

ENHANCING LONG-TERM FOOD SECURITY THROUGH SUSTAINABLE MANAGEMENT PRACTICES

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Abstract

The given essay is dedicated to the determination of the challenges faced by governments nowadays in the process of enhancing long-term food security. The overall aim of this paper is to put everyone in the picture about the economic essence of food security and to the search of the possible ways of achieving food security through sustainable management practices. It is defined that the concept of global food security has gone through various transformations over the last few decades. As a result, there are approximately two hundreds definitions of a multidimensional term “food security” within the contemporary academic literature.

The term “food security” first originated in the last decades of the XX century, when the World Food Conference defined food security in terms of food supply – assuring the availability and price stability of basic foodstuffs at the international and national level. The findings of the analysis indicate that since that period food security and the need to develop sustainable agriculture became prominent issues affecting the whole world. Considerable attention at the international and national level is given to the analysis of the food supply problems and to some degree the price stability of basic foodstuffs. The authors pointed out in the paper that the right to adequate food is an ordinary human right that is completely realized when all people in the whole world have physical and economic access at any time to adequate food, without discrimination of any kind.

Finally, it is emphasized that global food requirements will continue to increase in the nearest years, as population rise and as growing incomes both an increasing volume and a changing pattern of food consumption. In that case the food needs of the each country cannot be met by local production alone. Increased domestic production supplemented by an increase in export earnings from industrial, agricultural and services exports are needed to enhance long-term food security. Therefore, it is obviously that all sectors of the economy should develop rather than think superficially about agricultural production alone meeting the food needs of the territory.

Keywords: *food security, Food and Agriculture Organization, food availability, food access.*

Research type: research paper.

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INTRODUCTION

World Food Day, celebrated annually in every corner of our planet on the 16th of October, brings together all peoples and cultures in the global fight against the eradication of hunger from the world that we live in. Proclaimed in the early 1979 by the Conference of the Food and Agriculture Organization of the United Nations (FAO), it became a worldwide event, raising public awareness of the world food problem and strengthening solidarity in the struggle against hunger, malnutrition

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and poverty. Since 1981, World Food Day has adopted a different theme each year, in order to highlight special areas needed for action and provide a common focus. For instance, the theme of this year's (2014) observance was "Feeding the World, Caring for the Earth", chosen to recognize the important contribution of family farmers to solving the principal world food problem.

Taking into account the wide range of these annual themes, which provide a common focus and highlight the major areas needed for further action, it should be admitted that the problem of food security is the most significant problem facing the world's ever-increasing population. That is why the overall aim of this paper in the present day context is to put everyone in the picture about the economic essence of the term "food security" and to the search of the possible ways of enhancing long-term food security through sustainable management practices.

1. The Notion of the Term "Food Security"

According to the latest economic forecast, the world's population is estimated to rise to nine billion by 2050 [10]. With two billion more mouths to feed by 2050, it will be necessary to produce 70 percent more food than today [6]. That is why irreversible climate change will continue to desolate current and future crops with droughts, floods, and fires. In spite of population pressure increasing demand and natural disasters decreasing supply, world food security will continue to be one of the most important humanitarian and economic concerns worldwide. In order to feed a population of the planet in 2050, the world will need a new vision for agriculture, which means, first of all, delivering food security and environmental sustainability through agriculture. These important areas will require producing more food with more economical use of the existing resources while the development of rural economies. In our opinion, it can be achieved through collaboration, investment and innovation among all stakeholders.

Recent statistics indicate that combining expected population growth with income growth means food consumption will increase by 68 per cent between 2000 and 2050 [6]. This implies an annual growth rate of 1.04 per cent, compared with growth of 2.2 per cent annually between 1970 and 2000 (See Table 1).

Table 1

Projected growth in population and food consumption in the world [6]

Regions of the world	Average annual growth rates, %								
	1970 – 2000			2000 – 2030			2030 – 2050		
	kcal / person	population	food consumption	kcal / person	population	food consumption	kcal / person	population	food consumption
Developing countries	0,77	2,05	2,83	0,36	1,20	1,56	0,18	0,57	0,75
Sub-Saharan Africa	0,15	2,80	2,95	0,57	2,23	2,81	0,42	1,48	1,91
Near East / North Africa	0,00	2,57	2,57	0,17	1,56	1,74	0,09	0,82	0,92
Latin America and Caribbean	0,74	2,02	2,77	0,32	0,94	1,26	0,13	0,28	0,40
South Asia	0,47	2,23	2,71	0,51	1,29	1,81	0,33	0,53	0,86
East Asia	0,49	1,48	1,97	0,35	0,47	0,82	0,06	-0,17	-0,10
Industrial countries	1,19	0,74	1,94	0,07	0,47	0,54	0,03	0,13	0,16
Transition countries	0,41	0,08	0,49	0,28	-0,64	-0,37	0,19	-0,78	-0,59
Total (in the whole world)	0,49	1,70	2,20	0,29	1,03	1,32	0,15	0,48	0,63

As can be seen from the Table 1, considerable population groups all over the world will remain deficient in the basic foods. With global food consumption growing at decreasing rates to 2050, agricultural production can also spread at a slower rate than in the past without prices rising.

At the beginning of the XXI century José Graziano da Silva, FAO Director General, in his

Message on the occasion of World Food Day and TeleFood 2000 [1] admitted that “The scourges of hunger and poverty are morally unacceptable and have to be defeated, Hunger and chronic malnutrition diminish human life. The lack of physical access to safe and healthy food at all times leads to negative consequences for people and nations”.

Turning to this fact, we realize that ensuring food security requires action in multiple dimensions, including: improving the governance of food systems; inclusive and responsible investments in agriculture and rural areas, in health and education; empowering small producers; and strengthening social protection mechanisms for risk reduction.

1.1. Changing concepts of food security in the world

The first official reference to world food security had been made at the 1974 World Food Conference that, right after the world food crisis of 1972 – 1974, called for increased food availability through higher production and for greater stability of food supplies. The concept of food security has evolved greatly over the last few decades.

Thus, until the 1980s the concept of food security by Food and Agriculture Organization of the United Nations (FAO) was based on absolute food availability, meaning an aggregate reduction in food commodities within a nation could cause a famine. In 1983, FAO’s Committee on World Food Security expanded the new concept of the term “food security” to its current definition, encompassing several goals: ensuring adequacy of food supplies; optimizing stability of supplies; and securing access to available supplies for all who need them. The ultimate aim of the given concept was “ensuring that all people at all times have both physical and economic access to the basic food that they need” [5].

In 1986, the highly authoritative World Bank report, which was called “Poverty and Hunger” [8], focused on the impermanent dynamics of food insecurity. This document introduced the widely accepted diversity between chronic food insecurity, traditionally associated with a wide range of problems of continuing or structural poverty and low incomes, and transitional food insecurity, connected with some periods of reinforced pressure caused by natural disasters, economic crash or social conflicts and political violence.

The most recent careful redefinition of the term “food security” was offered at the World Food Summit of 1996, which was held in Rome, Italy. It was defined as a situation that exists when all people, at all times, have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy lifestyle [3]. In other words, it should be mentioned that the considering concept of food security is further elaborated in terms of permanent access of people at all times to enough food for an active and healthy life. The general focus of the presented definition was revised to include the individual and household level, in addition to the regional and national level of aggregation, in food security analysis.

This definition was reaffirmed officially in the 2009 Declaration of the World Summit on Food Security [2].

Essentially, food security can be described as a multi-faceted concept, variously defined and interpreted. We completely agree with R. Fish, A. Butler, M. Lobley [4] and other scientists that it is about producing more food in ways that contribute to broader public health agendas, safe & nutritious food, active lifestyles, minimize environmental impacts of farming, reduce fossil fuel dependencies and ensure a fair price for both producers and consumers.

Subsequently, the conceptualization of food security goes beyond the adequacy of food quantity and quality and extends to the four “A”: availability, accessibility, acceptability and adequacy. These variables are linked to each other in different ways.

Food security requires that a sufficient supply of food will be available (quantity) and accessible to all people equally. Acceptability addresses food’s cultural and symbolic value, that the food available and accessible should respect individuals’ cultural traditions. In turn, adequacy is traditionally defined in terms of the long-term sustainability of food systems (quality, in the broadest sense).

1.2. The Key Pillars of the Food Security

According to the numerous studies of the Food and Agriculture Organization of the United Nations, there are several basic pillars that define today's food security regulations and management practices (See Figure 1).

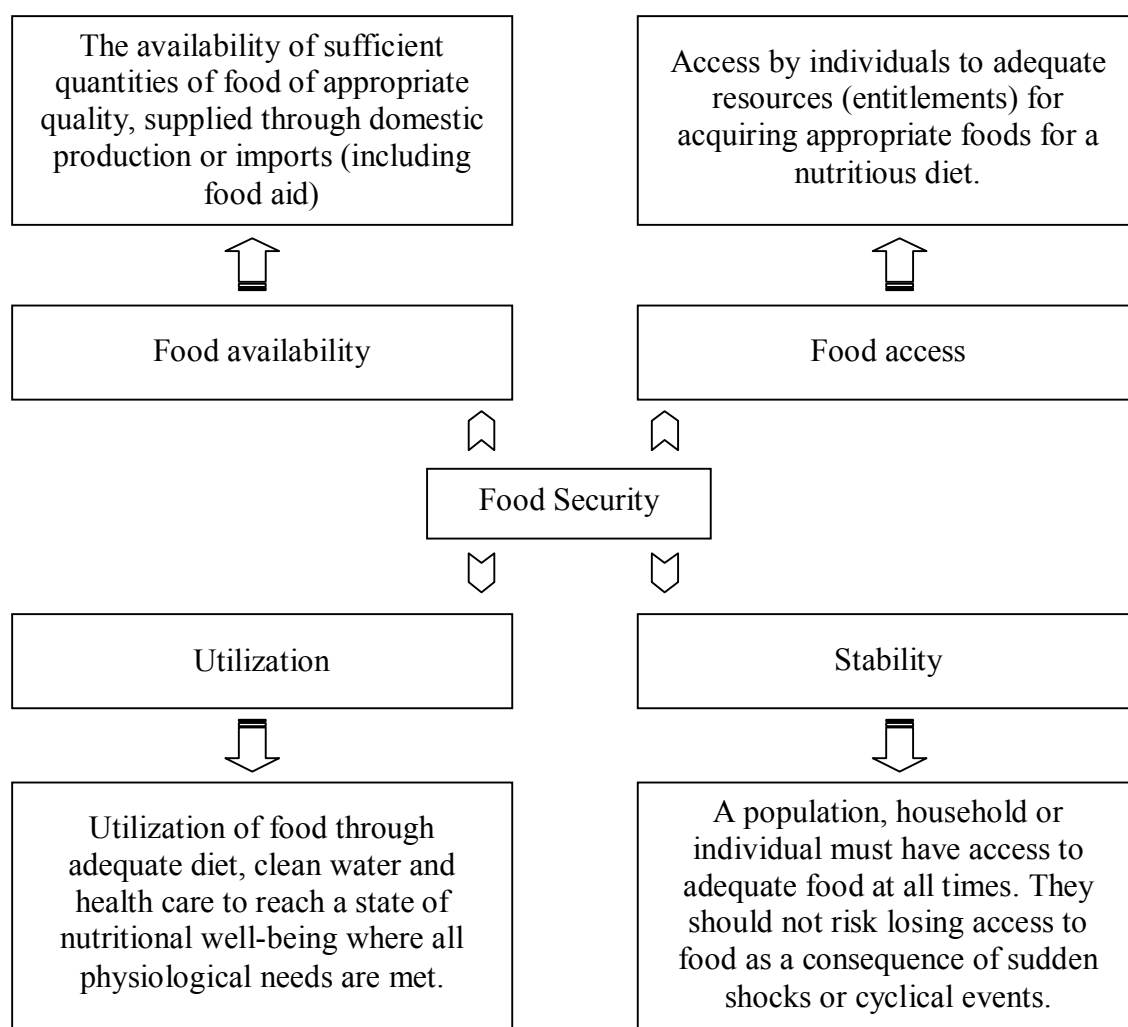


Figure 1. The key pillars of the term “food security”

(Source: IICA's Definition of Food Security/ Inter-American Institute for Cooperation on Agriculture/ http://www.iica.int/esp/programas/SeguridadAlimentaria/Documents/SeguridadAlimentarias_Quées_Eng.pdf).

It could be argued that nowadays food security is the existence of the necessary conditions for human beings to have an access, in socially acceptable ways, to food and in keeping with their cultural preferences, so as to meet their dietary needs and live healthy and productive lives. Those conditions are as follows.

First of all, the physical availability of the basic foods in sufficient quantities and of sufficient quality produced in and imported into the country, including even food aid.

Secondly, access of all people in the whole world to food because they have the economic and other resources needed to acquire adequate nutritious and safe food.

Thirdly, reaching an optimal level of nutritional well-being where all physiological needs are met, thanks to an adequate diet and availability of clean water and health care.

And, finally, permanent access to the basic foods at all times, without the risk of running out of food as a result of unexpected climatic and socio-economic crises or cyclical events (seasonal food insecurity).

2. Sustainable Management Practices in the Field of Food Security Enhancing

The recent food crisis has raised public awareness on the fragile nature of the existing global food production system and of the pressing need to develop agricultural production and to give an appropriate support to the food security.

2.1. Contemporary Approach to Food Security Enhancing

“Twin-track approach”, created for fighting hunger in the whole world by the well-known experts of Food and Agriculture Organization of the United Nations, combines sustainable agricultural and rural development with targeted programmes for enhancing direct access to food for the most needy (See Table 2).

Table 2

Contemporary approach for food security enhancing in the world, proposed by Food and Agriculture Organization of the United Nations [5]

The name of the approach	Availability	Access and Utilization	Stability
Rural development / productivity enhancement	Enhancing food supply to the most vulnerable. Improving rural food production especially by small-scale farmers. Investing in rural infrastructure. Investing in rural markets. Revitalization of livestock sector. Resource rehabilitation and conservation. Enhancing income and other entitlements to food.	Re-establishing rural institutions. Enhancing access to assets. Ensuring access to land. Reviving rural financial systems. Strengthening the labour market. Mechanisms to ensure safe food. Social rehabilitation programmes.	Diversifying agriculture and employment. Monitoring food security and vulnerability. Dealing with the structural causes of food insecurity. Reintegrating refugees and displaced people. Developing risk analysis and management. Reviving access to credit system and savings mechanisms.
Direct and immediate access to food	Food aid. Seed/input relief. Restocking livestock capital. Enabling market revival.	Transfers: food / cash based asset redistribution. Social rehabilitation programmes. Nutrition intervention programmes	Re-establishing social safety nets. Monitoring immediate vulnerability and intervention impact. Peace-building efforts.

As outlined in Table 2, first approach addresses recovery measures for establishing resilient food systems. By the way, it is based on the factors that affect the existing food system include the structure of the food economy as a whole, as well as its separate components, which are: agricultural production, level technology, the diversification of food production and consumption. Unlike this, another approach focuses on the assessment of the main options providing support to vulnerable groups. In general, both approaches are intended to be mutually reinforcing, and the positive interaction between them should reinforce the path to food security enhancing.

Drawing on the conceptual framework of the presented approaches, the following principles contribute to the implementation of the main directions of the state policies in the field of global and national food security enhancing:

fostering sustainable agricultural and rural growth, which means promoting environmentally

and socially sustainable agricultural development as the basis for further economic growth;
addressing the root causes of food insecurity, including promoting not only productivity growth, but also resource access and land tenure;
addressing the urban dimensions of food insecurity, especially addressing the unique factors behind increasing urban poverty and improving food security in terms of availability and access, market development and management of the existing natural resources.

2.2. Managing Food Security: Key Challenges and the Main Perspectives

Despite the recent progress made in the struggle to end hunger and food insecurity, the international community should pay considerable attention to the most notable challenges to meet the needs of the millions of hungry people today and those of an extremely growing population on different continents. The environment that comprises food production and food consumption components has changed greatly in recent few decades. New forms of investment are flowing into various food and agriculture systems and new models of food system governance are forthcoming.

While current and future challenges differ from those of the past, responses to the new challenges can build on lessons learned. Experience tells us that there is an urgent need for the universal agenda, for country and context-specific strategies, and for people-centered approaches. Given the complex challenge of eradicating hunger and food insecurity, progress will depend on effective governance systems and the involvement of many stakeholders across sectors, with empowered participation, transparency, equity and accountability as key principles [8].

In this context, we consider it necessary to emphasize that obvious political commitments need to be made and suitable resources allocated in a timely and effective manner for the hunger ending. Moreover, at the regional, national and sub-national levels various sectoral programmes need to be developed and coordinated in ways that ensure relevance and important action towards the eradication of malnutrition and food insecurity.

CONCLUSION

Our world is facing today a potential crisis in terms of food security. The challenge is to provide the growing population on the planet with a sustainable, reliable supply of safe, nutritious, and affordable food of high-quality through using less land, with lower inputs, and taking into account the global climate change, other environmental changes and reduction of nature resources.

Despite progress made in reducing chronic hunger, undernourishment still affects at least 842 million people worldwide. Guaranteeing fair access to resources, rural employment and income are key to overcoming hunger and food insecurity. Available data suggest that more than 700 million people in the developing world lack the food necessary for an active and healthy life [8].

The problem of food security is not caused by an insufficient supply of food as has been commonly believed, but by the lack of purchasing power on the part of nations and households.

Undoubtedly, strong economic conditions, as well as effective safety nets and increased agricultural production are needed to develop the food security of each country on the whole world. This is explained by the fact that increased agricultural production traditionally reduces the vulnerability of the country to food insecurity due to external impacts, such as high international prices caused by global food deficiency, reduced export capacity and balance of payments difficulties. As a rule, increased agricultural production serves the existing food needs of rural households and reduces the power of food insecurity in the country by increasing the supply and availability of food and by reducing prices on the basic foods.

Significant investment in agriculture remains critical to sustainable long-term food security, but the food needs of the country cannot be met by only local production. Increased domestic production supplemented by an increase in export earnings from industrial and agricultural exports is necessary to achieve long-term food security. Thus, it is obvious that all sectors of the national and global economies should develop rather than think superficially about agricultural production and meeting the food needs of the country or the continent.

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