ECONOMIC DEVELOPMENT, FOOD, AND NUTRITION

H. Delgado, P. Palma, M. Palmieri, and **F. Tartanac**
Institute of Nutrition of Central America and Panama, Guatemala

Keywords: Food and nutrition security, Central America, human development, malnutrition, energy intake, nutritional imbalance, health sector, food production, marketing, diseases, households, supplementation, birth weight, policy

Contents

Summary

This article reviews the conceptual bases of the food and nutrition security at family and community levels. Actions are also proposed that would have some effects in the promotion of the nutritional health of the population. The Central American experience related to the implementation of different activities for the Promotion of Food and Nutrition Security is especially interesting.

Despite many efforts in the Latin American countries, health problems linked to an inadequate food and nutrition situation continue to be the ongoing cause for health service demand in the region. The nutrition problem is thus defined as a condition of food and nutrition insecurity; no longer focused as a problem of individuals but collective and multicausal in nature, therefore requiring intersectorial action.

Security is based, primarily, on the promotion of permanent food availability, in adequate quantity, quality, and accessibility, that may continuously satisfy the needs of groups, families, and individuals. Additionally, the population must have access to basic products and services, especially food; they must possess knowledge about food, health, and nutrition that may contribute to healthy feeding practices, and, finally, be

surrounded by the optimal environmental conditions favoring an adequate health status. Furthermore, for food and nutrition security to be sustainable, sufficiency and stability of food availability and access, as well as food acceptability, consumption, and biological utilization must be sought in absolute harmony with nature.
Food and Nutrition Security is achieved, therefore, within the framework of sustainable development, by food availability, access, consumption and biological utilization: each of these components, in isolation, is necessary but not sufficient to attain it.

Food and nutrition insecurity is cumulative in nature, as the conditions present in each link of the chain affect food and nutrition security, independently of the previous link. Food may be available to 100% of the population, but there are cultural and social factors that affect food acceptability and consumption. These become additional obstacles to food and nutrition security. Food security is a necessary, yet not sufficient, condition to guarantee food and nutrition security.

Food production, available stocks, and international trade patterns determine food availability at the national or local level. Ensuring food security involves a complex process of coordinated efforts in these areas as well as in accessing development aid (including food aid), all aimed at guaranteeing certain minimum levels of consumption for each individual and household—especially the most vulnerable.

Food availability also depends on the proper functioning of markets at the international, national, and local levels. While the perspective of household food security is useful in understanding the impact of this range of complex issues on individual food security, the larger picture of global production and trade policies also must be kept in mind, as this forms the basis for sustainable improvements in household food security.

Two important policy elements will support countries in achieving food and nutrition security: first, the administration of knowledge—accessible, relevant, democratic, and vital for the transformation of reality—and second, the mobilization of political-technical will and knowhow and resources. These policies focus on the interplay between structural and conjectural factors, on their social repercussions, and on the contribution of nutrition to the improvement of human capital in developing countries.

1. Introduction

The last decade of the twentieth century was witness to a series of great transformations. Changes in all aspects of life, including economic, political, and social upheavals, necessarily have repercussions for present and future generations. Among these transformations are the globalization of world economies, the evolution and growth of science and technology, the close relationship between social societies and their environments, and the increase of the inequities and disparities between those who have and those who do not have resources. From the perspective of quality of life, the future might look optimistic for a small segment of the population. However, it looks dark for the majority, with an inheritance of poverty, inequity, and ecological deterioration. Given the present situation and the changes that could occur, there will be major impacts on the levels of poverty and the quality of life. These include the nutrition and

health status of the population. There are implications for the availability and access to food which could affect a significant percentage of the world's population.

Because of this situation technical and political groups have been promoting the strategy of food and nutrition security. Its application could contribute to the correction of the present nutrition problems and could promote the basic conditions to increase the availability and accessibility of food and changes in lifestyle and healthful diets that could prevent repetition of these problems. This document reviews the conceptual bases of food and nutrition security at family and community levels. Actions are proposed that in the experience of INCAP would have some effects on the promotion of the nutrition health of the population.

2. Background

Despite many efforts in Latin American countries, health problems linked to an inadequate food and nutrition situation continue to be, to a greater or lesser degree, the ongoing cause for health service demand in the region. Furthermore, the type of demand has become more complex given the coexistence, within the same population groups and occasionally in the same families, of problems linked to nutritional deficiencies with those derived from food and nutrition excesses and imbalances. The persistence, and in some cases the increase, of deficiencies, together with the appearance of problems associated with nutritional imbalances and excesses, express themselves through a higher demand for health services and consequently in the increase of expenditures in the health sector.

Based on this, it can be asserted that the improvement of the nutritional and health status of the population constitutes an effective strategy for the promotion of human and economic development, in the medium term and long term. These observations justify the argument that the vicious circle of malnutrition, poverty, and underdevelopment, may become a virtuous circle of food and nutrition security, quality of life, socioeconomic development and social equity.

The health sector officials in Latin America, for example, have emphasized the need to look for innovative solutions to the prevalent food and nutrition problems in the region. Furthermore, it has also been stressed that it is crucial to move from a curative approach concentrating on alleviating manifestations to an approach that integrates preventive and promotional aspects. A successful approach must consider the underlying and basic causes, including environmental, socioeconomic, cultural, and biological conditions that determine it. The nutrition problem is thus defined as a condition of food and nutrition insecurity; no longer focused as a problem of individuals but collective and multicausal in nature, therefore requiring intersectorial action.

Different organizations have made proposals addressing the problem of food and nutrition insecurity. The Latin American governments that participated in the International Conference of Nutrition in 1992 and the World Food Conference in 1996 have recognized the existence of a regional problem of food and nutrition insecurity. Such a system violates the population's human right to have access to healthy and secure food that may allow them to lead a healthy and active life. The declarations that emerged from these conferences demand collaborative efforts among nongovernment

organizations, national, regional, and international institutions, to address the problems of food and nutrition insecurity.

The Central American experience related to the implementation of different activities for the Promotion of Food and Nutrition Security is especially interesting. They were initiated in 1993, as the Council of Ministers of Health of Central America asked the System for the Central American Integration and the Central American Presidential Summit of that year to review a proposal for the Promotion of Food and Nutrition Security.

3. Food and Nutrition Security: A Conceptual Framework

The term Food and Nutrition Security has different meanings for various institutions and officials who are committed to the study of the problems and to the identification of solutions. INCAP/PAHO defines Food and Nutrition Security as *the status in which all people enjoy, in a timely and permanent fashion, physical, economic and social access to food that they need, in quality and quantity, for their adequate consumption and biological utilization, thus guaranteeing the general well-being that contributes to their development*. Food and Nutrition Security is based, primarily, on the promotion of permanent food availability, in adequate quantity, quality, and timely distribution, that may continuously satisfy the needs of groups, families, and individuals. Additionally, the population must have access to basic products and services, especially food; they must possess knowledge about food, health, and nutrition that may contribute to healthy feeding practices, and, finally, be surrounded by the optimal environmental conditions favoring an adequate health status. Furthermore, for food and nutrition security to be sustainable, sufficiency and stability of food availability and access, and food acceptability, consumption, and biological utilization must be sought in absolute harmony with nature. Food and Nutrition Security is achieved, therefore, within the framework of sustainable development, by food availability, access, consumption, and biological utilization: each of these components, in isolation, is necessary but not sufficient to attain it.

Food and nutrition insecurity is cumulative in nature, as the conditions present in each link of the chain affect food and nutrition security, independent of the previous link. Indeed, a situation of food and nutrition security may mean that food is available to 100% of the population. In certain cases, even though national availability may be adequate, consumption may be insufficient due to inequalities in food distribution. For these groups, food and nutrition insecurity is determined by a lack of availability, which, at the same time determines food inaccessibility from a physical standpoint. For other groups, food may be available, but not everybody will have access, due to economic restrictions. Besides availability and economic accessibility, there are cultural and social factors that affect food acceptability and consumption, thus becoming additional obstacles to food and nutrition security (see Regional and *Cultural Differences in Nutrition*).

Finally, food availability and access, and its acceptability and consumption by individuals and populations, do not guarantee an optimal nutritional status. Factors that affect the biological utilization of food consumed are complex and varied, and for this

reason it can be stated that food security is a necessary, yet not sufficient, condition to guarantee food and nutrition security (see *Economics and Policy of Food Production*). The major factors influencing food and nutrition security which also represent the framework for consideration of the food and nutrition security policy are shown in Figure 1.

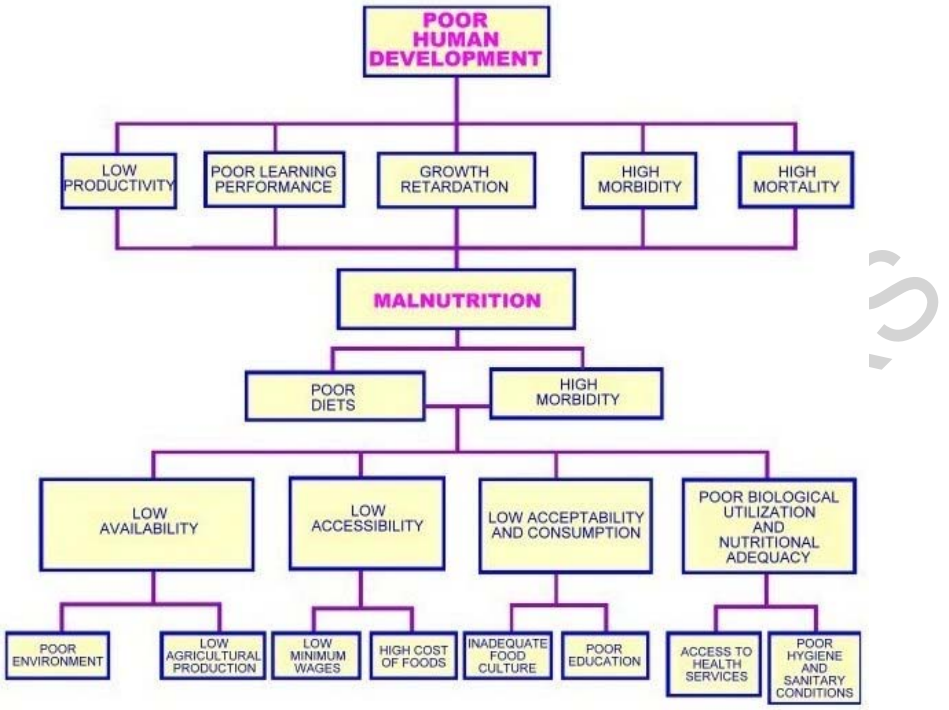

Figure 1 Framework for consideration of the food and nutrition security policy

3.1. Food Availability

Food production, available stocks, and international trade patterns determine food availability at the national or local level. Ensuring food security involves a complex process of coordinated efforts in these areas as well as in accessing development aid (including food aid), all aimed at guaranteeing certain minimum levels of consumption for each individual and household—especially the most vulnerable.

Food availability also depends on the proper functioning of markets at the international, national, and local levels. Important factors in this regard include adequate and equitable infrastructure development (especially for distribution) and free flow of information. Factors such as pricing policies for locally produced commodities and stock maintenance policies can affect the relative availability of food in urban and rural areas, and between various socioeconomic groups. A thorough review and monitoring of marketing and distribution and the impact on various social groups in each country is an important policy tool in reducing or mitigating household food insecurity. While the perspective of household food security is useful in understanding the impact of this range of complex issues on individual food security, the larger picture of global production and trade policies also must be kept in mind, as this forms the basis for sustainable improvements in household food security.

-
-
-

Bibliography

Bentley M. and Pelto G.H. (1991). The household Production of Nutrition. *Soc. Sci. Med*. **33**(10):1101–1102. [This work treats of intrafamily distribution and childcare.]

Engle P. and Nieves I. (1991). Intrahousehold Food Distribution Among Guatemalan Families in Supplementary Feeding Programs: Mother's Perceptions. *Food Nut. Bull*. **14**(4):314–322. [This study done in Guatemala analyzes intrafamily food distribution. It shows the priority given to male adults for food distribution.]

Laure J. (1994). *El comportamiento de los salarios mínimos y los retos de la política salarial en Centroamérica*. Guatemala: Inforpress Centroamericana No. 1083, junio 16. [This analyzes salary evolution and its relation with purchasing power, based on retrospective analysis of official data.]

Martorell R. (1993). Enhancing Human Potential in Guatemalan Adults Through Improved Nutrition in Early Childhood. *Nutrition Today*, January/February **93**:6–13. [This presents the results of the longitudinal study about population growth and development in Guatemala. It shows the effects of early nutrition (prenatal and infancy) on human potential development.]

Maxwell S. and Frankenberger T.R. (1992). *Household Food Security: Concepts, Indicators, Measurements. A Technical Review*. United Nations Children's Fund, International Fund for Agricultural Development. [This represents one proposal about food and nutrition security at the community level.]

Pinstrup-Andersen P. (1993). Estimating the Nutritional Impact of Food Policies: A Note on the Analytical Approach. *Ecol. Food Nutr*. **5**(4):16–21. [This presents the effects of structural adjustments upon food security.]

Pinstrup-Andersen P. and Pondye-Lorch R. (1994). *Alleviating Poverty, Intensifying Agriculture, and Effectively Managing Natural Resources. Food, Agriculture and the Environment Discussion Paper 1*. Washington, DC: IFPRI. [This presents the technical bases for the vision 2020 proposal promoted by IFPRI in relation to food security. It shows the variability intercountry and intracountry in relation to food availability, and other socioeconomic indicators.]

Ruel M. and Garrett J. (1991). Economic Crisis, Health and Nutrition in the Eighties: Evidence from Central America. Guatemala: INCAP/PAHO. [This revises the effect of structural adjustments upon food security in urban areas.]

Schejtman A. (1994). *Economía Política de los Sistemas Alimentarios en América Latina*. Santiago, Chile: FAO, Oficina Regional para América Latina y El Caribe. [This analyzes the relation between the drop in agricultural production prices and the reduction of the capacity to access goods and services in rural areas.]

World Resources Institute (1994). *World Resources 1994–95*. People and the Environment. New York: Oxford University Press. [This relates the changes occurring at the world level and the different paradigms which could affect food and nutritional security.]

Biographical Sketches

Hernan Delgado, M.D., Director of INCAP, was educated as a physician, received a M.P.H. (Public Health) from Harvard University, Cambridge, MA, US. He has 27 years experience at INCAP in Research and Technical cooperation in the area of Public Nutrition.

Patricia Palma is a nutritionist. She holds an M.S. degree in International Nutrition from Cornell University, Ithaca, NY, US, and has 14 years experience at INCAP in Research and Technical cooperation.

Mireya Palmieri is a sociologist, with an M.A. in Government and Latin American Policies, from Essex University, UK, and 17 years experience at INCAP in Research and Technical cooperation,

Florence Tartanac, Ph.D. is a Food Technologist (Engineer), with a Ph.D. in Economic Geography, from Paris X-Nanterre University, France. She has 8 years experience at INCAP in Research and Technical cooperation.