

Improving the Delivery of Extension Services in the Philippines: Lessons Learned and Future Directions

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Agricultural productivity improvements are essential for achieving overall economic growth. The Philippine performance on both counts has been disappointing. Agricultural extension which is one way of improving productivity has undergone substantial change in the last thirteen years through devolution under the Local Government Code of 1991. Whether devolution has improved agricultural extension delivery is a key question. Devolution generally has yielded some positive outcomes: cooperation between local government units (LGUs) and with the private sector and nongovernment organizations (NGOs); recognition of the realities of globalization; and use of modern management and communication. But problems of capacity building, partisan local politics and uncertain lines of financial and decisionmaking accountability between central and local government remain. These general lessons apply to agricultural extension. Moreover, even the best extension service, whether delivered by local or central government, is unlikely to be effective where farmer decisionmaking is unduly influenced by government controls and pricing policies and where security of tenure is weak.

Background

The Philippines has not experienced a sustained period of rapid growth since the 1970s (Hill and Balisacan 2003: 9).

Agricultural Productivity and Economic Growth

In those Asian countries where economic growth has regularly hit eight percent plus—Vietnam, Thailand, Indonesia and the Philippines in the 1970s—agricultural productivity growth has made a crucial contribution to

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improved overall economic performance. In both developed and developing countries, publicly-funded agricultural extension has, in the past, been one of a number of ways through which governments have sought to help farmers secure productivity gains. Other ways include tax and trade policy reforms, security of land tenure and better infrastructure and education. More recently, a combination of technological and market changes has seen a switch from public to private delivery of extension services in a wide range of developed and developing countries.

What do these lessons of experience in other countries imply for the Philippines? To begin with, some 57 percent of the Filipino people depend directly on agriculture for their livelihood. Almost all of these people are poor. In the Philippines, the agricultural productivity improvements essential for raising rural incomes have been slow in coming and the same point applies to the economy as a whole. Hill and Balisacan observe that "...unlike many of its neighbours, the Philippines has not experienced a sustained period of growth since the 1970s" (2003: 9).

In setting out to understand this poor agricultural productivity story, agricultural extension and its linkages to agricultural research are natural targets for study. They have been important in other countries and were a significant part of the brief growth spurt in the 1960s Green Revolution in the Philippines. Over the last 14 years, Philippine agricultural extension services have also undergone a large-scale devolution from central government delivery down to local and municipal governments for funding and delivery.

Other possible sources of growth also matter but these are reasons enough to look closely at extension services. The best extension service in the world is unlikely to be effective when farmers operate in a policy environment of insecure land tenure, unrealistic input and product prices, and frail infrastructure.

Nevertheless, the recent strong interest in agricultural extension by Filipino researchers makes good sense. (See for example, Tolentino 2001, Honrade 2001, Vargas et al. 2002, Contado 2004, Cardenas 2004.) This work, which is supported by the Australian Centre for International Agricultural Research (ACIAR), has similar origins. It is built around case studies of experiences with the devolved agricultural extension system in seven case study regions.

General Lessons from Devolution

The Local Government Code (LGC) of 1991 devolved a wide range of functions to LGUs besides agricultural extension. Over the past twelve years of its implementation, a number of issues and concerns have emerged

concerning the entire devolution process. These general lessons need to be understood when assessing the particular impact of devolution on agricultural extension. They may also be referred to as "lessons learned" so far.

Lesson One. Decentralization of powers without financial decentralization is meaningless. It is, therefore, imperative to support and continue the process of transferring financial resources to the local governments.

Lesson Two. Because of the massive devolution of powers to local governments, capacity building should be high in the priority of the agenda for local governance. Capacity building efforts—including skills and capability building and training of local officials—should be targeted at both the local government units and the concerned national government agencies. Indeed, if there is another lesson learned over the past twelve years, it is the neglect of capability building for concerned national government agencies in the devolution process. This means that while capability-building efforts were targeted at local government units, accompanying efforts at developing the capabilities of concerned national government agencies that would include clarifying their role under a decentralized setup were either neglected or underemphasized.

Lesson Three. Local governments have become more assertive and effective in articulating LGU concerns over the past ten years. Local governments have successfully organized themselves into leagues at various levels and formed an umbrella organization such as the Union of Local Authorities of the Philippines (ULAP). Indeed, if there was another major institutional development initiative that has occurred over the past ten years, it is the emergence of the local governments themselves as advocates in the cause of local governance. This was manifested in the increased impact of such associations upon local government concerns ranging from resisting efforts of the national government to withhold their Internal Revenue Allotment (IRA) shares to supporting omnibus amendments to the LGC.

Lesson Four. Local governments in the Philippines have recognized the value of interlocal cooperation and collaboration as provided for in the LGC. Many local governments have recognized that many of the challenges encountered at the local level can be solved only if they cooperated or collaborated with the local governments contiguous to them. Problems, such as, preservation and management of marine resources, watersheds, flood control, pollution control could only be successfully carried out in collaboration with neighboring local governments.

Lesson Five. Local governments have begun to increasingly enter into partnerships and collaboration with civil society. Largely because of the LGC, the context of partnerships between government and civil society, the private

sector, NGOs and business has been laid. Examples of successful partnerships abound, making the Philippines a leading model of government-civil society collaboration. It is within this context that many have referred to the Philippine experience as one that has redefined governance at the local level.

Lesson Six. The field of governance, in general, and local governance, in particular, is an area that has generated high interest among the international donor agencies operating in the Philippines. Indeed, as early as the late eighties, and early nineties, United States Agency for International Development (USAID) through its Local Development Assistance Program (LDAP) identified local autonomy and the passage of policy reforms to support local autonomy as a major area of assistance. Earlier on, of course, was the Local Resource Management (LRM). The Local Government Support Program (LGSP) through the Canadian International Development Agency (CIDA) is an example of another successful initiative that encouraged and supported clustering among local governments. Other institutions, especially after the passage of the Code, including the United Nations Development Programme, the Ford Foundation, the Asia Foundation, various German Foundations such as the Konrad Adenauer Foundation (KAF), the Friedrich Ebert Foundation, and the German Foundation for International Development (DSE), the Asian Development Bank, the World Bank also focused on capacity building for local governance. The Australian Agency for International Development (AusAID) identified local governance as a major thrust in its operations in the Philippines.

Lesson Seven. Awards programs have been instruments in successfully disseminating and encouraging good and best practices at the local level. Since the enactment of the LGC, various awards programs recognizing local initiatives and innovations have been launched. These included the *Galing Pook* Awards of the Local Government Academy and the Asian Institute of Management; the Health and Management Information System (HAMIS) Awards of the Department of Health (DOH) and the German Technical Cooperation (GTZ); the Konrad Adenauer Medal of Excellence (KAME) of KAF; and, of course, the various awards of the Department of the Interior and Local Government (DILG) such as the Clean and Green, *Gawad Pamana*, *Sajid Bulig*, etc.

Lesson Eight. Urbanization is development that should be increasingly addressed at the local level. It is estimated that over 50 percent of the Philippine population will be living (surviving!) in urban areas by the turn of the century; thus, problems of urbanization, from pollution, to traffic, to environmental degradation, etc, will have to be confronted. It must be noted that consultations with local governments have shown relatively high environmental consciousness among LGUs.

Lesson Nine. Globalization issues and concerns are being increasingly addressed by local governments. Many of the local governments in the Philippines have participated in many international fora, been invited to present their initiatives and innovations, and adopted the hackneyed but relevant paradigm of thinking globally yet acting locally. In this day and age of rapid developments in telecommunication and computers, local governments have begun to cross the so-called "digital divide."

Lesson Ten. Performance indicators and benchmarks for good governance are emerging concerns for governance in general and local governments in particular. This is particularly true of efforts being made to prepare formulas to determine, say the IRA share of local governments. The DILG has the Local Government Performance Measurement System (LGPMS) and former Secretary Jose Lina advocated the development of a process that would come up with some kind of an "ISO for LGUs."

Lesson Eleven. Finally, the past twelve years have also shown that excessive partisan politics and the persistence of graft and corruption and rent-seeking behavior at the local level can subvert the gains of local autonomy and decentralization.

It is within this context that accountabilities and answerabilities at the local level should be given emphasis not only in theory but also in practice. This is where civil society and the private sector may play a key role by encouraging and providing the context for active participation in the monitoring and implementation of programs and projects.

Contemporary Delivery of Public Agricultural Extension

We will never again allow the government to give us free water (WB 2004a: 10).

Finding the 'right' level of government for any kind of public service is a difficult matter on technical and political grounds. Two questions need to be addressed.

- In what respects is the service in question (agricultural extension) a public good which needs to be provided by government?
- What level of government is best suited to providing the public good (agricultural extension)?

Is Agricultural Extension a Public Good?

A review of reform and decentralization of government services currently being prepared covers the issue of agricultural extension as a public good (Caballero, Quieti and Pantanali, forthcoming). Governments may become involved in the provision of agricultural services on efficiency grounds because of perceptions of market failure—or on equity grounds, for example, to redistribute income.

In both developed and developing countries, agricultural extension was for many years regarded as a public good. Knowledge of farming practices, once made available to one farmer could be appropriated by others (i.e., the knowledge was not excludable) and the use of that knowledge did not diminish the consumption of others (extension was regarded as not rivalrous). Whereas specific farm inputs, such as fertilizer, are private goods, in that the purchase by one farmer excludes the use of others and consumption by one affects consumption by others. There is no need to worry about underinvestment in fertilizer—because individual farmers can secure all the returns from its application if they have ample incentives to purchase and apply it. But in the case of extension, the benefits of knowledge acquisition may extend well beyond that farmer. Farmers may well underinvest in the acquisition of productivity improving knowledge. From the point of view of the community as a whole, a case can be made for subsidizing that investment on the grounds that community benefits exceed individual benefits.

This reasoning underpinned public support for agricultural extension (and research) in developed and developing countries alike for many years. Returns from public investment in research and extension are generally considered to be high (Cardenas et al. 2003). And the Philippines' experience with high yielding rice varieties in the 1970s and 1980s indicated high returns to research and extension expenditures (Hayami and Ruttan 1985).

Despite this history, the use of public funds for agricultural extension is no longer automatically assumed to be money well spent. In both developed and developing countries, funding for public agricultural extension is under increasing pressure for a range of possible reasons.

Thus, publicly funded extension should focus on those areas where there is a large divergence between community and private benefits. Subsidies for farm inputs do not seem to be good candidates for public extension (because the benefits can be confined to the farmer purchasing them) whereas training in techniques for disease control, environmental or land care, in principle, might be good candidate on the grounds that benefits will extend to the wider community.

In practice, most goods have a combination of public and private good characteristics. Some farming techniques are specific to a farmer or farm or perhaps to a region or local government area. Moreover, changes in technology can affect the extent to which a particular technique is excludable. Productivity gains from hybrid seeds, for example, can be fully appropriated by the farmer purchasing the hybrid seed and the expanding activities of some private seed companies in the Philippines by way of demonstration farms indicate that these incentives can be effective.

Because many extension activities will have a combination of private and public good characteristics, it might be the case that co-payment by farmers is appropriate. Co-payment systems have a number of potential benefits: (1) helping farmers articulate priorities; (2) enabling scarce public extension resources to go further; and (3) empowering farmers as clients of the extension service.

The *WB World Development Report* states that “farmers in Andhra Pradesh, India are finding out that when they pay for their water, the irrigation department becomes more accountable to them” (2004: 10). In the words of one farmer “we will never allow the government to again give us free water” (WB 2004b: 10). Interestingly, Filipino farmers also make co-payments for water to the National Irrigation Authority (NIA) with similar benefits reported in control and accountability. One of the trends noted in the case studies discussed in the next section is greater use of co-payments for services covering such things as seeds, fertilizer, fish breeding stock, and irrigation materials.

Demonstrating divergence is one thing, fixing it is another. Even the clear existence of a large divergence between public and private benefits does not in itself warrant public intervention, whether through extension, or some other means. It also needs to be established that the costs incurred to fund extension will yield benefits sufficient to cover them. Extension is expensive, all the more when farmers are isolated, their farms are tiny, and modern technologies are complex and specialized.

During the 1960s, it was thought that new technology could be diffused quickly by dramatic increases in extension agents; but in many countries this way of thinking has collapsed through poor management, lack of relevant new technology to transfer, and problems of financing (InterAcademy Council 2004). A second model of extension—the Training and Visit model—was applied widely in African countries particularly through the 1990s. It too has been judged inefficient and unsustainable (Gautam 1999). A contemporary model of agricultural extension involves a much greater private role and is being driven by several imperatives including (1) lack of government funds; (2) lack of donor funds; (3) demonstrated success of private extension in cases

of export crops where farmer levies can be gathered to support both research and extension; (4) effectiveness of local NGO extension activities; and (5) the spread of private extension in industrial countries such as the Netherlands, New Zealand and the United States (InterAcademy Council 2004).

One of the benefits of private extension is that its usefulness is self testing. The costs of a productivity improving new method of farming include the cost of the information about that method plus the costs of the farmer's time absorbing that information and the costs of material and equipment that may be required to apply it. Even when the information itself is free but farmers lack the incentive and capacity to apply it, even large expenditures of public funds are bound to be ineffective. So if farms are too small to show decent returns or if the title is weakly held so that farmers cannot borrow or benefit from any improvements they make by subsequent resale, extension advice is unlikely to be taken. And if the extension is devoted to crops such as rice where costs for unmechanized small-scale production are high and returns are low, then farmer interest again will be low for understandable reasons.

The East West Seed Company has been involved in the introduction of demand driven public-private partnerships to organize the transfer of commercial off-season vegetable production technology. About a dozen-technology transfer projects have been conducted since 1999. Projects typically involve demonstration farms, co-payment by way of farmer purchase of seeds, and cooperation with donors, universities and LGUs (Acosta 2004).

The following broad conclusions emerge from this discussion:

- Public extension activities should not seek to duplicate or replace the private sector—do not use extension funds to purchase private inputs.
- Public extension should focus on activities where the divergence between community benefits/costs and private benefits/costs are potentially greater and where public extension is likely to have impact in achieving those public benefits.
- Most activities involve a mix of public and private goods and there should be provision for co-payments which will (1) enable public funds to go further; (2) empower farmers as clients; and (3) help identify priorities.
- Extension delivery is expensive especially where farms are small, communication is difficult, and farmer incentives and capacity to adopt are weak, thus, the pay off to extension is likely to be low.

Allocating Functions among Different Levels of Government

Some of the principles for resolving the question “which level of government should do what?” are being addressed in the work of Cabellero et al. (Forthcoming 2004.) There are three main principles, subsidiarity jurisdictional spillover and specialization. The first of these, subsidiarity, says that administrative responsibilities should be assigned to the lowest level of government capable of carrying out these responsibilities competently. The principle of jurisdictional spillover says that a service should be controlled and financed at that level of jurisdiction where outcomes do not impinge on neighboring jurisdictions. According to the principle of specialization, activities should be done at a level which enables the benefits of scale and specialization to be appropriated.

Thus an important question is whether the devolution of agricultural extension to LGUs under the LGC saw agricultural extension being delivered by the ‘right’ level of government. A review of experiences ten years after the LGC became a law contended that devolution to the lowest level of government needs to be understood in the context of discontent following 30 years of highly centralized rule (Tolentino 2001). Tolentino (2001) points out that the local governments are in the best position to dovetail strategies of agricultural extension.

One possible advantage of delegating functions to the lowest level is that it can set up a basis for LGUs to cooperate to find the ‘right’ level. The Local Government Code provides for cooperation and collaboration, and many local governments have recognized that some of the challenges encountered at the local level could be met, but only if they cooperated or collaborated with local governments contiguous to them (Brillantes and Tumanut 2002).

In the context of identifying the ‘right’ level of government to deliver agricultural extension, the following questions emerge:

- Did the Local Government Code adequately spell out functions and responsibilities of revenue raising by different levels of government?
- Was the transition of responsibilities from central to local government well managed?
- Are LGUs too small to deliver extension services efficiently?
- How far has devolution of agricultural extension progressed and how effectively are funds for agricultural extension being expended by local governments?

Tolentino (2001) observes that the LGC clearly specified key powers, responsibilities, and resources. But it has been subjected to varying interpretations since then. Initially, there was enthusiasm with the issue of many clarifying orders followed by a quiet period through to 1996. From 1996 to 1998 there was a time of decentralization culminating in proposals to actually recentralize extension; however, these proposals did not come to light and according to him, devolution of agricultural extension is here to stay.

Tolentino suggests that disillusion with highly centralized government through the 1960s and 1970s may have created unrealistic expectations about the effectiveness of service delivery at the local level. By implication, it raises the question "was extension pushed down too far?" What do recent studies have to say about this and what evidence has emerged from the case studies?

- Compared to devolution in other countries like the United States and China, the Philippines devolved to the municipality which seems to be a very small unit for operational delivery.
- One reason why linkages to research outputs are weak is that municipalities are too small to be able to afford subject matter specialists.
- Political intervention is reported to be a pervasive problem within LGUs. Services are reported to be distributed unfairly (Vargas et al. 2000). And senior extension personnel are often selected from political party workers.
- Capacities for planning and implementation are weak so national programs tend to dominate (Vargas et al. 2000).
- Municipalities are too small to have short message service (SMS), media, proper evaluation and monitoring and good links to national and provincial experts.

Problems Identified with the Delivery of Agricultural Extension

Expectations from the devolved Philippine agricultural extension service were initially high. Prior to devolution, extension services were criticized for being inefficient, irrelevant, ineffective, and top-down. When agricultural extension services were devolved to LGUs, it was expected that a demand-driven service that is more responsive to farmers' needs would emerge.

Studies of the impact of devolution have shown that the bedding down of the devolved system suffered in a number of respects against the initial high expectations. The results are as follows:

- The financial aspect of the devolution was chaotic in its organizational aspect.
- LGUs were not furnished any guidelines on how an ideal extension service should look in terms of staff size, composition, and competencies.
- Planning and implementation were reported to be based almost entirely on national programs (Vargas et al. 2000).
- With regard to extension linkages with research there is an over concentration of efforts on a single commodity: rice (Vargas et al. 2000).
- Farm or home individual visits appear to be the most common extension modality. Accordingly, the extension staff serves very few farmers per visit in a barangay. There appears to be little use of mass media by LGUs (Honrade 2002); whereas NGOs in Infanta report very effective use of local talk-back radio (Lucas 2004).

A study prepared by a Committee on National Agricultural Extension Policy provides a detailed analysis of the contemporary state of the devolved extension service (Cardenas et al. 2003).

Major conclusions of this study include the following:

- No mechanism whereby research results generated outside DA are systematically transformed into extension messages.
- Weak training support for LGU extension staff along with low salaries and lack of career path.
- Operation of many providers of extension services, including Department of Agriculture-Agricultural Training Institute (DA-ATI) and other DA attached agencies including provincial authorities; LGUs; NGOs; State Universities; Department of Agrarian Reform (DAR); Department of Science and Technology-Philippine Council for Agriculture, Forestry and Natural Resources Research and Development (DOST-PCARRD); Department of Environment and Natural Resources (DENR); National Food Authority; and private seed companies.

These recent contributions of Philippine researchers address a number of important questions. The emerging evidence on these issues is summarized below. The next section draws on case studies conducted in this current project to elaborate and complement this emerging evidence.

The Philippine Experience: Drawing Lessons from the ACIAR-Sponsored Project

The assumption is that decentralization works by enhancing citizen's voice in a way that leads to improved services.... But greater autonomy can also increase opportunistic behavior and create moral hazard, resulting in costs that diminish accountability and the benefits of decentralization (WB 2004b: 185 and 187).

The Study

The manner of delivery of agricultural extension in the Philippines has undergone substantial change over recent years. Considerable extension functions have been transferred to local government through the LGC. Under the LGC, the local government units are responsible for the delivery of extension services.

As reported earlier, studies on the devolution of agricultural extension in the Philippines reveal a disappointing performance of LGUs in the delivery of agricultural extension. These studies conclude that, while the transfer of powers allows LGUs to tailor extension to the needs of small farmers, major questions as to what factors contribute to successful devolution of agricultural extension services still linger.

The present study on "Improving Delivery of Extension Services in the Philippines" is built around the experiences with the devolved agricultural extension system in seven study areas. The study explores factors that contribute to successful (or abortive) devolution of agricultural extension services in seven case study areas. The case studies analyze the strengths and weaknesses of devolved setup and draw lessons from them.

The Methodology

In setting out to find answers to these issues, seven case studies were designed and pretested. The selected cases were recommended by members of the steering committee of the research project. The study areas include the provinces of Leyte (Ocenar 2004), Southern Leyte (Jamig 2004) and Nueva

Vizcaya (Esden 2004); the cities of Santiago, Isabela and Tuguegarao (Francisco and Montes 2004) and Tuguegarao, Cagayan (Fernandez 2004); and the municipalities of Infanta, Quezon (Calugay 2004) and Claveria, Misamis Oriental (Carada 2004). These study areas have been recognized as being effective in providing extension services to small farmers and have good working interfaces with private and government extension providers.

Because of the manner in which the study areas were selected, the findings of seven case studies cannot be generalized beyond these sample seven study areas. Nevertheless, the results contain significant findings that are valuable inputs in designing an appropriate framework for the financing and delivery of public extension services.

The preparation of the case studies benefited largely from existing studies, field visits, and consultations with policy experts from national and local governments and donor institutions. The field visits to study areas provided case writers opportunities to secure data, organize workshops for extension technologists, and conduct focus group discussion on extension with farmers and stakeholders. The workshops and dialogues yielded relevant information on the situation of extension services in the study areas. These various methodologies were further enriched by extensive consultations and meetings with members of the steering committee of the research study, and national officials of agencies involved in the delivery of extension services, as well as with agriculture experts from donor institutions. The series of consultations and meetings with them clarified the framework of the study, assessed and reaffirmed issues and findings of the case studies, suggested refinement of the cases, and presented alternative ways of delivering extension services to farmers.

The Case Studies: Issues and Concerns

In the context of examining the delivery of agricultural extension services in the Philippines, the following observations emerge.

Leyte Province. Overall, there have been advances in the delivery of extension services in Leyte. These inroads are largely due to the initiative and support of the political leadership of the province, particularly the governor and vice governor who, four years earlier, started introducing good practices in sustainable agricultural extension programs in various parts of the province. These programs typically involve demonstration farms, breeding and marketing centers, co-payment by way of farmer purchase of fertilizer and seeds, and cooperation with donors and local university.

The involvement of NGOs, private sector, and regional university enhanced the delivery of extension services. These groups implement

extension programs using varied modalities. Generally, they supplement government extension programs in communities where they are based, thus reaching out to farmers that are not usually covered by other extension providers. These institutions also serve as channels through which government extension services are delivered. They are frequently commissioned by agriculture-based government agencies and donor institutions to undertake extension programs in the province.

The national agencies, particularly DA and its attached agencies continue to take the lead in conducting extension activities in the province. This role has been further strengthened by the 1997 Agriculture and Fisheries Modernization Act, which mandates DA satellites to coordinate and integrate research and extension systems in the regions where they are based. The continued involvement of DA in the delivery of extension services in the province raises some urgent concerns regarding the devolution of agricultural services. This involvement has, to a large extent, restricted efforts of the province and component municipalities/cities to initiate their own agricultural extension services. These local governments merely adopt and support agricultural extension programs of the national agencies. Furthermore, devolved personnel spend a big part of their time providing extension support to national programs in the province.

Provincial funds for agricultural extension services are generally restricted due to limited appropriation released to the service. Funds allocation for extension has to compete with other major programs of the provincial government, including welfare, health, tourism, environment, enterprises and infrastructure. The last item receives the bulk of the annual budget of the province sharing almost 40 percent of the funds. The limited funds shelled out to extension programs neglect some urgent organizational needs of the Office of the Provincial Agriculturist (OPA). For instance, there are no government funds for the preparation of agricultural plans, research, training programs for staff, salary increase and evaluation of extension programs.

Nueva Vizcaya. Devolution has laid the policy framework for participatory governance, which empowered the province to initiate innovative programs to enhance agricultural development. Through a multi-sectoral strategic planning workshop, the provincial government, municipal and *barangay* officials, national government agencies, private sector, and civil society identified the province as a watershed haven with the twin purpose of developing agriculture and enhancing tourism.

A common vision provides direction for the development of agriculture. The multisectoral strategic planning workshop initiated by the governor and participated in by different stakeholders under the Provincial Development

Council (PDC) crafted a development vision for the province. This vision provides the framework for planning, programming, and budget allocation to agriculture and other programs and projects of the province.

A supportive provincial leader who took the initiative in addressing the development concerns of the province, Governor Rodolfo Agbayani played a key role in sustaining agricultural growth. The governor instituted participatory governance in setting direction for the socioeconomic development of the province. An important output of this activity was the crafting of a long-term strategic vision and focus on agriculture and eco-based tourism.

Workable strategies geared toward enhancing the delivery of extension services were crafted. These are:

- the monthly meeting with the municipal agricultural officers (MAOs) provides the provincial officials an opportunity to strengthen linkages with component municipalities. The meeting provides an avenue to share information and to thresh out cross cutting issues and concerns. It also provides a venue for learning and synergizing innovative agricultural extension programs;
- the availability of commodity and subject matter specialist at the Office of the Provincial Agriculturist (OPA). This provides technical support to the municipal extension workers in performing their tasks;
- focus on Farm-system and Farmer-led extension approaches. The focus is on the farmers themselves and not on the farm or the commodity;
- inter-governmental initiatives. The provincial government and the Department of Environment and Natural Resources agreed to co-manage the watershed haven program of the province. In a similar vein, the provincial government built alliances with upland communities to restore the environmental integrity of the forest while providing livelihood opportunities to upland farmers; and
- establishment of Farmers Information and Technology Services Center (FITSC) at the provincial and municipal levels to help farmers access relevant information on new programs and technologies.

As the province installed a new governor, the new provincial administration will have to face the following persistent challenges to improve the delivery of extension services:

- lack of government funds;
- lack of an integrated provincial agriculture extension plan to harmonize the seemingly fragmented extension activities;
- dominance of subject matter specialist at the Office of the Provincial Agriculturist who is unable to respond to queries beyond his line of specialization;
- resistance of aging extension workers to new technologies; and
- personnel-related problems such as low salary and lack of promotion plan.

Southern Leyte. There is a high level of commitment by the provincial leadership to sustainable agricultural development in Southern Leyte. The strong leadership and political will of the provincial governor and the vice governor have been responsible for achieving self-sufficiency in rice in 2003 and in containing the spread of Abaca Bunchy Top Disease in the province. The urgent concern to achieve food security and to improve the abaca industry has gained support both from the local and national officials.

The agricultural programs of the province have also the full support of the congressman of the district and even the incumbent national leadership. This is evident in their financial and material support to various agriculture-related programs of the provincial government.

Support to sustainable agricultural development in the province is manifested by incorporating food security and abaca development in the provincial development agenda and annual investment plan. As a result of this, the province in 2003 reported a surplus of 221,650 *cavans* (sacks) of rice. At the same time, the spread of mosaic and bunchy top diseases that threatens the abaca industry has been minimized.

Adoption of a development model that involves partnership with component municipalities, national government agencies, academic institutions, and the private sector is suggested. Financial, infrastructure and technical support to the agricultural program of the province is extended by municipalities, the Southern Leyte Vegetable Growers Multi-Purpose Cooperative, the Department of Trade and Industry, the East-West Seed Company, and Germany's Deutscher Entwicklungsdienst (DED).

In spite of the great potential for sustainable development of the agricultural sector, the province faces the following challenges and issues that have to be addressed:

- lack of government funds for agriculture programs and projects;
- mobility of extension workers is rather slow due to lack of vehicles;
- centralized system of requesting logistical support. For instance, request for supplies and materials is delayed because supply is centralized at the provincial level;
- slow approval of legislative measures by the legislative council in support of agricultural programs of the province; and
- low level of acceptability of modern technology by farmers.

Santiago City (Isabela). The city government of Santiago introduced strategic changes in the delivery of agricultural extension services that are usually not employed by other local government units. The city government launched the Redirection Program that provided a unified framework or direction for the development of agriculture in the city. The program introduced, among others, diversified farming and brought in private sector partners in order to inject efficiency and economy in delivering agricultural services to target clientele.

The strong leadership exercised by the city mayor has been the moving force that dictates the direction of agricultural extension services delivered to the farmers. The mayor defined the city government's focus, which is agricultural self-sufficiency, increased farmers' income, and embarked on a public-private partnership that made great impact in sustaining the Redirection Program.

The alliances established by the city government with the private sector and state universities revitalized further the delivery of agricultural extension services. The entry of the East West Seed Company and the Green Thumb Marketing Corporation has solved the very cumbersome process of procuring agricultural inputs. The partnership has minimized the dependency of the farmers on the city and benefited the extension personnel through training provided by the private partners. On the other hand, academic and research institutions such as the Central Luzon State University (CLSU), the University of the Philippines Los Baños (UPLB), and the International Rice Research Institute (IRRI) provided training and information on latest agricultural technologies.

Pioneering farmers and strong farmer associations are in themselves catalysts for improving the local agricultural sector. These farmers dared to venture into the new and scientific methods of vegetable farming and took time to learn new technologies and seed varieties by attending training

programs offered to them. On the other hand, the city government initiated the conduct of rapid field appraisal (RFA) in every barangay to maximize the benefits and assistance extended to them by various extension providers. Members of the associations attend seminars to improve farming techniques, meet with extension workers regularly, and avail themselves of financial assistance from local banks. The RFAs enabled farmer members to share their knowledge with each other with regard to their actual farming experiences.

A close working relationship between extension workers and farmers is important. Extension workers provide round the clock assistance to farmers to ensure transfer of technology and good harvest.

The initial success of the Redirection Program poses questions on its sustainability. Since the program's launching in 1996, it has been shelved twice due to political uncertainties that confronted the city during the previous years. The new leadership has discontinued the program due to financial difficulties, wishes to rethink the continuation of the program and intends to leave the evaluation in capable hands.

The issue of funding remains one of the biggest challenges of the city. The city government does not have sufficient financial resources to meet the extension needs of all the farmers in its 29 agricultural barangays.

The merger of the Offices of the City Agriculturist and the City Environment and Natural Resources has severely affected the performance of the agricultural sector and the morale of the extension personnel. All extension workers are casuals despite working with the city for over ten years. The merger deprived them of the opportunity to become permanent. The contracts of all extension workers were not renewed by the new city mayor.

There is a high turnover of extension workers. Majority of the extension personnel are casuals all of whom are well-trained in extension activities. The non-renewal of their working contracts by the new administration would greatly affect the performance and sustainability of the current city agricultural programs. It would also put to waste the various trainings given to the extension workers if they are not rehired.

Tuguegarao City (Cagayan). The city government implements an updated medium-term rolling agricultural and fishery plan. The 2004-2009 City Agriculture and Fishery Modernization Plan envisions an improved quality of life for the people as it aims to achieve food security and sustainable development, among others. Implicit to the plan is the desire of the city government to develop and sustain agricultural and fishery production through modern and appropriate technologies and workable strategies, and the state-of-the-art agricultural facilities. The plan likewise demonstrates the priority thrust of the present city leadership.

The city mayor is an innovative, competent and sincere leader who enthuses the city dwellers into cooperating and collaborating with the city government and each other for the betterment of the community. The incumbent city mayor was proclaimed Outstanding City Mayor in 2002 and 2003. One of the factors that made him an outstanding city mayor for two consecutive years is the city government's medium-term agricultural and fishery plan initiated during his term of office.

There is strong NGO and people's organization (PO) support for the delivery of agricultural extension services. They serve as innovators and advocates for alternative agricultural development policies. One of these is the Agricultural and Fishery Council (AFC) composed of members from the private sector. The AFC is organized at the barangay and city level. The organization actively participates in all agricultural endeavors of the city government like the MAKAMASA Festival.

The agricultural staff is technically trained. Conscious of the need to continuously upgrade the capabilities of its personnel complement, the city government has to develop and implement its personnel development plan through education and training, appraisals, incentives and awards, and other capability building programs. The city leadership recognizes that the organization is only as good as its personnel. However, the office of the city agriculturist suffers from lack of technical staff.

Beyond training, there was an expansion of the scope of agricultural extension modalities. These include the demonstration farms, farmer's field school, farm and home visits, and study tours. The city agricultural extension workers find demonstration farms and farmer field schools as very effective modalities. The extension workers, however, complained that farmers are slow in accepting new technology because of their wait-and-see attitude.

A five-year plan shapes and guides the future direction of the development of the agriculture and fishery sector. The formulation of the Integrated and Sustainable Agriculture and Fishery Plan (ISAFP) enables the municipal government to set the direction of agricultural development of the municipality. It serves as a framework for tapping opportunities and potentials offered by the agricultural sector, promoting extensive people's participation, and rationalizing the allocation of scarce resources in attaining the municipality's vision of sustainable and ecologically balanced agri-based industry.

Strong leadership support is manifested through regular budgetary allocation for the agricultural sector. Over the past twelve years, the agricultural sector has gotten an average of 11.72 percent from the 20 percent Development Fund. Its share in the Development Fund enables the municipal government to sustain its priority programs in food production.

The continuing financial support from the national government through DA, NIA, provincial government of Quezon and other institutions helps sustain the agricultural programs and projects of the municipality. The external funds were used to augment the local budget for food production.

The participation of private extension providers—such as the Infanta Integrated Community Development Assistance, Incorporated (ICDAI)—has strengthened the overall delivery of extension services for rice production. The ICDAI has 17 community workers who provide extension services in upland and lowland farming as well as coastal resource management in the municipality.

The commitment of the agricultural staff of the Office of Municipal Agriculturist (OMA) in performing the devolved tasks has sustained the implementation of agricultural programs. Despite low salaries, lack of career path, delayed release of incentives, and weak training support, the technologists continue to conduct farm visits regularly and to do other farm related activities using their own vehicles and money when releases of travelling allowances are delayed.

However, there are confluences of personnel-related issues that the municipal government should address to improve further the delivery of extension services. These include weak training support for LGU extension staff along with flat organizational setup, low salaries, delayed and selective incentive payments, and limited opportunity for promotion.

Claveria (Misamis Oriental). The Landcare program is an institutional innovation that shows the role of social capital in soil conservation. The program carries a multitude of agriculture and environment-based projects that are geared towards developing agriculture while conserving and enriching the land.

The program brings extension activities down to the barangay level. It incorporates agriculture and environment based programs into the Barangay Development Plan. The program provides barangays with an opportunity to build up their financial and technical capabilities.

The existence of an organized Claveria Land Care Association (CLCA) strengthens the program. The association was organized to enable Claveria farmers to implement sustainable agriculture on sloping lands and new methods in farm conservation.

The program faces some major problems. One of these is the lack of involvement of the municipal government of Claveria and Misamis Oriental State College Agriculture Technology where the Landcare program is based. This issue could be the Landcare's single most difficult challenge.

Lessons Learned

Leadership. Overall, the critical factor in the success of a program is the strategic leadership that the local chief executive (LCE) (or vice governor/mayor) can provide, particularly in sustaining the difficult process of performing the devolved tasks. Besides having the vision and political will to translate these into reality, the LCE should have the commitment to pursue reforms in the delivery of extension services. At the same time, he should possess a consultative and participatory style of governance and can draw widespread support from various stakeholders in developing and sustaining agricultural growth in the community.

Strategic Direction. There should be a strategic vision crafted through multisectoral consultation at the grassroots level. The vision translated into specific development plan shapes and guides the future direction of the delivery of extension services and the development of agriculture and fishery sector. The plan serves as a blueprint for tapping opportunities and potentials, promoting extensive public participation, and rationalizing the allocation of scarce resources towards achieving the high-order goal of improving extension services and increasing farmers' income.

Funding. Financing the devolved extension services will be a persistent challenge to LGUs, which are mostly dependent on the 20 percent development fund for financial support for the broadening array of extension activities. The burden of securing funds for the agricultural sector lies in the local leadership which is expected to constantly seek funds from external sources to augment the meager resources of the LGU.

Involvement of NGO, Private Sector and State Colleges and Universities (SCUs). The involvement of NGO, private sector, and SCUs provides insights on the importance of their role in the delivery of extension services. These groups supplement government programs in communities where they are based, thus reaching out to farmers not usually served by other extension providers. Given the opportunity to undertake extension activities, they can initiate groundworking activities and even create opportunities for excellent delivery of extension services.

Presence of Competent and Dedicated Extension Technologists. The commitment and dedication of the extension technologists towards performing assigned functions could improve and sustain the implementation of devolved extension services. The case of Tuguegarao City and Infanta, Quezon is instructive of the need for committed extension workers—those change agents who would be willing to work for the interest of small farmers despite low salaries, lack of incentive allowances, and vague career path.

Personnel-Related Problems Need Immediate Attention. A confluence of lingering organizational-related issues (i.e., unclear organizational structure, weak training of support extension workers, low salaries, lack or delayed releases of travelling allowances and lack of promotion plan) presents a persistent challenge to the delivery of extension workers. Agricultural extension workers feel a sense of dedication if they are properly nurtured and taken care of by their LGUs. Salaries and incentives are good motivators for hard work. Establishing a clear career path, attendance in training programs and minimization of red tape and other irregular practices are also important.

Coordination among Extension Providers. There are strong arguments for synergy of efforts. Active linkages among various extension providers are important in the mobilization of support and resources. Working together can provide them opportunity to chart the optimal and strategic use of resources within their disposal and in turn widen their reach of beneficiaries while minimizing overlaps.

Workable Strategies. Crafting working strategies can make a difference. These include:

- monthly meeting with municipal agricultural officers which serves as an avenue to thresh out crosscutting issues and concerns and to synergize innovative extension programs;
- establishment of Farmers Information and Technology Services Center at the provincial and municipal levels to help farmers access relevant information on new agricultural programs and technology;
- focus on Farm-System and Farmer-led extension approaches, with focus on farmers and not on the farm or the commodity;
- pioneering and strong farmer associations, themselves catalysts for improving delivery of extension services, venturing into new and scientific methods of farming, attending seminars, and sharing knowledge with each other with regard to their actual farming experiences;
- availability of various extension modalities including demonstration farms, farmer field school, farm and home visit, study tour, farmers' classes, caravan, training, information materials, and advisory services;
- research and extension interface manifested by a large number of technologies disseminated to farmers and fisherfolk that are

developed by region-based national agencies and academic institutions; and

- increasing use of co-payments for service covering seeds, fertilizers, water, and fish breeding stocks.

Well-organized Extension Programs of DA and Attached Agencies Restrict LGUs' Efforts to Initiate their Own Extension Programs. The LGUs merely adopt and implement agriculture programs of DA, an arrangement that involves less expense. All devolved personnel spend a big part of their time providing technical support to DA programs. The DA has designated all devolved personnel as implementers of its *Ginintuang Masaganang Ani* Rice and Corn programs at the local level. While the DA may have provided LGUs extension programs to work on, thus, providing them an opportunity to contribute to the overall productivity of the area, its continued presence at the local level obviously restricts LGUs initiative in performing the devolved tasks. LGUs would not readily invest in extension services, knowing that DA has the programs that they can implement in their respective areas.

Devolution. Finally, good results can be gained from devolution. The strategy of delegating powers and responsibilities to LGUs provides opportunities for providing responsive and high quality services, as well as the possibility of strengthening accountability and extensive public participation in the delivery of extension services.

Demand for Extension Services

Give a man a rock in secure possession and he will create a garden.
Give him a garden on an insecure lease and he will leave behind a
desert (Kasper 2003: 17).

Perhaps the most important lesson of all is that in terms of achieving the objective that really matters, which is increased productivity and incomes, the power of extension is shaped as much by farmer demand for extension services as by its supply. And demand in turn is shaped by agricultural policies, security of land tenure, the efficiency of the financial system, and infrastructure services such as transport, communication and power.

Devolution: A Mix of Demand and Supply Side Objectives

The pressures which led to the devolution of agricultural extension probably contained a mixture of supply side and demand side considerations. On the supply side it seemed the thinking was a highly centralized system has not worked well, initiating the move to a decentralized system. And one of

the demand side benefits that the agents of decentralization hoped would occur was probably that decentralization would give farmers a voice in demand.

Has Devolution Worked?

As indicated in the previous section, how well devolution has worked is still an open question. On the one hand the case studies reveal some encouraging signs such as the following:

- In some LGUs, extension advice is focussing on whole farm systems rather than on individual crops.
- New players are emerging in the provision of extension services such as seed companies.
- In some LGUs, options for co-payment are being adopted which is strengthening the role of farmers as clients.
- At the provincial level strategic plans acknowledging trade-offs and priorities are being developed.

On the other hand, there is little evidence in favor of the effectiveness of devolution in some LGUs because of the following reasons:

- The DA still plays a major role in determining the nature and amount of extension services to be delivered.
- There is considerable overlap between and confused jurisdiction over a whole range of other central service providers.
- The research extension linkage is weak.
- There is not much evidence of farmer voices being heard in determining either research priorities or extension linkages.
- Career structures of extension workers are limited because the services they work in are too small to allow specialist skills, a major role and to provide a robust career ladder.
- Farm productivity growth is slow.
- Local political considerations appear to unduly shape what should be a technical service.

Interpreting the question of whether the glass is half full or half empty is complicated by the fact that extension services comprise just one part of a complex system in which farmers make their decisions about the kinds of extension advice they need and use.

Extension Part of a Complex System

Studies of extension in the Philippines face various pressures to focus policy prescriptions on the public extension system itself.

- It is the nature of a decentralized system to have variations, inconsistencies, apparent successes, and apparent failures.
- There are many apparent failures or weaknesses in the existing system.
- It is natural to think of solutions in terms of those identified problems.

Thus the various diagnoses of the problems identified with the devolved extension service imply a range of prescriptions.

- Perhaps there should be a degree of recentralization to a unit large enough to provide a career structure for staff, specialist services, and the scale and capacity to do proper strategic planning.
- Central government agencies could be consolidated and reorganized to more closely align mandate and function.
- A body to coordinate extension service delivery could be possibly set up by strengthening the Agricultural Technology Institute.
- Partnerships between LGUs and central agencies could be strengthened.

These sensible proposals are all supply side focused. They are about improving the supply of public extension services. Now efficiency in supply matters a lot but it is only one side of the story—demand also matters. The question is does the extensive and complex Philippine extension service reflect strong demand from a growing number of farmers or does it reflect plain institutional empire building? (Contado 2004: 39).

There are other possible explanations besides a propensity for institution building. For example, the confidence in public extension as an agent for

productivity improvements could be misplaced. Although studies in the Philippines show high rates of return to such expenditures, those studies related to the 1960s and 1970s were done when spectacular technologies had occurred. If the same technology gains are not available, then farmer demand is likely to be low.

The Policy Environment

Moreover, several features of 'the contemporary' Philippine policy environment are likely to affect farmer demand for extension services.

- Trade policies, especially high level of protection (relative to all other sectors) for most crop and livestock products in the domestic market, reduce competitive pressures to increase productivity and underpin a range of other policies that work against efficient resource utilization in agriculture.
- The continued equation of food security with food self sufficiency leads to skewing of incentives in favor of greater allocation of land to rice and corn that is consistent with the country's comparative advantage. These policies also support a range of environmentally unsustainable farming practices, such as clearing of upland forest for the cultivation of low-value corn.
- Rice pricing policies and the operations of the National Food Authority (NFA) destabilize and distort the rice market and place a heavy burden on the National Treasury, which subsidizes NFA's trading and operating losses.
- The Comprehensive Agrarian Reform Program (CARP) has created uncertainty and deterred development of a functioning market for agricultural land and of the use of land as collateral for reform beneficiaries, thus discouraging investment in many aspects of agriculture. As noted earlier, if farmers cannot use their land as collateral, they cannot borrow; if they cannot sell their land as a way of benefiting from improvements then why should they make improvements.
- Monopolistic control of sea ports, combined with cabotage laws, raises costs of interisland transport and delays integration of domestic markets for agricultural products. The structure of sea and air transport infrastructure is also reported to have perpetuated inefficient routing structures for agricultural exports from southern islands.

- Restrictive financial sector regulations have led to biases against long-gestation investments (e.g., tree crops), combined with inappropriate measures to force lending to agriculture (the Agri-Agra Law) which serve mainly to raise costs of intermediation or direct financial resources in favor of real estate development (Hill and Balisacan 2003).

These policy impediments are well understood within bureaucratic and academic circles in the country, but decisionmaking processes appear to place little weight on the consequences of these policies. This may be, in part, due to the limited appreciation of their effects in the wider community and the muted voice in decisionmaking circles of those who are negatively affected. These broader characteristics of the policymaking process have led to: a) serious policy instability impacting on the agricultural sector; b) continuing urban biases in public expenditures; and c) deteriorating and dislocated delivery of services (such as agricultural research, development and extension) to rural areas. Policies affecting particular crops and products, which impede enhancement of efficiency, include those towards the sugar, banana and coconut industries; many of these policies also encourage a range of damaging and environmentally unsustainable farming practices.

An example of a policy impediment to increased productivity is the regulation whereby farmers must pay a fee to and receive permission from DA to utilize fallen coconut palms for replanting, conversion to another crop, timber or other purpose; this regulation is instrumental in deterring replanting with higher-value coconuts or other crops and leads to about 25 percent of agricultural land being permanently under low productivity and usually very old palms. An example of environment-unfriendly policy is quota and tariff protection for corn, which creates artificially high prices and induces upland farmers to clear forests to cultivate low-value corn.

Concluding Remarks

In other parts of the world, public funding of agricultural extension is being wound back. Farmer co-payment is being used more widely. This trend reflects the fact that extension typically has a mix of public and private good characteristics—co-payment has the benefit of empowering farmers as clients and enabling them as consumers to set priorities.

In the Philippines, the lessons of a devolved agricultural extension service are mixed as indeed are the lessons of devolution generally. On the one hand, there is an increased focus on a farm-system approach rather than on a single commodity, new partnerships are being formed with partnerships involving other LGUs, private firms, universities and NGOs and co-payment is starting to apply.

On the other hand, the extent of actual decentralization is ambiguous, with DA still playing a major role, along with several other players from the central government. Capacity building needs more attention and devolution does not appear to have reduced instability arising from partisan politics.

Most importantly, farm productivity and income do not seem to have improved. However, this outcome cannot solely be attributed to failures in the delivery of agricultural extension. The continued emphasis on food security, the uncertain tenure of many farmers and consequent inhibitions on their ability to borrow and capitalize on any improved productivity, and the state of infrastructure and communication would all constrain the effectiveness of even the best delivered public extension.

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