Food Security and Poverty Alleviation towards Sustainable Livelihood

Ferdoushi Ahmed and Chamhuri Siwar

Institute for Environment and Development (LESTARI) Universiti Kebangsaan Malaysia, 43600 UKM, Bangi, Selangor D. E., Malaysia

ABSTRACT

Poverty and food insecurity are very common problems among the low-income households particularly in the developing countries of the world. Poverty is the principal cause of food insecurity. The incidence of food insecurity and poverty affect poor people in many ways including sustainable livelihoods. This paper focuses on sustainable livelihoods for poor people with respect to food security and poverty alleviation. The paper aims to represent a pragmatic framework that highlights the prospect of achieving sustainable livelihood for the poor through reducing food insecurity and poverty. Literatures were identified from various sources such as journals, reports, proceedings and related documents by searching comprehensively both electronic and non-electronic databases. Studies demonstrate that production of food commodities should be increased substantially to reduce food insecurity which ultimately will contribute to reduce poverty. In order to boost up food production, there should be a pragmatic reform in the three important components of agriculture sector, namely, irrigation technology, irrigation infrastructure and farmers empowerment which will spin high productivity and facilitate better management of natural resources. It will increase income of the poor households and spending on consumer goods and services which will ultimately contribute to reduce food insecurity and poverty. Food security and poverty alleviation are crucial in achieving sustainable livelihood for the poor. In this case, the Sustainable Livelihood Approach (SLA) can serve as an antidote for attaining sustainable livelihood for the poor by reducing food insecurity and poverty.

Key words: Food security, Poverty alleviation, Sustainable livelihood.

Introduction

Poverty is a complex and comprehensive phenomenon and covers many dimensions of human and social behaviour. Poverty is a major problem around the world, and given its multi-dimensional nature, its conceptualization and measurement continue to be challenging. Therefore, poverty reduction has become the most important issue in the development policies of almost all the countries in the world. On the other hand, Food security is becoming an issue of great importance in not only developing countries but also in the developed world. Maziya-Dixon et al. [21] have defined food security as the ability of a household to secure, either from its own production or through purchases, adequate food for meeting the dietary needs of all its members. As stated in the National Special Programme for food security [22], food security exists when all people at all times, have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and preference for an active and healthy lifestyles. Food and nutritional security are key issues for human wellbeing [11].

Corresponding Author

Ferdoushi Ahmed, Institute for Environment and Development (LESTARI) Universiti Kebangsaan Malaysia, 43600 UKM, Bangi, Selangor D. E., Malaysia
expenses and so on), certain type of disabilities or poor health of the household members can result in an increased risk of food insecurity [19].

Food security and poverty alleviation have been focused with crucial importance in most of recent development goals around the world [2]. Poverty affects the human ability to acquire, absorption and utilisation of food [10]. The incidences of food insecurity and poverty are devastating particularly in the developing countries and a lot of resources are being channelled towards programmes aimed at eradicating poverty and food insecurity by various international organisations and government of the developing nations [2]. The Food and Agriculture Organization (FAO) reports that over 860 million people in the world are suffering from severe food insecurity and chronic malnourishment and about 95 percent of them are in developing countries [8]. In October 2010, 925 million people were estimated to be undernourished [9]. Six million children die of hunger every year – 17,000 every day [5]. Recently, it was reported that the number of people suffering from chronic hunger increased from below 800 million in 1996 to above 1 billion in 2009 all over the world [28]. In addition, a growing number of low and middle-income countries are facing a ‘double burden’ of malnutrition: a persistence of both macronutrient and micronutrient under nutrition, notably among children, along with a fast rise in the number of overweight and obese people, and consequent diet-related chronic diseases [29,30].

Food security and poverty alleviation are important for sustainable livelihood for poor peoples. The concept of ‘sustainable livelihood’ is primarily attributed to both Chambers and Conway [4] since they presented sustainable livelihoods in their study as a link between capabilities, equity and sustainability. A livelihood comprises the capabilities, assets (stores, resources, claims and access) and activities required for a means of living. Sustainable livelihood is one which can cope with and recover from stresses and shocks, maintain or enhance its capabilities and assets, and provide sustainable livelihood opportunities for the next generation; and which contributes net benefits to other livelihood at the local and global levels in the short and long term [4]. The ‘Sustainable Livelihood Approach’ (SLA) has been widely used in the recent development programmes that aim to reduce poverty and food insecurity in less developed countries. The approach also focuses on policy design and development interventions to reduce poverty and food insecurity in developing countries.

This paper focuses on sustainable livelihoods for poor people with respect to food security and poverty alleviation. The paper aims to represent a pragmatic framework that highlights the prospect of achieving sustainable livelihood for the poor through reducing food insecurity and poverty.

Materials and Methods

Relevant literatures were identified from various sources such as journals, reports, proceedings and documents by searching comprehensively both electronic and local databases. Literature searches from electronic databases were conducted mainly on Science Direct, Springer Link, Blackwell, and Social Science Citation Index using the key words: food security, poverty, nutrition, impacts, sustainable livelihoods and sustainable livelihood frameworks. References cited in the literatures were searched and important studies were collected in full text. Websites of the research institutes, governmental and non-governmental organizations known to have undertaken research in these areas were also searched to find related documents and reports. In addition, both electronic and non-electronic searches were also supplemented by a network of colleagues who provided related literatures and documents. In the review process, only the documents written in English were considered. Literatures were identified and selected for review in a systematic way. This study reviewed the literatures that included discussions and demonstrated data, findings and evidences related to food security, poverty, nutrition, sustainable livelihood and sustainable livelihood frameworks.

Findings:

This study is based on the data, information and evidences from published literatures and documents that focus on and discuss food security, poverty alleviation and sustainable livelihoods. Literatures that highlight approaches and frameworks for food security, poverty alleviation and sustainable livelihood are also included in this review.

Dimensions of Food Security:

Over time, as its role has evolved, FAO has developed and promoted a broad food security framework that identifies four key dimensions of food security: availability, access, utilisation and stability. The framework applied analytical tools to increase understanding of complex interactions that determine food security status at different levels. These tools can be used to address food problems and identify opportunities, support policy and programme formulation and targeted action as well as measure food security outcomes. Fig. 1 shows the elements of food security. Achieving food security requires that there should have sufficient supplies of food, households have access to those food supplies through either their own production or the markets (given sufficient purchasing power) or other sources, and the utilisation of those food supplied is appropriate to meet the specific dietary needs of
Dimensions of food security which are linked together and sometimes overlapping can be divided into four key components. The elements of food security are discussed below:

**Food availability:**

The availability of sufficient quantities of food of appropriate quality, supplied through domestic production or imports (including food aid).

**Food access:**

Access by individuals to adequate resources (entitlements) for acquiring appropriate foods for a nutritious diet. Entitlements are defined as the set of all commodity bundles over which a person can establish command given the legal, political, economic and social arrangements of the community in which they live (including traditional rights such as access to common resources).

**Utilisation:**

Utilisation of food through adequate diet, clean water, sanitation and health care to reach a state of nutritional well-being where all physiological needs are met. This brings out the importance of non-food inputs in food security.

**Stability:**

To be food secure, a population, household or individual must have access to adequate food at all times. They should not risk losing access to food as a consequence of sudden shocks (e.g. an economic or climatic crisis) or cyclical events (e.g. seasonal food insecurity). The concepts of stability can, therefore, refer to both the availability and access dimensions of food security.

**Improving Food Security and Reducing Poverty:**

Incidence of poverty affects human beings in many ways. It causes human deprivation which manifests in hunger, malnutrition, disease, illiteracy and insufficient and lower quality of consumption of hundreds of millions of people, particularly in the least developed and low income countries [6]. Food insecurity is also significantly correlated with health and nutritional status of human beings [3,25]. Food insufficiency may affect dietary intake and ultimately nutritional status and physical well-being of the people [13]. Therefore, production of food commodities must be increased significantly to reduce food insecurity which ultimately will contribute to reduce poverty. In order to boost up food production, there should be a serious and pragmatic reform in agriculture sector. Figure 2 presents a framework which serves as an antidote for attaining food security and poverty reduction. The framework provides an understanding how reform in agriculture sector will influence higher productivity and better management of natural resources for higher income and help in reducing poverty, protect the environment and attain food security. The framework indicates reformation in the three fundamental components of agriculture sector: the irrigation technology, infrastructure and farmers empowerment strategies. Irrigation technology should be reformed in such a way that sufficient water for irrigation can be conserved and its distribution to farmland efficiently. Irrigation infrastructures need to be repaired and rehabilitated for a better operation and productivity. The farmers should be given responsibility in the operation and maintenance of such infrastructures. Farmer’s empowerment is another important issue in agricultural sector to boost up production. Farmers should have better access to farm inputs in general, fund and modern irrigation technology to increase production substantially. Finally, government should take appropriate and adequate measures to ensure proper reformation in the above mentioned three important components of agriculture sector which will spin high productivity and facilitate better management of natural resources. Higher productivity will lead to higher income and consequently more spending on consumer goods and services. Cumulatively, there will be economic
growth which will reduce food insecurity and poverty.

**Achieving Sustainable Livelihood of the Poor:**

Poor people, particularly in the rural areas of a country, depend on a variety of daily activities for their livelihood. These activities include farm and non-farm activities, livestock and poultry rearing, varieties small shops, tea stole, wage labour, petty hawking and trading, handloom, handicrafts and so on. Poverty and food insecurity are the main constraints in achieving sustainable livelihoods for the poor people. The ‘Sustainable Livelihoods Approach’ (SLA) has been widely used in recent development programmes that aim to reduce poverty and vulnerability in less developed countries. The SLA takes into account the poor people (rather than resources, sectors or technology) as the centre of the development process and embraces the complexity of rural livelihoods from the perspective of the poor. The SLA is typically set out in the form of a framework (Figure 3) that brings together assets and activities that are thought to comply with the livelihood definition and illustrates the interactions between them. The various elements of the sustainable livelihood framework are discussed briefly as follows:

**Livelihood assets:**

The framework looks first at the capital assets (in other words, livelihood assets) owned, controlled, claimed, or by some other means accessed by the household. The variety of capital assets can be grouped into five major categories: **Human capital** (skills, knowledge, ability to work and good health), **Physical capital** (transport, shelter, water, energy, communications, and production equipment), **Social capital** (social networks, membership of groups, cooperative society and other social institutions), **Financial capital** (household savings, supplies of credit or regular remittances or pensions) and **Natural capital** (land, water, wildlife, biodiversity and environmental resources). The capitals mentioned above are often depicted as an ‘asset pentagon’ in the sustainable livelihoods framework. People combine the capital assets at their disposal in different ways to make a livelihood.

![Fig. 2: Food Security and Poverty Reduction Framework. (Source: Adapted from Kerr and Kolavalli [17])](image)

**Transforming structures and processes:**

Secondly, the framework focuses on various external factors that affect households’ access to the different forms of capital as well as returns associated with the exchange between the capitals. One group of the factors consists of various structures and processes that directly enable or impede the households’ access to both assets and activities they need. These are known as “transforming structures and processes”. The transforming structures and processes are various institutions and organizations like government (e.g. policies, programmes, laws, rules, regulations imposed by government), wider society (e.g. caste and class systems, religion, traditional norms for resource access), and private sector (which includes markets, investment and NGOs involvement).

**Vulnerability context:**

Another group of factors that affect households’ access to the assets they need for their livelihood is called the “vulnerability context”. This vulnerability context frames the external environment in which people operate, exposing them to various shocks and seasonal shifts over which they have little or no control [15]. Shocks include natural disasters (such as floods, cyclone, and droughts), sickness or death of a family member and the loss of land because of erosion. Seasonal shifts may have impact on changes in prices of products or availability of food.
Shortages of agricultural products or works associated with them at certain times of the year can mean that the normal food shortages of the poor become critical forcing them near to starvation (Sustainable Coastal Livelihood Project, 2002).

Livelihood strategies:

Thirdly, the framework sheds light on livelihood strategies of the households. With the context of prevailing vulnerability and existing transforming structures and processes that affect the access to and use of assets, households combine all the assets available to them to create a livelihood. The ways they combine these various elements are called livelihood strategies. Some of the livelihood strategies frequently used by the poor people include diversification of livelihoods, mobility and migration.

**Fig. 3:** Sustainable livelihood framework. (Source: DFID [7]).

Livelihood outcomes:

Finally, sustainable livelihood framework focuses on livelihood outcomes. The livelihood outcomes are what households actually achieve by applying their livelihood strategies. A livelihood outcome is sustainable if people are able to maintain or improve their standard of living related to well-being and income or other human development goals, reduce their vulnerability to external shocks and trends, and ensure their activities are compatible with maintaining the natural resource base [1].

Conclusion:

Poverty reduction is one of the most important issues in the development policies of almost all the countries in the world. On the other hand, food security is an emerging issue particularly in the developing world. The incidence of food insecurity is very common among the poor households in the low and middle-income countries of the world. Studies demonstrate that socio-economic variables of the households are important determinants of their poverty and food security status. Poverty causes human deprivation which manifests in hunger, malnutrition, disease, illiteracy and so on. Food insecurity affects dietary intake and nutritional status and consequently physical well-being of the people. Therefore, production of food commodities must be increased significantly to reduce food insecurity which ultimately will contribute to reduce poverty. It requires a serious and pragmatic reform in agriculture sector to increase food production substantially. Reformation should be made in the three important components of agriculture sector, namely, irrigation technology, irrigation infrastructure and farmers empowerment which will spin high productivity and facilitate better management of natural resources. Higher productivity will contribute to higher income and more spending on consumer goods and services and consequently reduce food insecurity and poverty. Food security and poverty alleviation are crucial for poor people to make their livelihood sustainable. The SLA approach has been utilized by various multilateral agencies, donors, NGOs and government agencies aimed at achieving sustainable livelihood for the poor people. The SLA approach provides an understanding how poor people can access to and combine various livelihood assets and utilize different livelihood strategies in the context of prevailing vulnerability and existing transforming structures and processes to make a sustainable livelihood as well as improve the quality of their lives by reducing food insecurity and poverty.
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