

# The Search for a Sustainable Framework for Food Security and Livelihoods of the Rural Poor

**IN 2010,** the Food and Agriculture Organization (FAO) reported that of the 925 million hungry, 578 million are found in Asia. Among these are Asia's small food producers, majority of whom continue to live on less than \$1.25 per day. The International Fund for Agriculture Development (IFAD) also attests that 70% of the world's very poor people are rural. They are chronically poor due to lack of assets, limited economic opportunities, poor education and skills, and socio-political inequities (by gender, age or indigenous roots).

This article<sup>a</sup> intends to provide a perspective or how food security and livelihood of the rural poor in Asia can be strengthened and sustained by following the framework of sustainable agriculture.

Livelihood in rural areas are mostly derived from smallholder farming, including agricultural labor, livestock production, and artisanal fisheries. Usually the poorest households depend on farming and agricultural labor. Many farming households tend to diversify their livelihood since income is seasonal from one type of crop alone. Usually,

this involves a mixture of on-farm and off-farm activities of various family members. Thus, there is higher pressure to create a dynamic agriculture sector, which can play a major role in reducing poverty and hunger.

With the food crisis of 2008, food security regained top priority for governments and intergovernmental organizations. And as can be expected, investments and development assistance are shifting back to agriculture and food security programs. But how are these truly affecting and improving food security and livelihood for the rural poor in Asia? Several key challenges need to be considered:

High vulnerability of the rural poor. The State of Food Insecurity 2010 produced by FAO noted the lack of resilience to economic shocks of poor countries and vulnerable households. Such shocks could be death or illness in the family, calamities or even price increase of basic goods or inputs. To cope with crisis, rural households tend to sell assets that are difficult to recover (such as land and livestock), reduce food intake in quantity or

Condensed from the full paper (same title) presented by Fr.
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Conference on Agriculture and Food Security (ICAFS), Singapore, August 10-12, 2011.

quality, or cut down on health and education expenses. These risks for poor rural households need to be managed or minimized.

Unsustainable food production systems. Unsustainable methods of agriculture have caused soil erosion, loss of soil fertility, excessive water extraction from irrigation, to name a few.<sup>b</sup> Around 75% of biodiversity in agriculture was lost in the last 50 years.<sup>c</sup> Up to 90% of crop varieties have disappeared from farmers' fields.<sup>d</sup> Half of the breeds of domestic animals are lost; fishing

grounds, overfished.

Limited resources, limitless demand. Land, water, energy --- these are but the most critical elements for life on this planet to survive and yet, are becoming scarcer with the growing population and their competing use. Deforestation and mining are destroying watersheds, biodiversity, and indigenous cultures. The stability in the food production and consumption of the rural poor is being threatened by increasing competition for land due to agricultural investments and urbanization. Around 15-20 million hectares of land are under negotiation for acquisition or leasing by foreign investors (IFAD Rural Poverty Report, 2011). While the government may have the right intention of encouraging agricultural investments, the food security of the rural poor should be included in their economic equation.

On the other hand, demand for water used for agriculture could rise by over 30% by 2030. Agriculture currently consumes 70% of water withdrawals from rivers and aquifers (Foresight, 2011).

Climate change. The changing climate pattern will also have a tremendous impact on the rural poor's food security. Desertification, salinization, and sea level rise will further diminish arable land. Agriculture's specificity to location and sensitivity to weather, will affect greatly the types of crops and

their productivity. In turn, food intake is affected as there will be changes in taste, nutrient content, and social acceptability. Biofuel requirements for climate change mitigation will also reduce lands for growing food crops.

Rural undernourishment. In the Philippines, the rural population is eating less than those living in the urban areas (XUCA, 2011). Within the food groups, people in the rural areas eat more cereals, starchy tubers and vegetables, and very little of milk and milk products, meats, and surprisingly, fruits. The bigger percentage intake of carbohydrates and starchy foods is related to the availability and affordability of these food products in the rural areas.

## Can the rural poor achieve food security and sustainable livelihoods from agriculture?

YES, they can, with a more holistic framework to guide programs and interventions. Sustainability should not only target better food security and livelihood for increased incomes but the sustainability of resources and the quality of life. Hence, ANGOC has heavily espoused mainstreaming sustainable agriculture as a key strategy to achieve these goals.

## Sustainable agriculture as basis for agricultural systems

Organic and agro-ecological agriculture is part of the larger approach of sustainable agriculture (SA), the more fundamental framework which is essentially principle and value-laden. Today, it is inaccurately branded as an alternative agricultural method perhaps only to differentiate it from the "conventional", high-yielding agricultural practices propagated by the Green Revolution. Yet, it has been embedded in Asia's long tradition of food self-sufficiency and community survival. Sustainable Agriculture is one of the most effective programs for food security, especially for the underdeveloped rural and agricultural countries.

Communities of small food producers have partnered with civil society organizations (CSOs) for half a century to defend and promote the practice of sustainable agriculture that conserve and improve the environment.

SA, with its agro-ecological system, conserves the natural resource base made up of water, soils and biodiversity, and at the same time entails economically-viable activity because of the diversity of animals, plants and microorganisms, and crops involved. Emphasis is put on **small-scale and medium-sized farms** instead of large-scale farms. Community-based and family-based agricultural systems will be more prominent and a closer link between rural and urban populations is envisioned – that is, consumers and producers are more interconnected.

The FAO report on the State of Food Insecurity in 2002 also emphasized that farmers who owned their lands tend to invest more on making them productive than those who still leased land or work as farm laborers. Furthermore, small farm owners have more freedom to decide how to diversify their farm activities according to their needs, which helps achieve household food security. Farmers who practice sustainable agriculture are usually those who have no tenure issues and can choose freely their preferred farming approach.

Communities of small food producers have partnered with civil society organizations (CSOs) for half a century to defend and promote the practice of sustainable agriculture that conserve and improve the environment. SA protects the seeds, the genetic resources that could feed the planet, in a sustainable, equitable, ecological, and healthy manner. The UN official statistics estimate around 1.5 billion smallholder families that practice traditional and ecological forms of agriculture, pastoralism and fisheries for a living.<sup>e</sup>

Studies attest that growth in agriculture can still generate the best improvements for the poorest people (IFAD Rural Development Report, 2011), especially through sustainable agriculture. SA promotes diversified livelihood, like crop and farm diversification, to address seasonal harvests, nutritional deficiencies, and environmental

conservation. SA is labor-intensive, which promotes agricultural employment or family/ community integration. There is also a need to balance on- and off-farm activities to reduce the risks that keep rural households in the cycle of poverty.

For the past decade, ANGOC has been involved with two programs that has been working to strengthen the link between sustainable agriculture practitioners and the market to respond to growing opportunities for better income and to promote healthier, more nutritious food to a wider public.

## I. Enhancing capacities for sustainable agriculture towards poverty reduction <sup>f</sup>

In partnership with the Asia-Japan Partnership Network (AJPN), the United Nations Development Programme (UNDP), NGOs and People's Organizations, ANGOC implemented "Enhancing Capacities for Sustainable Agriculture Towards Poverty Reduction", which aimed to contribute to the goal of poverty reduction by enhancing capacities of Asian rural communities to increase agricultural productivity through the promotion of sustainable farming systems. By adopting these technologies, the Project enhanced capacities of farmers in selected rural communities in India, Indonesia, and the Philippines towards sustainable utilization of land and labor resources.

Site activities were identified following a site resource development planning activity, making the process highly demand-driven. Such approach enabled farmers to formulate with appropriate interventions on the basis of available resources. The table next page provides an overview of the interventions undertaken:

The project sites were subjected to resource assessments to decide on which stage in the commodity chain each should focus, while considering vulnerability factors and strategies to achieve their objectives.

Project Sites	Local Support Group	Crops	
India			
Khamkalan, Kaimur, Bihar and Parmalpur, Kaimur, Bihar	Association of Voluntary Agencies for Rural Development (AVARD)	Pigeon Pea, Niger, Tomato, Potato, Rice and Wheat	
Moravapalli and Kothapalli Villages, Pulicherla Mandal, Chitoor District, Andhra Pradesh	South Asia Rural Reconstruction Association (SARRA)	Tomato, Brinjal, Chilies, Ladyfinger, Onion, Double Beans, Cluster Beans, Radish, Pumpkin, Ridge Gourd, Bitter Gourd, Drumstick and Leafy Vegetables	
Indonesia			
Banjaroya, Banjarasri, Jatisarono, Pagerharjo, Giripurwo and Hargorejo, Kulon Progo, Jogyakarta	Hari Pangan Sedunic (HPS)	Cassava, Rice, Ginger, Clove, Corn, Lima Bean and Banana	
Banjarmangu, Punggelan and Paseh, Propinsi Jateng, Banjarnegara	Bina Desa	Organic rice and Zallaca fruit	
Philippines			
Barangays Tongantongan, Sinayawan & Kahaponan, Valencia City, Bukidnon	Philippine Development Assistance Program (PDAP)	Organic rice	
Barangays Tual and Tuato, President Quirino & Barangay San Emmanuel, Tacurong City, Sultan Kudarat	Philippine Partnership for the Development of Human Resources in Rural Areas (PhilDHRRA)	Sugarcane	

Source: Sustainable Agriculture as a Strategy for Poverty Reduction in Asia:The AJPN Experience, 2005, ANGOC-AJPN

India worked on improving diversification through crop and livestock production with training, exposure programs, and the establishment of demo farms for pigeon pea, tomato, rice and wheat. While access to land was not a problem in the Indian sites, productivity was constrained by the low supply of irrigation water, high input costs, and the farmers' lack of skills.

In Indonesia, most of the farmers had lands, but very small. Thus, they also needed to diversify their income sources and add value to their agricultural products (i.e., rice, corn, lima beans, cassava, zallaca fruit). Food processing and cottage industry development were selected strategies to augment their income.

In the Philippines, interventions focused on marketing and industry development to enhance the producer groups' competitiveness in the market for organic rice and muscovado sugar. Interventions were related to product consolidation, quality control, standards development, and cementing market linkages.

Results. The project demonstrated the potential of SA for raising farm productivity, while keeping inputs to a minimum. Although labor costs increased due to the labor intensiveness of an organic farm, jobs were created for unemployed rural workers. With premium prices commanded from natural or organic products, this significantly improved the farmers' incomes. The corn farmers of Jogjakarta, Indonesia saw a 32% increase in corn production. The pigeon pea and tomato harvests of Khamkalan farmers from India shot up to 58% and 35% more, respectively. The muscovado sugar farmers from the Philippines yielded a net return on investment of 15.41% after they upgraded product quality and established better market linkages.

But the best capability perhaps instilled in the food producers was independent decision-making on farm management. While conventional agriculture may have raised their yield to impressive levels, it would have prescribed varieties to grow, and fertilizers and pesticides to use. Farmers ultimately have little room for their own choices.

On the other hand, since sustainable agriculture is knowledge intensive, training investments are required for extension workers, with the incorporation of SA in academic curricula and the allocation of a budget for SA researches.

The Project was also able to strengthen local development planning through the formulation of Master Plans for organic products that have significant potential in local and export markets. Under these plans, the local government unit (LGU) could facilitate the consolidation of organic products from small farmers by setting up a common framework and program for participation of various stakeholders in the area. Business plans could also be developed from these Master Plans.

## 2. Promoting Rural Industries and Market Enhancement (PRIME)<sup>§</sup>

In 2005, the Philippine Development Assistance Programme, Inc. (PDAP)<sup>h</sup>, a consortium of rural development NGOs based in the Philippines, with the Canadian International Development Agency (CIDA), embarked on a six-year program called PRIME with a financial contribution of CDN\$ 4.8 million. ANGOC is a founding member and current board member of PDAP.

PRIME has four major components/target outcomes, namely micro-enterprise development, enhancing participation in the market, program and policy analyses in support to rural micro-enterprises/industries, and strengthened institutional capacity of PDAP. These four components were envisioned to achieve the three interrelated program goals of enhanced food security, increased income, and jobs creation towards poverty reduction. Result specific for food security is expected to be addressed by one major target outcome, that is, increased household income.

Of the 42 micro-enterprises (MEs) under PRIME, 26 MEs are devoted to organic rice, 13 to

muscovado, and 3 to seaweeds. PRIME areas are national in scope. The geographical concentration is in Mindanao with 29 MEs; there are 9 in Visayas and 4 in Luzon.

To enhance farmer participation in the market, PRIME adopted as its core strategy the **rural industry development (RID)** approach to support MEs in poor rural communities that are engaged in organic and natural commodities. RID looked into the entire chain of the three (3) commodities from production, processing, and distribution. It facilitates the effective participation of farmers and rural producers in the market through organizational capacity building of rural enterprising communities (RECs).

The RECs are communities who have gone up from survival and productivity stage to communities that have exhibited growth through microenterprise development and industry-oriented enterprise. RECs have secured their production assets and increased productivity with some surplus, and have organized themselves into small micro-enterprises. Furthermore, they now have substantial production volume, were linked to the value chain and demonstrated a certain level of expertise in technical and marketing aspects. RECs, while still in incipient and formative stages, have some capacities to engage the market. However, these RECs or their respective MEs have limited growth prospects due to financing constraints, which PRIME also sought to address.

The value chain approach in the previous page aptly reflects the interventions of PRIME along the value chain of the priority industries. At one end of the value chain were individual farmers belonging to RECs who produced the commodity and did primary value-adding activities, such as milling and processing. The produce were then aggregated at the Local Market Consolidation (LMC) level for common marketing, and further leveraged with the distributors at the other end of the chain. The distributors oversaw product

availability to the institutional markets and the ultimate consumers.

In partnership with key players (e.g., financing institutions, NGOs, business development service providers, marketing groups, private businesses), PDAP played a vital role in developing three organic and natural commodities. PRIME provided RECs with the necessary financing, technology, entrepreneurial capability, and other capacity development interventions so they can actively participate in the dynamic and fast-growing organic and natural products market.

PRIME also worked with national government agencies and LGUs, along with the academe, NGOs, multilateral and bilateral agencies, and the private sector to improve public policy and influence the development of programs and allocation of resources that support rural industry development towards poverty reduction. The PRIME itself led to the creation of local clusters, value chains and industry associations on organic rice and muscovado. The Global Organic and Wellness Corporation (GlowCorp), a business corporation composed of PRIME MEs and LMCs geared towards institutional and export markets, was also incorporated.

#### **Insights from the Projects**

The path out of poverty in the rural areas is by no means easy nor brief. There are still challenges to sustain the target of an average 15% increase in income. Some of these key challenges are posed by conditions in the larger economic and political setting, chief of which are the price movements in the world market of the three commodities and rice importations.

I. Land Tenure Security: An important first step to food self-sufficiency. It is critical to note that the successful community efforts presented above confirmed the need to secure their access and control of their resources first before attaining the higher goals of household

### Main Results of PRIME

**Sustained jobs, households served.** PRIME interventions resulted in additional and/or sustained jobs. As of September 2010, PRIME micro-enterprises now serve 5,138 rural households or 30,828 Filipinos. As members of MEs, farmers also benefited from the ME's profitability by way of interest on capital and patronage refunds and dividends.

Increased income, diversified sources, enhanced food security. Organic and natural products command premium prices in the market. The PRIME package of services from production to marketing ensured that, like other players along the value chain, small farmers and rural enterprises also benefit.

Diversified income sources through livelihood from the MEs enabled farmer members to augment their primary incomes. The particular support of PRIME for women's enterprises covered production of mushrooms, rice cookies, and sugarcane-based processed products in Luzon; processing of sugarcane-based products in the Visayas as well as of the by-products of the three priority commodities in Mindanao.

Facilitation of market linkages. Through the Local Market Consolidators (LMCs) scheme of PRIME that facilitated market linkages, pricing of the products of the partner MEs became more competitive (i.e. favorable to the farmer members, the MEs, LMCs, and distributors). LMCs and distributors were able to expand market outlets from local (within the community, province) to inter/regional and national markets.

**Policy support and advocacy.** The enactment in 2010 of the Organic Agriculture Act or Republic Act 10068 was a landmark outcome of PRIME. The law provided the institutional framework for the growth of organic agriculture in the Philippines. PDAP sat as the NGO representative in the National Organic Agriculture Board (NOAB). PDAP and another PRIME partner, the Organic Certification Center of the Philippines (OCCP), were again at the forefront in the formulation of the Implementing Rules and Regulations (IRR) of the Organic Agriculture Act.

food security, excess production, and industry focus. The two projects purposely selected food producers who have security of tenure over their land. With this critical stage already resolved, the farmers were more focused on food security and productivity issues. They were also free to decide on the use and management of their resources.

2. Exercising greater control on food. The underlying assumption here is that food is more secure when produced in the backyard or by the community. There is less risk of going hungry even if shocks (i.e., natural, health, etc.) move the rural households in and out of poverty. Moreover, locally produced food have better quality and cheaper prices. Food nutrients are conserved and preservatives are not added. Handling costs are also minimal.

Though a number of countries have relied on the market to augment their food supply, most of them still depend mainly on domestic production. The volume of rice traded in the world market, for example, is less than 5% of the total production. The current Philippine Department of Agriculture has crafted a rice self-sufficiency plan over three years. They have committed to satisfy the local demand for rice and even export excess supply. Though others may take this with a grain of salt considering the Philippines has been a rice importer for the past three years, this objective is worth supporting. The goal of DA is consistent with the agenda of having greater control over our food.

**3.** Facilitate access of the rural poor to the market. Filipino farmers of muscovado sugar showed that upgrading product quality and establishing better market linkages have a positive effect on price, which later yielded a net return of 15.41%.

It is also necessary to invest in enhancing the farmers' capacities for product processing and promotion, or at least the organizational mechanisms that should assist them. Finding the value-added of specific products is not easy and requires appropriate marketing linkages and strategies.

Furthermore, organizing the suppliers (millers/traders/farmers) and linking them with reliable buyers/consolidators of SA-grown products can stimulate demand for the product, as in the case of muscovado sugar.

4. Securing the food and nutrition needs of the rural poor through diversification. In enhancing the food security of the rural poor, a big bulk of the challenge is assisting rural communities meet food requirements by producing diverse crops locally. This can be done by producing substitute products, fortifying existing foods or

introducing new commodities. An example of this initiative is the introduction of a legume that has high protein content. It may not be a complete substitute for meat and meat products but is at least a viable solution for combating protein deficiency. The introduction of a new commodity or new variety may, however, require training and technical assistance.

5. Reducing risks from unexpected shocks. Illness, death, education, natural disasters --- these are among the most common risks of a rural poor household that root them to destitution. We need to pay greater attention to these and to territorial characteristics that could be crucial dealbreakers in rural families' struggle out of poverty.

6. Strengthening a marketing system tailored to support SA products. Both projects had to deal with a marketing system that still caters to the needs of conventionally-grown agricultural products. A new system which considers the unique processing, storage, and even packaging needs of organic producers must be established.

At the community level, local institutions led by local governments can provide support facilities like seed banks, processing plants, and distribution channels. This support will increase community productivity and participation in the local market. Linking local food production directly to the local market through a value chain will generate local employment and maximize labor. Hopefully, it will boost the local economy, as well as improve the local community's health and food security, particularly those of the rural poor.

Key interventions in the establishment of these food chains are the organization of the rural poor into commodity clusters to attain marketable volume, provision of postharvest and storage facilities, and enhancement of their entrepreneurial capacities.

Given the fragile food sub-system of the rural poor, their control over productive resources for producing their own food should be strengthened, their local food production should be enhanced, and their link to the market should be facilitated, prioritizing the local market that is easily accessible and familiar to the small food producers.

## Promoting community-centered enterprises for sustainability

Finally, we need to shift our focus again to making the community the center of development and not be purely profit-motivated. Peoplecentered enterprises treat natural and human resources not merely as factors of production, but as resources that fulfill present and future human needs. The motivations and decision-making processes of the capital and community-centered approaches are thus differentiated in the table on this page.

A community-centered enterprise appears to be the more appropriate strategy to achieve both the goals of sustainable livelihood and food security. This approach encourages people to do work that ensures the sustainability of the ecology and the well-being of the community as the core principles of production.

As CSOs, we must continue to engage in reforming the policy environment to support community enterprises, build knowledge and capacity among community entrepreneurs, and conduct research and development for effective methods in managing these enterprises. We must ensure that development will not be defined by economic growth alone. It should be a more holistic growth that includes social justice, economic productivity, sustainable environment, political participation and a vibrant culture.

<b>Capital-centered</b>	Community-centered	
■ What can I sell?	■ What do people need?	
■ How much can I make?	■ How much will people benefit?	
■ How to produce it cheaply?	How can production involve the community and sustain the habitat?	
<ul> <li>Market development – promoting consumer cultures</li> </ul>	<ul> <li>Community Development: responsibility of stewardship</li> </ul>	
■ Individualism	■ Community well-being	
<ul> <li>Profit and wealth accumulation</li> </ul>	Resource sharing and quality of life	

Source: ANGOC. Sharing the Fruits of Our Labors, Report of the Third Asian Development Forum, Quezon City, 1995

#### **Endnotes**

- a Written by Fr. Francis Lucas, Roel R. Ravanera, Casandra Hilary B. Emata and Maricel Almojuela-Tolentino for the Asian NGO Coalition for Agrarian Reform and Development (ANGOC), 2011. Fr. Lucas is Chairperson Emeritus of ANGOC and an SA practitioner and advocate. Mr. Ravanera and Ms. Emata are the Dean of College of Agriculture, Xavier University and Research Assistant of Xavier Science Foundation, respectively. Ms. Tolentino is a Senior Program Officer of ANGOC for Access to Resources.
- b Foresight. The Future of Food and Farming (2011) Executive Summary, The Government Office for Science, London.
- c ETC Group, GRAIN, ITDG, 2002.
- d FAO
- e ETC Group, Who will feed us?
- f Sustainable Agriculture as Strategy for Poverty Reduction in Asia: The AJPN Experience, Teresa L. Debuque (ed), Asia-Japan Partnership Network for Poverty Reduction (AJPN)-ANGOC, 2005.
- g PDAP Paper for the Roundtable Discussion: Imperatives on Agriculture and Food Security for the New Administration, 4 July 2011, Quezon City, Philippines
- h Established in 1984, PDAP is composed of the Asian NGO Coalition, Assisi Development Foundation, Association of Foundations, National Council of Social Development, Philippine Business for Social Progress, and Philippine Partnership for the Development of Human Resources in Rural Areas
- i Sharing the Fruits of Our Labors, Report of the Third Asian Development Forum, ANGOC, 1995.



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The International Land Coalition is a global alliance of civil society

and intergovernmental organizations working together to promote secure and equitable access to and control over land for poor women and men through advocacy, dialogue and capacity building.



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Founded in 1979, ANGOC is a regional association of 17 national and regional networks of non-government organizations (NGOs) in Asia actively engaged in food security, agrarian reform, sustainable agriculture, participatory governance and rural development. ANGOC member networks and partners work in 14 Asian

countries with an effective reach of some 3,000 NGOs and community-based organizations (CBOs). ANGOC actively engages in joint field programs and policy debates with national governments, intergovernmental organizations (IGOs), and international financial institutions (IFIs).

The complexity of Asian realities and diversity of NGOs highlight the need for a development leadership to service the poor of Asia—providing a forum for articulation of their needs and aspirations as well as expression of Asian values and perspectives. ANGOC seeks to address the key issues related to food sovereignty, agrarian reform, sustainable agriculture, participatory governance, and rural development in the region.

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