) and contribute to the development of rural areas.

22. **Public expenditure in the rural sector.** Average public expenditure on the LAC agricultural sector in the 1990s was very low (under 5%). Countries with a higher incidence of undernutrition spend proportionately more of their national budget on the rural sector, but the statistics on poverty and undernutrition indicate that the returns on expenditure have been disappointing. The absence of evaluations of the impact of rural programmes and policies makes it difficult to direct expenditure towards initiatives that will maximize this impact. The orientation of resources towards rural areas is a basic feature of food security, given that that is where most of the food-insecure population live. Rural investment is an essential factor in raising production capacity, creating employment and generating income. Resources directed towards promoting agricultural productivity also ease the flow of rural-urban migration and restrain the rise in urban poverty, food insecurity and undernutrition. However, any public expenditure initiative directed towards the agricultural and rural sector needs to be accompanied by impact evaluation.

23. **Internal conflicts.** The dynamics of sustainable livelihoods can help not only reduce hunger but also avert the internal conflicts that arise with the impoverishment and marginalization of family farmers and indigenous groups. Land access is a fundamental ingredient of food security, correcting the situation where more than 30% of the LAC rural poor are landless^{xxxvi}. Promoting internal stability is also a requisite for a more conducive environment for investment and thus development

V. Natural resources, food security and rural development

24. **Biodiversity.** The Region of Latin America and the Caribbean includes five of the world's ten countries with the greatest wealth of biodiversity^{xxxvii}. It has 36% of the main food and industrial crops and 28% of the world's forest area. The Region has the largest rainforest in the world, in the Amazon basin, and almost half of the developing world's renewable water resources^{xxxviii}. This abundance of natural resources is largely due to the Region's favourable climate and its geographical extension over two hemispheres. Its available and potentially usable biodiversity needs to be viewed as its greatest asset for dealing with the food insecurity problems of a Region that has relatively low population density. This biodiversity needs to be valued in order to appreciate its importance.

25. **Degradation of natural resources.** The causes and effects of natural resource degradation include the insufficiency and inadequacy of food supply systems, the problems of inequality of income and land distribution, the large-scale mechanized farming that erodes the soil and the cropping intensity that depletes natural soil fertility. A total of 20% of the LAC surface area (300 000 hectares) is subject to desertification. Under present trends, desertification and salinization will effect 50% of the Region's agricultural land in the year 2050. Deforestation of world forests in the 1990s amounted to 0.38% a year^{xxxix}. Agricultural frontiers are advancing in 70% of the world's countries while forest cover in two-thirds of these countries is shrinking. Deforestation in LAC in 1990-2000 totalled 4.25%, with annual average of 0.43% and Central America scored highest with an annual 1.60%. The right to landownership is the key determinant of adoption of sustainable natural resource practices^{xl}. The conclusion therefore is that reducing food insecurity through recognition of food rights, increased landownership, regulation of land tenure, programmes of extension and training in conservation, and more sustainable cropping technologies and systems will have a substantial impact on mitigating environmental degradation.

26. **Natural disasters.** Latin America and the Caribbean is prone to serious natural disasters in the form of hurricanes, earthquakes, landslides, flooding, drought and forest fires. Natural disasters are a serious source of food insecurity and can hold back growth. It is estimated that 26% of the population of Central America, 8.5 million people, are exposed to the risk of hurricanes several times each year. South America has recurring problems of drought, flooding and telluric disasters, especially in the Andean countries. In geological terms, Central America is the junction for six highly active tectonic plates that cause very severe earthquakes, especially along the Pacific coastline. It can generally be said that these natural disasters have a greater

impact on the poorest sectors of the population, who have fewer resources and are therefore heavily exposed to food insecurity. It is important to reduce this vulnerability and impact and one important area of action is risk management, especially as applied to integrated watershed management. However, we also need to highlight the importance of responding promptly to natural disasters and providing assistance to the communities hit.

27. **Natural resources and food security.** A vicious circle exists in many LAC countries involving state of food security, condition of vulnerability and loss of natural resources. One result of extreme poverty is that the high demand for fuel is met by producing charcoal, which only perpetuates deforestation. Erosion and the loss of million of tonnes of arable soil have produced an ecological disaster that has only aggravated food insecurity in these countries.

VI. Food security for rural development: improving information and access

28. **The mandate of the World Food Summit.** Information is crucial for improving rural life. Information at the service of rural development through food security suggests a change in emphasis towards training individuals in the use of new networks and technologies, institutional change and the development of sustainable and dynamic strategies. One outcome of the WFS mandate has been the need for information to evaluate the state of food security, to identify vulnerable groups, to determine the problems and to transfer good practices^{xli}.

29. **Information and early warning networks.** A first phase of the food security information system is to anticipate emergency situations in order to introduce greater stability into rural areas. Risk as a determinant of food insecurity and the vulnerability of individuals to the consequences of natural and socioeconomic disasters highlight the need for information systems that can provide an early warning mechanism. The ability to identify and prepare for drought, pest infestation or fluctuating prices, to protect production systems from natural and socioeconomic disasters and to cope with such situations is essential if there is to be food security.

30. **Institutional change.** Information is an integral part of the new institutional structure needed under a people-centred and sustainable livelihoods approach, developing techniques and mechanisms that will promote the establishment of different kinds of partnership to form effective networks of organizations and individuals^{xlii}. Information on training and employment opportunities, on microcredit available to help rural enterprises improve their productivity and earnings, and on market chains linking producer organizations and urban users can broaden the options available for sustainable livelihoods.

31. **Productivity.** Information has been crucial in getting globalizing food production systems to set up productive networks. The advance in information technology provides small farmers with opportunities to establish networks that provide timely access to information assets: availability of inputs, prices, regulations on conditions of access, products and market opportunities. The collapse of production systems calls for information systems that will provide farmers with proven local solutions and will enable them to react and take appropriate market decisions so that they can enhance their competitiveness and thus strengthen their entitlement to trade.

32. **Market information.** Market access is one route out of poverty. Lack of competitiveness has historically resulted in the marginalization of small rural producers. Market information enables small family producers to re-tool for participation in the new global system of trade and in the productive networks and partnerships that are being formed. Latin America's small farmers now sell 2.5 times more to supermarket chains in their own countries than they export^{xliii}. Small farmers also need the support of market information systems so that they can participate in these markets and in markets for higher added-value products and to set themselves up in producer networks^{xliiv}.

33. **Undernutrition and public health.** Epidemiological information on the occurrence of food-borne disease identifies this as a cause of undernutrition in developed and developing countries^{xlv}. The global industrialization of food production systems has brought to light the vulnerability of the food chain. National and individual concern over food safety stresses the need for appropriate information systems. Better epidemiological information will improve health and nutrition programmes for vulnerable population groups, and will enhance food security, productivity and growth in the rural sector.

34. **Social participation.** FAO, the Department for International Development (DFID) and the Overseas Development Institute (ODI) carried out a study on the function of information in sustainable livelihoods, which concluded that the availability of appropriate information is a key factor in decision-making that leads to sustainable livelihoods^{xlvi xlvi}. They recommended using realistic techniques that could improve and add value to existing systems, establishing strategic alliances to share knowledge and information.

35. **The FAO World Agricultural Information Centre (WAICENT).** FAO has developed many dedicated information systems on various aspects of agricultural policy for rural development and food security, including: SISAAT, FAOSTAT, SIACIAV and SISSAN. These systems serve to generate a better understanding of user needs, a more appropriate use of information and improved access to information through the networking process. They permit the exchange of information, the establishment of integrated databases and the improvement of data quality and analysis through the generation of new methodologies and tools. The lack of interlinkages, the frequent duplications of effort and the lack of operating synergies call for a strengthening of mechanisms to examine, evaluate and share the lessons learned.

VII. Recommendations

36. The challenge facing FAO, along with all policy-makers, is to improve human capacities by pursuing the following actions related to the food security process (Annex 1) in order to reduce the number of people living in food insecurity and promote sustainable livelihoods.

37. Reduced poverty and enhanced rural development require increased productivity of work and thus a competent workforce in all areas of economic activity. **Investment is therefore required in integrated programmes of nutrition, health and nutritional education directed primarily towards women, school children and indigenous groups, so that they can increase their learning capacity and participate more effectively in the economic sector.**

38. A food security approach requires the long-term sustainable use of natural resources. **This means extending the titling of land rights and stimulating and strengthening the various forms of ownership of natural resources, including collective responsibility for their use. It is also important to foster the development of institutions and instruments that will stimulate natural resource management processes,** taking into account the benefits and externalities of their use, as well as defining regulatory frameworks for food production that will promote the sustainable use of resources and implementing a sustainable productive strategy.

39. A large proportion of the rural poor live in areas with low agricultural potential and, because of the quality and quantity limitations of their resources, overstep the sustainability threshold and begin to destroy the resource base for lack of alternatives. The sustainable use of natural resources requires recognition of the interlinkages that exist between rural life and urban life in satisfying basic requirements. **This means underlining both agricultural and non-agricultural sources of income, as well as the infrastructure required** to facilitate access to work opportunities and to provide better options for satisfying basic requirements, in order to diversify and increase the quality and quantity of their resources.

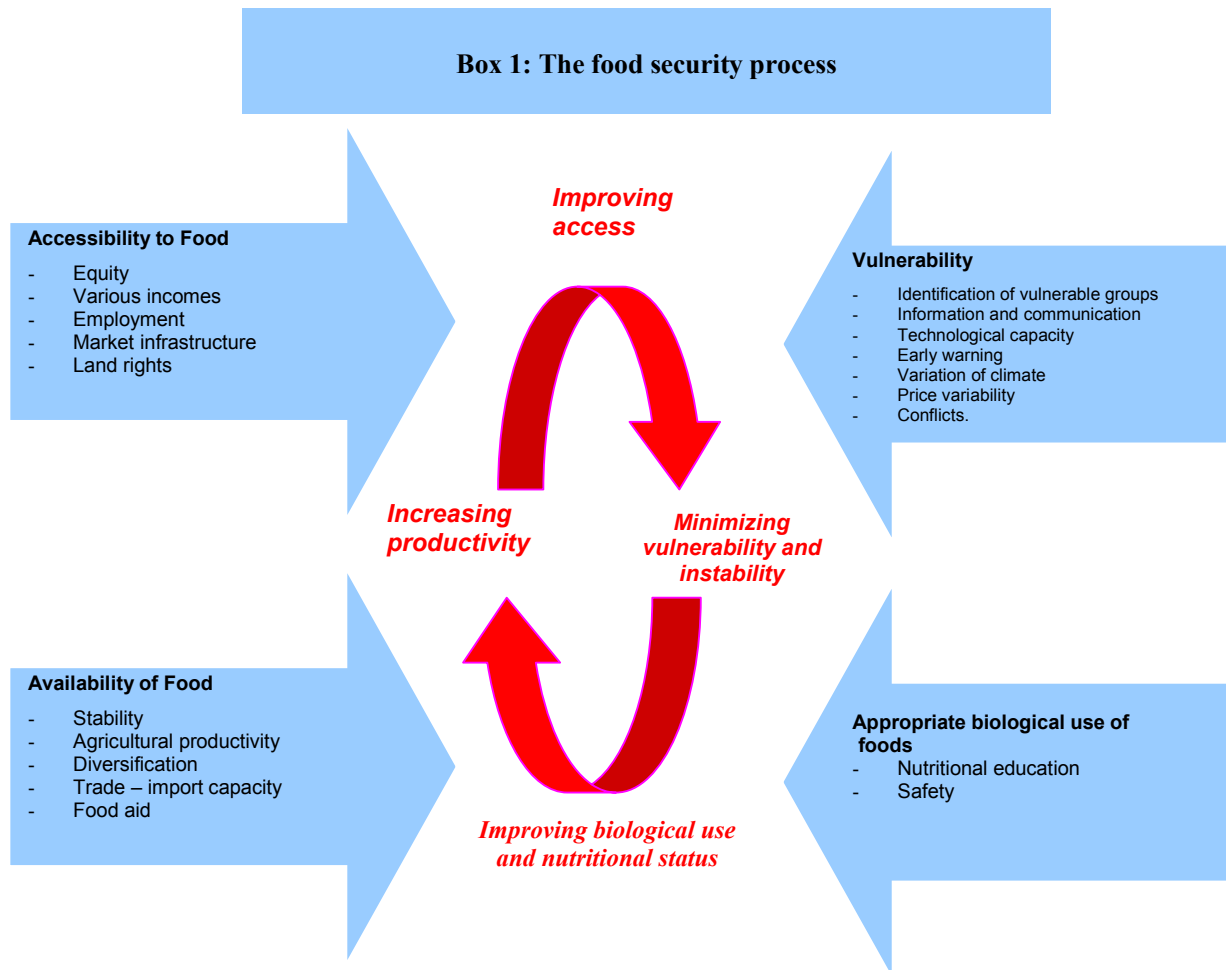
40. Natural and social emergencies disrupt capacity to satisfy the basic food security requirements of the rural poor. To avoid this, **early warning strategies and food security programmes need to be developed for each type of situation that might occur in each**

subregion (earthquakes, hurricanes, civil conflict), that could exacerbate the destruction of natural resources, and that could heighten food insecurity.

41. Given the more effective role being played by women in food security, in agriculture and the rural sector, in the lives of the young and in family income, a gender focus is needed to ensure human development. **Programmes need to be developed that target the requirements of women, their education and the creation of services that will support their participation in the economy and in policy development.** Gender is a cross-sectoral feature that runs through all food security strategies and that has become a key ingredient of all economic and social activity relating to rural development.

42. Access to more information and rural participation in the deployment of new information systems is essential to forge vibrant sustainable livelihoods. The capacity of rural inhabitants in this regard needs to be developed, especially among the young. **We can show that food security can be enhanced by means of information, through information programmes that help establish producer and market networks and in doing so provide access to higher incomes.**

43. **The promotion of strategic partnerships for food security is essential at all levels of rural change.** Such partnerships should also serve to strengthen community organization and to promote the development of microenterprises, with links to medium-size and large enterprises. The development of financial markets that will mobilize savings and facilitate investment is essential for the establishment of a system of dynamic and sustainable development.



Box 2

Costa Rica: food security, human development and rural development

Food Security and Nutrition Policies and Programmes in Costa Rica

A Government commitment to promoting a sustainable improvement in nutritional welfare has existed for decades. Some 32% of public expenditure is directed towards social support policies and programmes for the health and nutrition of children, adolescents and vulnerable population groups. Public expenditure on education in Costa Rica in 1995-97 was more than 22% of the overall national budget, having doubled in the last decade. Expenditure on public health is now six times higher than 50 years ago, at 7.4% of GDP in 1980 and 10% in 2001.

Social programme landmarks in Costa Rica:

1950: Programme of Food Supplementation with participatory **Nutrition Centres**

1951: Creation of the **Nutrition Department** at the Ministry of Health

1968: Programme of Family Nutrition/School Gardens (Ministries of Health, Education and Agriculture)

1971: Integration of the Educational Component into the Nutritional Component: **Education and Nutrition Centres (CEN)**

1972: Creation of **SEPAN, the Secretariat of National Food and Nutrition Policy.**

1972: Costa Rica decrees the iodization of salt.

1974: Costa Rica decrees the vitamin A enrichment of sugar. [Programme suspended in 1982].

1976: “**Law of Social Development and Family Allocations**” establishes a fund for economically disadvantaged families and social health, food and nutrition programmes.

1976: Creation of the **Integrated Children's Health Centres (CINAI)**

1977: Integrated Pre-School Childcare provides care for 12 hours a day to children of working mothers.

1983: Strategy for the promotion of primary health care for vulnerable groups.

1983: CEN-CENAI Programme establishes **Integrated Childcare Centres (CAI)** which provide an integrated health, education, nutrition, social assistance service to children under the age of seven.

1989: Expansion of the Programme to pre-school children, children of working mothers and vulnerable communities.

1990: Promotion and support of self-managed community micro-enterprises.

1990: Creation of a “**Community Homes**” service under “Community Mothers”.

1993: PROEvisa Project for the Promotion of Healthy Lifestyles.

1994: National Plan to Combat Poverty (PNCP) guarantees basic education and health services to all the population and has programmes targeting the population below the poverty line. The **National Programme of Child Nutrition and Development** targets the nutritionally and socioeconomically most vulnerable groups.

Child Nutritional Status 1982 - 1996

An increase in both size and weight of children

Proportion of children with normal weight for age increased from 66.6% to **73.5%**.

Chronic undernutrition (weight/age) decreased **7%**

Acute undernutrition (height/age) decreased from 21.7% to **15.3%**.

Increasing obesity indicates the need to focus on preventive nutritional programmes

Overweight increased progressively from 4% to **11.4%** between 1966 and 1978.

In 1996, **14.9%** of pre-school children were exposed to the risk of obesity (BMI>85 percentile), with the risk higher in the metropolitan area (20%) and lower in rural areas (**9.3%**).

Continuing differences in nutritional status between urban and rural areas.

Human Development and Economic Development

Costa Rica's social development has exceeded its economic development. According to the Human Development Report 2001, the HDI for 1999 of 0.821 ranks **Costa Rica third in terms of country with highest human development in Latin America, and fifth in terms of economic development based on GDP/capita.** Agriculture occupies 20% of the workforce and accounts for 10% of GDP.

In 2001, while average life expectancy in Latin America was 70 years, life expectancy in Costa Rica was 76.2 years.

- i Article 25, *Universal Declaration of Human Rights*, General Assembly of the United Nations, 10 December 1948.
- ii *Millennium Declaration*, United Nations Millennium Summit, 13 September 2000. <http://www.un.org/spanish/milenio/>
- iii FAO, *The State of Food Insecurity in the World, 2001*. <http://www.fao.org/docrep/003/y1500s/y1500s00.htm>
- iv United Nations Conference on Financing for Development, Monterrey, Mexico, 2002.
- v FAO, *World Food Summit: five years later*, Rome, 2001.
- vi FAO, *The State of Food Insecurity in the World, 2002*. <http://www.fao.org/docrep/005/y7352s/y7352s00.htm>
- vii FAO/ODI/DFID, <http://www.fao.org/waicent/portal/outreach/livelihoods/es/index-es.html>, 2001/2
- viii Sen, Amartya, “*Poverty and Famines – an Essay on Entitlement and Deprivation*”, ILO, Geneva, 1981.
- ix Sen, Amartya, “*Development as Freedom*”, First Anchor Books, August 2000.
- x FAO, http://www.fao.org/docrep/005/y7352s/y7352s03.htm#P0_0, 2002.
- xi Fogel, Robert, “*Economic growth, population theory and physiology: the bearing of long-term processes on the making of economic policy*”, *American Economic Review*, 84(3), 1994
- xii FAO, Economic and Social Development Paper No. 147, 2000, “*Undernourishment and economic growth: the efficiency cost of hunger*” by J. Arcand. This study concludes that increasing per capita food energy to 2 770 kilocalories per day in countries below this food energy level would increase per capita GDP growth by between 0.34% and 1.48 % per year.
- xiii “*Report of the United Nations Conference on Environment and Development*”, Resolution 1, Annex II <http://www.un.org/documents/ga/conf151/aconf15126-1.htm>, Rio de Janeiro, June 1992
- xiv Fogel, Robert, “*Economic growth, population theory and physiology: the bearing of long-term processes on the making of economic policy*”, *American Economic Review*, 84(3), 1994
- xv FAO and the World Bank, “*Farming Systems & Poverty: Improving Farmers’ Livelihoods in a Changing World*”, 2001.
- xvi World Bank, “*Poverty Trends and Voices of the Poor*” (Washington: The World Bank, 2000).
- xvii Echeverría, Rubén, IDB, Rural Development Unit of the Sustainable Development Department, *Opciones de inversión en las economías rurales de América Latina y el Caribe* in Desarrollo de las economías rurales, 2002.
- xviii IFPRI, Smith & Haddad, “*Explaining Child Malnutrition in Developing Countries: A Cross-Country Analysis*”, Research Report 111, 2000.
- xix FAO and World Bank “*Farming systems and poverty: improving farmers’ livelihoods in a changing world*”, 2001.
- xx UNICEF, *La reforma del sector salud y su incidencia sobre el sector nutrición en Costa Rica*, Dr. P. Rivas, 1999.
- xxi UNDP, Human Development Report, 2002.
- xxii Engel, Eduardo, “¿Distribuir o crecer?”, *América Economía*, September 2000.
- xxiii FAO, Anti-Hunger Programme, Rome, July 2002.
- xxiv FAO, http://www.fao.org/docrep/005/y7352s/y7352s03.htm#P0_0 2002
- xxv FAO, Norton, R.D., “*Agricultural Development Policy: Concepts and Experiences*”, TCAS Working Document No. 43/1, 2003.
- xxvi Block, S., & Timmer, C., 1994, “*Agriculture and Economic Growth: Conceptual Issues and the Kenyan Experience*”, mimeo, Harvard Institute for Economic Development.
- xxvii IMF, “*World Economic Outlook*”, Washington, 2001.
- xxviii De Janvry, A. and Sadoulet, E.. *La inversión en el desarrollo rural es un buen negocio*. In R. Echeverría, Ed. Desarrollo de las economías rurales, IDB, Washington, DC., 2001
- xxix De Janvry, A. and Sadoulet, E. “*Income strategies among rural households in Mexico: The role of off-farm activities*”. In World Development, 1999.
- xxx Davis, B. Carletto, C. and Sil, J. *Los hogares agropecuarios en Nicaragua: un análisis de tipología*. Department of Agricultural and Resource Economics, University of California at Berkeley. 1998.
- xxxi López, R. y Valdés, A. “*Rural poverty in Latin America: Analytics, new empirical evidence and policy*”. World Bank, Technical Department, Latin America and the Caribbean Region, Washington, DC. 1997.
- xxxii Lanjouw, P. “*Rural poverty and non agricultural employment in Ecuador*”. World Bank, Policy Research Department. Washington, DC, 1996.
- xxxiii FAO *Mobilizing Resources to Fight Hunger*. Committee on World Food Security, 27th Session, 28 May – 1 June 2001.

-
- xxxiv OECD Policy Brief, *Towards more liberal agricultural trade*, November, 2001.
- xxxv LARC/02/2, Balance between food security and the sustainable management of resources in Latin America and Caribbean, 2000.
- xxxvi FAO, SOFI http://www.fao.org/docrep/005/y7352s/y7352s05.htm#P125_28780, 2002
- xxxvii United Nations Environment Programme, 2000
- xxxviii FAO and World Bank *Farming Systems & Poverty: Improving Farmers' Livelihoods in a Changing World*, 2001.
- xxxix FAO, *State of the World's Forests, Part 1, The situation and recent developments in the forest sector*, <ftp://ftp.fao.org/docrep/fao/005/y7581s/y7581s01.pdf> 2003
- xl IFPRI, *Reducción de la pobreza en las zonas de ladera de Honduras*
- xli *World Food Summit Plan of Action*, Paragraph 4, Rome, 1996. -
- xlii Messner, D. *La transformación del Estado y la política en el proceso de globalización*, in Nueva Sociedad, 163, September-October 1999.
- xliii IFPRI, J. A. Berdegue, F. Balsevich, L. Flores, D. Mainville and T. Reardon 2 *Safety Standards for Produce in Latin America*, Focus 10, Brief 12, September 2003.
- xliv ODI, Page and Slater, *Small Producer Participation in Global Food Systems*, Development Policy Review, 2003, 21 (5-6): 641-654.
- xlv IFPRI, 2020 Vision, Kaferstein, Fritz, *Food Safety as a Public Health Issue for Developing Countries*, Food Safety in Food Security and Food Trade, Brief 2 of 17, September 2003.
- xlvi FAO/DFID Expert Panel Meeting, Rome 2001.
- xlvii FAO, *Livelihoods Approaches to Information and Communication in Support of Rural Development and Food Security*, 2003
<http://www.fao.org/waicent/portal/outreach/livelihoods/es/partnerships-es.html>