

DO NON-FARM ENTERPRISES AFFECT SUSTAINABLE AGRICULTURE?

I. Statement of the problem

Intensive agriculture, particularly in the uplands, has brought about soil erosion and/or land degradation, thus, threatening sustainability or improvement of production. Despite the presence of soil conserving technologies and environment-friendly techniques, there are factors constraining their widespread adoption such as additional labor requirements which are competitively pulled by diversifying sources of income and emerging non-farm income opportunities within or in nearby areas.

Small and medium-scale enterprises (SMEs) are one of the non-farm income opportunities that have emerged as an important component in the rural development paradigm. Accounting for 99% of all establishments in the Philippines (Roa 2000), SMEs not only provide additional income to farm families but also serve as link between agriculture and industries and as an absorber of surplus labor in agriculture. Non-farm enterprises do abate degradation of soil resources when they serve as alternative to erosive farming activities. However, if such non-farm activities are not properly regulated, they could also pose some threats to the resource or environment especially if these activities extract use from the resource. On the other hand, as non-farm jobs attract more labor away from agriculture, the more labor becomes unavailable for labor-intensive soil-conserving technologies, but could encourage labor-saving techniques instead, like planting perennials or longer fallow.

Farmers' behavior or decisions are generally in response to current policies that encourage non-farm income generating activities or promote concerns for environment and natural resources. How then can one reconcile the objective of increasing income of households in the uplands and sustaining the natural resource base?

II. National policy on SMEs

There are a number of policies that encourage the development of small and medium-scale enterprises in the countryside. Three major pieces of legislation are as follows:

The Magna Carta for Small Enterprises

Republic Act No. 6977 of 1990 is one milestone in the pursuit of encouraging small and medium enterprises (SMEs), particularly rural agri-based enterprises, with simultaneous concern for balanced and sustainable development. Also referred to as the Magna Carta for Small Enterprises, R.A. 6977 provides for the establishment of a feedback and evaluation mechanism that will monitor the economic contributions as well as the bottlenecks and environmental effects of the development of SMEs (Section 2).

In 1996, R. A. 8289 amended R.A. 6977, specifically distributing the 8% credit allocation to small (6%) and medium (2%) enterprises until year 2007. SMEs are defined as any business activity or enterprise engaged in industry, agribusiness or services, and classified based on the following categories: micro - with total assets less than PhP1,500,001; small - PhP1,500,001 to PhP15,000,000; medium - PhP15,000,001 to PhP60,000,000.

The law also created the Small and Medium Enterprise Development (SMED) Council based at the Department of Trade and Industry (DTI) for planning, coordinating, and monitoring activities.

The Countryside Industrialization Act

Through R.A. 7368 of 1992, government efforts were geared towards industrializing the countryside by providing financial assistance to SMEs in manufacturing, processing, and related industries. The objective is to hasten the formation and integration of intra-provincial and regional trade and industrial linkages.

The Agriculture and Fisheries Modernization Act (AFMA)

Another breakthrough in Philippine legislation is R. A. 8435, also known as the Agriculture and Fisheries Modernization Act of 1997. Section 22, Chapter 3 of Title I of AFMA declares that "an agriculture, fisheries and agrarian reform credit system shall be designed for the use and benefit of farmers and fisherfolk, those engaged in food and non-food production, processing and trading, , and SMEs engaged in agriculture and fisheries".

Section 23 also states that packaging and delivery of various credit programs shall cover, among others, agri-business activities which support soil and water conservation and ecology-enhancing activities, and privately-funded and LGU-funded irrigation systems that are designed to protect the watershed.

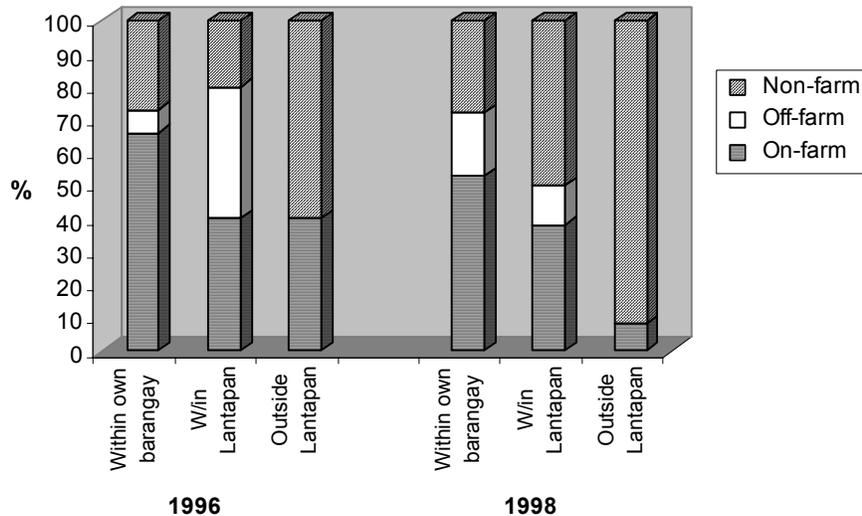
III. Experience at the local level and emerging issues

Non-farm development in Lantapan, Bukidnon

In general, majority of Lantapan's labor force is in agriculture although changes in employment structure have taken place as employment in non-farm work within Lantapan and more so, outside Lantapan has increased (Figure 1). There are only a few non-farm work opportunities within Lantapan that are non-migratory such as small business enterprises. Non-farm employment opportunities have rapidly increased in the proximate areas of Malaybalay and Valencia. Daily wage rates are higher than farm work that some non-farm workers are willing to reside outside Lantapan and pay for the transactions cost, such as transport to and from place of work. Furthermore, females, especially in the uplands, are generally engaged in non-farm work, being better educated than male, and therefore, more preferable for the job (Rola and Coxhead 1999).

Figure 1. Distribution of household members over 15 years old, by type and location of employment, Lantapan, Bukidnon, 1996 & 1998.

(Source of data: Rola and Coxhead, 1999).



The national program on SME development has somehow spurred the local government of Lantapan to pursue programs and projects along this concern. The abundance of minor forest and other products that could be used for handicraft industry is said to augur well for such development direction. Table 1 lists down some of the government efforts in Lantapan towards this end.

Table 1. Examples of SMEs development programs and projects, Lantapan, Bukidnon, 1991.

Type	No. of beneficiaries	Venue
<i>Skills training (DTI -Special Projects & Management Division-CARP)</i>		
Abaca hat weaving	16	Kaatuan
Stuff toy making	15	Impasilao, Kulasihan
	16	Poblacion
Bamboo basket weaving (basic)	15	Victory
Bamboo basket weaving (upgrading)	15	Victory
Sawali making	2	Capitan Juan
<i>Monitoring/Maintenance and establishment of income-generating projects</i>		
Abaca Hat weavers of Kaatuan (active)	10	Kaatuan
Bamboo Furniture of Kulasihan (active)	3	Kulasihan
Phone Mat and bamboo Basket Weaving	10	Victory
Stuff toy makers (Active)	14	Poblacion

Kamuyot weavers (Dormant)	14	Kaatuan
Sawali makers (Semi-active)	2	Capitan Juan
<i>Micro-enterprise development program</i>		
Kulasihan Multi-Purpose Cooperative	Loan (P150,000)	Kulasihan
Victory Sunrise Multi-Purpose Coop	Due for approval	Victory
Bag-ong Tigum sa Mag-uuma sa Bugcaon	Applied	Bugcaon
Alanib Multi-purpose Cooperative	Applied	
4 Trade fairs		Lantapan, Kaamulan, Maramag, Phillips

Source: Local Government Unit, Lantapan, Bukidnon 1991.

Impact on sustainable resource management

The emerging structural change in employment in Lantapan indicates some link between non-farm economic conditions and farmers' choice of crops and technologies including those affecting soil conservation. As non-farm income opportunities become available, farmers face the option to leave their farms, or to adopt production practices that require lower labor input such as planting perennials. With rising wages in non-farm jobs, farm work in the uplands become less remunerative than non-farm, thus reducing the supply of family labor on the farm, or shifting from relatively labor-intensive annual crops to less intensive farming systems, including agroforestry.

This phenomenon was observed in Lantapan between 1996 and 1999 when plots with contours and hedgerows which are labor-intensive soil-conserving practices declined from 16% to approximately 5% while plots with trees or fallow, considered labor-saving conservation techniques, increased from 25% to 68%. In the upper watershed, corn parcels with contours/hedgerows declined from 38% to 18% while parcels with trees/fallow went down from 62% to almost 82%. Also observed is the higher rate of increase in the number of farm households practicing less-labor soil conservation techniques than that of households adopting labor-intensive measures (Rola and Coxhead 1999).

Facilitating and constraining factors

The Philippine policy on setting minimum wage has affected the behavior of the labor market. There was a generally increasing trend in nominal wages for both agriculture and non-agriculture until 1990, yet, agricultural wages remained lower than non-agricultural. From 1991 to 1994, agricultural wages stagnated but went up again in 1995 onwards coinciding with a decline in agricultural employment, as observed in Region 10 (Northern Mindanao).

Meanwhile, system of remunerating farm labor in Lantapan varies from cash to non-cash payment, on a daily or individual or contractual basis, e.g., per hectare of land worked, per bag of fertilizer applied, or per unit of crop harvested. In such instances, wage policy may not bring about a significant impact on farm labor market. For agricultural wage labor, e.g., plowing, planting, weeding, and harvesting, daily wage in

Lantapan remains lower than non-farm to attract workers. However, as labor for farm work becomes scarce as a result of movement to non-farm opportunities, remuneration for farm employment should improve.

Choice of technology that will release or tie up labor in the farm, or will conserve or erode natural resource also depends on the perception of farmers on how policies could affect the farm profitability, such as price incentives for output. When output price changes, mix of crops also change and so does the pattern of labor utilization. For instance, the price support and trade interventions in corn and vegetables created among farmers the impression that these crops are profitable, thus, resulting in a shift from coffee to corn and vegetable farming, which are considered labor-intensive and soil-erosive.

IV. Policy implications

The growth of non-agricultural sector has brought about a significant structural change in the labor market, even in the uplands. The wages offered by non-farm jobs lures labor away from the farm such that labor-saving soil conservation technologies are replacing labor-intensive ones.

In order to simultaneously address the concerns of raising income through non-farm employment and sustaining natural resource productivity, there are policy incentives that could be offered. Local government units (LGUs) could promote sustainable resource management by providing incentives such as tax credits to farmers planting perennials or adopting agroforestry, and negotiating with the banking sector to offer lower interest rates to farmers adopting such practices. For farmers to fully appreciate the importance of sustainable agriculture, LGUs should also embark on a strong information dissemination program.

Moreover, the development of SMEs right in the locality will slow down the movement of labor to urban centers for non-farm employment. There is a need, therefore, to explore the package of incentives that could attract private sector investments on SMEs in the village or local areas. (*Dulce D. Elazegui*)

References:

R.A. 8435 - The Agricultural and Modernization Act (AFMA)

Roa, J. 2000. Re-thinking Policy Support for the Small-Scale Food Processing Enterprises, ISPPS-CPAF Policy Paper, U.P Los Baños..

Rola, A. and I. Coxhead 1999. Soil Conservation Decisions and Non-Farm Economic Conditions: A Study of the Rural Labor Market in the Philippine Uplands of Bukidnon, SANREM-CRSP.