Developing an Extension Partnership among Public, Private, and Nongovernmental Organizations

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Abstract
This paper posits a conceptual framework that identifies the comparative strengths of public, private, and nongovernmental organizations (NGOs) in carrying out different types of technology transfer, human resource, and social capital development programs. First, public extension appears better suited to undertake a wide range of extension programs dealing with natural resources and farm management. Second, private sector firms have access to superior technologies; therefore they can provide farmers with information to complement these new technological products. Third, NGOs are well suited to assist the rural poor through different types of social capital and poverty alleviation programs. Most NGO staff members are motivated to organize small-scale, marginal farmers and women so they can better access technology and resources.

In strengthening national extension systems for the 21st century, policies and resources should reflect the comparative strengths of public extension, private firms and NGOs. If this type of public-private partnership can be achieved, then the result would be a more effective approach of delivering extension programs to serve the technological, human resource and organizational needs of all groups of farmers in developing countries.

Introduction
The role of public sector extension in developing countries has changed substantially over the past three decades. Historically, many developing country governments assumed responsibility for providing farmers with new technology, farm inputs and supplies, as well as agricultural services. The introduction of Training and Visit (T&V) Extension, starting in the mid-1970s, shifted the role of many public extension systems toward technology transfer. Over the past decade, national governments and international donors have reduced their investments in public sector institutions, including agricultural extension. As a result, extension programs in most countries have deteriorated.

With the decline in government expenditures, public extension systems are not able to provide adequate educational and technical extension programs for all groups of farmers. On one hand, there is the increasing complexity and sophistication of agricultural technology. In most countries, public extension lacks qualified specialists that can provide the commercial farm sector with up-to-date technical and managerial assistance. On the other hand, public extension has been less than effective in responding to the basic educational and technical needs of small-scale, marginal farmers due to insufficient resources and the lack of a continuing flow of appropriate technology. Therefore, alternative organizations have emerged to fill this void in many developing countries, as farmers search for more effective ways of meeting their technical, informational and organizational needs.

Private sector firms and nongovernmental organizations (NGOs) have become important alternatives to public extension in providing technical inputs, information and training, and organizational support services to farmers and rural households. Private sector firms, including multinational seed and chemical companies, have become important contributors to agricultural technology transfer, especially to the commercial farm sector. In many cases, these private firms have access to superior technologies as a result of research and development (R & D) activities carried out in other countries.

Nongovernmental organizations have emerged in many countries to concentrate on human resource development (HRD) and social capital development1 (SCD) programs aimed at small and marginal farm households, including rural women. These NGOs sometimes compete with public extension for national and international resources.

1 Social capital development refers to different types of community and farm organizations that are created to empower different social and ethnic groups within rural communities.
**Purpose of the Paper**

This paper posits a conceptual or policy framework that identifies the comparative strengths of public, private and nongovernmental organizations in carrying out different types of technology transfer, human resource, and social capital development programs. This framework, based on a comparative analysis of each set of institutions, could serve as the basis for developing a sustainable, long-term partnership among these different organizations.

**Conceptual Framework**

This paper calls for a redefinition of the role of public extension to reflect the institutional realities of the 21st century. This proposed redefinition is reflected in the conceptual framework presented in Figure 1 below. This proposed framework is formulated on the fact that developing countries have very limited resources available to invest in public sector and NGO institutions. Therefore, these publicly supported organizations should have a clear program focus and mandate. Each set of public and private sector institutions should capitalize on their respective comparative advantage in providing farm families with useful educational programs and technology transfer activities. These organizations should avoid overlapping and duplicative activities that will likely result in inter-organizational conflicts. The rationale for this proposed division of labor is discussed in the remainder of this paper.

The Role of Public Extension

Historically, the organization of agricultural extension programs has been the exclusive domain of the public sector in most developing countries. However, during the latter part of the 20th century, a broad array of new organizations emerged to deliver “extension-type” programs to farmers and rural households. In most developing countries, agricultural extension is still considered to be a “government responsibility,” while in most industrially developed countries, agricultural extension functions are being performed in partnership with the private sector, or they have been totally privatized.

Public extension institutions in developing countries are under increasing pressure to deal with a range of policy issues, including accountability, relevance, responsiveness, and cost-effectiveness. Also, many international and bilateral donors are demanding institutional modernization within public extension, taking into account trade liberalization, the emerging role of the private sector, and governments with fewer resources. The way extension leaders respond to these challenges will determine the role and effectiveness of agricultural extension during the early part of the 21st century.

Extension leaders cannot ignore the interdependent economic and social environment where the emerging roles of private sector firms and NGOs are becoming well recognized and appreciated. Failure to do so would result in the further deterioration of extension programs and undermine extension’s long-term credibility. To continue with a “business as usual” attitude could put extension in direct competition with private sector input supply firms and NGOs—a struggle that extension is unlikely to win. Instead, extension leaders need to determine how these three sets of institutions can best work together in a partnership that will serve long-term societal interests. Pluralism, not a single dimension strategy, should be adopted in organizing extension programs in developing countries (Antholt, 1994).

Most developing country extension systems pursue some combination of human resource development and technology transfer programs (Nagel, 1997). However, with the widespread adoption of the T&V system, many of these public extension systems now concentrate their efforts on technology transfer. At the same time, these public extension systems are not particularly effective in carrying out these technology transfer activities due to weak public research systems, their own lack of technical expertise, and limited resources.
Therefore, developing country governments need to redefine the mission and structure of the agricultural extension service and then allocate sufficient resources to enable extension to carryout this new mandate.

As shown in Figure 1, the main task of a public extension system should be human resource development that can equip medium and small-scale farmers to solve their own problems and respond to new opportunities. In addition, public extension should concentrate its resources and expertise on those educational and technical programs where it can complement the technology transfer role of private firms and the human and social capital development role of NGOs. Public extension institutions should work on those problems that will result in public benefits (Umali, Feder and Haan, 1992).

These “public goods” include all areas of natural resource management, such as integrated pest management (IPM), integrated soil nutrient management, more efficient irrigation techniques, water harvesting within rainfed areas, agro-forestry and other soil and water conservation practices. In addition, extension can carry out extension programs on post-harvest handling and storage, food safety, as well as farm management and marketing skills that will help increase farm income through the intensification and/or diversification of farming systems. During the foreseeable future, public extension will be the primary channel for delivering these types of extension programs, especially to small-scale and marginal farmers.

Moreover, in the absence of NGOs, public extension could be more instrumental in assisting small-scale farmers to organize into farmer groups and associations. Several cooperative-type organizations such as producer associations have proven to be effective in helping small-scale farmers take advantage of new market opportunities and by coordinating farmers’ input and marketing needs to create economies of scale. Extension can provide
managerial and marketing training to leaders and members of cooperative-type organizations.

Role of the Private Sector in Technology Transfer

Given the emerging global economy, trade liberalization, and direct competition with highly productive agricultural countries, some developing countries now view the private sector as a more viable and efficient alternative to public extension in transferring agricultural technology and marketing agricultural products. In most countries, the private sector is already involved in many facets of agricultural technology, especially the production and delivery of purchased inputs, such as seed, fertilizer, feed, agrochemicals, drugs, tools, equipment and machinery. However, the role of the private sector in agricultural technology transfer can be encouraged or discouraged by government policies that determine the rules, regulations, and parameters under which private firms are expected to function. Governments can stimulate private sector participation and investment in technology transfer by providing a “level playing field” whereby private sector firms can compete with each other and whereby government ensures quality control through a systematic monitoring and regulatory system.

A policy of privatizing selected technology transfer functions should be actively pursued in developing nations. Specifically, the responsibility of transferring “proprietary” technologies should be shifted to the private sector as soon as feasible. The delivery of new farm inputs and services requires the establishment or expansion of new distribution networks and retail outlets. The cost of these “private goods” and their transfer is shifted directly to the farmers themselves as private sector firms recover these costs through the sale of purchased inputs and services. This arrangement ensures the economic sustainability of this privatized technology transfer system. Private sector firms, in their pursuit of profits, will organize efficient systems that deliver information and products in response to farmer preferences. To remain competitive, while maximizing profits, these firms must keep costs at minimum and charge prices that will ensure an adequate volume of business (Lewis and Kenney, 1988).

As a part of their responsibility in promoting new technological inputs and services, sales or technical representatives of agribusiness firms can be expected to provide complementary information and training to ensure the effective use of new technical inputs. In addition, some firms provide information on other crop and livestock management practices as a complimentary service. These services are designed to promote and strengthen customer loyalty and, thereby, expand the company’s market share (Umali, Feder and Haan, 1992). Private firms can offer higher quality, more convenient products and services than public institutions, since they only serve those farmers who can pay. Also, the technical advice offered by these firms is more closely tailored to the needs of specific customer groups, such as commercial farmers. At the same time, this advice and information may not be appropriate for other groups, such as small-scale, marginal and/or women farmers. In these cases, public extension and/or NGOs will need to bridge this knowledge gap.

Although the mechanism is different, vertically integrated systems for high value cash crops (tobacco, sugar, cocoa, coffee, etc.) charge participant farmers directly for all technical inputs and services received. These firms or parastatals also provide detailed technical direction to ensure that quality standards are met. These firms recover the cost of technology transfer and production inputs at the time the commodity is sold, thus ensuring the economic sustainability of this alternative technology transfer system. This trend, which is already well established in most countries, results in fewer resources being needed by public extension to carry out technology transfer for these high value crop or livestock enterprises.

Promoting the role of the private sector in technology transfer activities should be a central component of a government’s agricultural development policy. Governments can create a positive policy environment that promotes private sector involvement and investment in technology transfer. Governments can help stimulate private sector involvement by removing barriers to the privatization of specific technology transfer functions. Needed actions include a reform of government policies, removal of price subsidies and trade barriers, elimination of restrictions on private practices, and abolition of input monopolies (Umali, Feder and Haan, 1992). In addition, government should encourage private firms to participate in
marketing of agricultural products as one means to recover some of the cost of carrying out technology transfer and extension-type activities.

**The Role of Non-Governmental Organizations (NGOs)**

Over the past two decades, NGOs have become important institutional players in rural development. Giving declining public resources, some national governments have welcomed the opportunity to shift some extension responsibilities to NGOs. At the same time, international donors view NGOs as more effective in community mobilization, especially when contrasted with the bureaucratized government extension service (Lewis and Kenny, 1988). NGOs are a hybrid between the public and private sectors. Also, NGOs appear to have a comparative advantage in working with small and marginal farmers, including women and ethnic minorities. Moreover, NGOs tend to be managed more efficiently than public extension systems and have lower operational costs (Musgrove, 1996). Although most NGOs do not become permanent institutions, they do require a continuing infusion of public or donor resources to carry out their mandate.

Given that the predominant ethic of most NGOs is to “do good,” NGO staff members tend to be more highly motivated than public extension workers, especially in assisting the rural poor through community organization and poverty alleviation programs. The methodology followed by most NGOs is to identify the pressing needs of low resource families and then assist the rural poor in bringing about sustainable development. NGO’s utilize participatory extension methods, which help explain why they have been more effective than top-down extension systems. In addition, given their focus on community mobilization and getting farmers organized, they primarily use “group” rather than “individual” methods. Given their rapport with the rural poor, they are able to draw on local knowledge to ensure that introduced technology is appropriate for resource poor farmers (Chaguma & Gumbo, 1993).

The majority of NGOs are relatively small, horizontal or flat structured organizations with short lines of communication. Therefore, they are capable of responding flexibly and rapidly to clients’ needs and interests (Farrington, 1997). The structure of many NGOs allows them to deliver a range of services, where public extension cannot take action, and to respond quickly to emergency demands in poor and remote areas (DeJong, 1991). However, this type of organizational structure does not permit NGOs to address fundamental problems that underlie rural poverty. In addition, most NGOs lack the technical expertise to play an effective role in technology transfer. But, if they work in collaboration with public extension and the private sector, they could be more effective in helping resource poor farmers gain access to resources and technologies. As outlined in Figure 1, NGOs can build social capital in rural communities by organizing credit societies, self-help groups, and farmer associations, thereby improve the access of rural people to public extension services, private sector technologies, and other rural services.

**Conclusions and Policy Implications**

The role of public sector extension will continue to evolve during the 21st century as new organizations take their place in rural communities and compete with public extension for time and resources. Public extension should not view these new organizations as threats, but as opportunities to forge new partnerships. However, for these new partnerships to develop, policy makers must create a positive policy environment that will specify an appropriate division of labor between public extension, private agribusiness firms, and NGOs.

The framework outlined in this paper can provide the basis for Ministries of Agriculture to develop policy guidelines, based on comparative advantage and societal interest, that can help strengthen effective partnerships among public extension institutions, private firms, and NGOs. To enhance the effective participation of private sector firms in agricultural technology transfer, government policies must provide incentives, and remove price and trade barriers. In addition, governments should encourage the development of NGOs and provide programmatic resources that will help resource poor farmers get organized and, thereby, build social capital in rural communities. Finally, governments must invest sufficient resources in public extension so that effective human resource programs can be developed and maintained, particularly in the areas of natural resource management, farm
management and marketing. The resulting partnership would make more efficient use of developing country resources to deliver extension programs that can more effectively serve the needs of farm families and rural communities.

References


