



Agricultural Extension, Community-Based Development, and Conflict

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Abstract

This paper is the first of a series regarding a project that aims to develop an improved model for agricultural extension in conflict-affected areas of Mindanao. The paper contains a literature review undertaken to determine whether there are conceptual or practical pointers available that would facilitate the achievement of the project objectives. The paper commences with an overview of the development of agricultural extension, leading into a discussion of the role of agricultural extension in conflict areas, in general, and then specifically in relation to Mindanao. The commonality between the principles of agricultural extension and community-based development is recognized, especially for conflict areas. In such areas, building on existing community or farmer-based approaches is likely to be more sustainable post conflict (as opposed to “imposing” solutions from outside). This may be a good general strategy for externally funded development projects regardless of conflict, but it is especially important in a conflict environment. The literature review further explores and explains how social capital can be seen as a key component of both extension and other forms of community-based development. Social capital is particularly relevant in conflict-vulnerable situations, such as those that prevail in Mindanao.

Keywords: agricultural extension · community-based development · conflict · Mindanao, Philippines

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Introduction

While there is an extensive literature on agricultural extension and quite a significant literature on community-based development in conflict areas, there is scant literature on agricultural extension in areas actively affected by conflict. For this paper, we have adopted a definition for community-based development as referring to a broad spectrum of development program approaches that prioritize participation and ownership by the community members in program implementation. Some contemporary models of agricultural extension have features that are closely aligned with community-based development. This paper comprises a brief review of the literature on agricultural extension as well as the relationships between agricultural extension and community-based development. The literature review further explores and explains how social capital can be seen as a key component of both. This is particularly relevant in conflict vulnerable situations, such as those that prevail in Mindanao. The concept of social capital features strongly throughout this special issue.

Definitions and Views on Agricultural Extension

Everett Rogers (1962) proposed a “diffusion of innovation” view, whereby new agricultural technologies were developed by scientists, transferred by extension personnel, and adopted by farmers. In this view, extension could also

provide feedback to researchers about problems encountered by farmers. This diffusion of innovations approach (also known as the technology transfer approach) is widely referred to as the linear extension model since it assumes a linear relationship between research, extension, and the farmer—with organized, publicly sponsored science as the source of innovation.

Many people continue to adhere to this linear model, which sees agricultural research as the source of all agricultural innovation (Rivera and Sulaiman 2009). However, participatory research methods in the 1980s forged the view that it is important to understand and strengthen farmers’ own capacity to develop new knowledge and to solve problems. In the 1990s, discussion on agricultural knowledge and information systems and the importance of group action came to the fore. Concomitantly, the need for platforms for interaction to promote innovation was gaining recognition. In this scenario, extension can facilitate the processes of reflective action, learning, and decision making by stakeholders. Van den Ban and Hawkins (1996) explicitly affirmed the idea of extension assisting farmers to make better decisions and set well-defined goals.

World Bank (2006) promotes the modern view that innovation can be seen as a process of generating and accessing knowledge and putting it to use. Central to the process are the interactions among different people and how individuals and organizations interact. The main focus of emerging agricultural innovation systems is strengthening capacity of different actors in agricultural development to create, share, and use knowledge. Doing so includes organizing rural producers, linking up with markets, and brokering strategic collaborations and partnerships.

An agricultural innovation system can be defined as “a network of organizations, enterprises, and individuals focused on agricultural extension bringing new products, new processes, and new forms of organization into economic use, together with the institutions and policies that affect the way different agents interact, share, access, exchange and use knowledge” (World Bank 2006). Indeed, according to Leeuwis and Van den Ban (2004), most of the innovations

needed in present-day agriculture have “collective dimensions” of interaction, organization, and agreement among multiple actors. In this sense, agricultural extension has close parallels with the concept of social capital.

Agricultural Extension in Conflict Zones

The link between development outcomes and security is accepted (World Bank 2011). Therefore, insofar as agricultural extension can facilitate development, it can also boost security, although this could be regarded as a secondary effect, with the primary effect being the direct effect on livelihoods. Robertson (2012) argues that decentralized, participatory, market-driven extension systems have been successful in augmenting farmer capabilities and that a focus on this particular form of development is appropriate in conflict situations where hierarchical and rigid structures cannot work. Furthermore, by offering access to expertise (rather than expertise itself), agents in decentralized systems can respond quickly and effectively to varied farmer needs. These same approaches can be used to connect farmers to the experts and resources they need to manage conflict in their communities. Information technology can provide the capacity to match agricultural and conflict management expertise to farmer needs. It can also improve the reach and productivity of extension agents.

Robertson (2012) made a succinct summary of the role of agricultural extension in conflict situations. He reaffirmed the point made in the previous section about facilitated extension, whereby agents work with groups of local farmers to identify common problems and develop shared solutions. One challenge that this trend poses has been a broadening of the kinds of knowledge that extension agents are expected to provide. Agents can thus no longer be expert in all the material that should be communicated. A wider range of agricultural knowledge together with information that supports the farmer as a businessperson are now essential if the agent is to be effective. Rather than knowing the answers as experts would, extension agents are shifting to a service model in which they work as knowledge brokers, providing

access to information. The points made above arguably may not be explicitly related to a conflict environment, but the point made by Robertson is that agricultural extension agents, operating in the brokerage manner described, can be de facto agents for peace building.

Jones et al. (2002), referring to South Sudan, write that given the constraints imposed by conflict, it is better to build on existing systems (which they say are often surprisingly resilient in the face of conflict) rather than “impose” solutions that may not be sustainable post-project. This may be a good general strategy for externally funded development projects regardless of conflict, but it is especially important in a conflict environment. Jones et al. also urge farmer experimentation with potential new technologies, via agricultural extension, since this can occur more or less independently of conflict. Longley, Christopolos, and Slaymaker (2006) report on how aid, more broadly, can best be used to support rural livelihoods in conflict situations. Specifically, their report is concerned with how international actors might best support the agricultural component of rural livelihoods. In their view, disaster relief (e.g. food aid) is not enough in situations of chronic conflict; there is also a need for sustained support for the livelihoods. This is particularly true in the agricultural sector where the response is often to provide seeds and tools.

Korf and Bauer (2002) urge care to avoid excessive dependency in conflict-affected areas. The tendency in disaster situations is to assume that systems have totally collapsed. This may result in a prolonged reliance on relief and food aid, leading to a dependency syndrome. In turn, market opportunities may be missed, and the initiative may be lost for conflict-affected groups to take charge of their own destinies. Korf and Bauer argue that institutional capacity building paired with a strong level of community participation is a priority to ensure that services can be managed even under constraining conditions. Therefore, among other things, they conclude that: (1) partner institutions should be strengthened while increasing the self-help capacity of the local population, (2) strong coordination with a donor is a key for sustainable interventions, and (3) there should be a balance between process and output.

The World Bank (2005) source book on agricultural investment includes a section—“Strengthening Markets in Areas Affected by Conflict”—that makes the same point as Korf and Bauer about the resilience of markets. Prolonged conflict changes markets but does not destroy them. Markets continued to function in Afghanistan and in northern Uganda in spite of twenty years of conflict. The best approach is to understand first how markets function and then to strengthen them so that people can access food and other needs and establish a stake in peace and stability by finding employment and earning an income. Additionally, the World Bank argues for support for farmer organizations. By organizing around an economic motive, groups and cooperatives have the potential to reach across the conflict divide. By acting in economic self-interest and building trust among members, groups and cooperatives have a stake in peace.

The final World Bank point of relevance here is to take account of labor availability and requirements. Loss of able-bodied labor (due to death or injury caused by the conflict) limits rural households’ economic options. For example, the loss of household labor (particularly the main breadwinner) usually means that less land is cultivated and/or less labor-intensive crops are cultivated. It will often be necessary to invest in research and extension of less labor-intensive crop varieties and techniques.

Another World Bank report by Schwartz and Kampen (1992) echoed some of the above points in relation to extension in East Africa. In particular, the World Bank reiterated the need to provide services to groups of farmers. The World Bank suggests that the issue of gender should be brought into the mainstream of adaptive research and extension. Also noted in the report is the improvement in communication technologies (e.g., mobile phones), even in conflict zones, which means farmers will be less dependent on direct contact with extension staff for new technologies and practices. And finally, but of special relevance to the project, is the need for farmers to be closely involved in selecting, supporting, and evaluating extension staff.

The above literature indicates a strong community-based view of agricultural extension (even if not uniformly practiced on the ground). Community-based approaches (CBAs) are widely perceived as offering great potential for reaching people in fragile and conflict-affected states. In such environments, where public service delivery is seriously disrupted or inefficient, local or community-based organizations like farmer groups, parent-teachers associations, health action councils, or water user groups may prove the only way to ensure the availability and continuity of basic services in the short term. CBAs are also seen as having the potential to strengthen the “short route” of accountability and to build local capacity through the development of local community structures, civil society actors, and social capital.

This community-based approach has been put into practice as the guiding extension philosophy in India, where agricultural technology management agents have been trained to act as brokers between the farming communities and various departments in the Indian government, non-government organizations (NGOs), input suppliers, and international organizations (Ferroni and Zhou 2012). Assisted by extension agents, village farmers organized into interest groups and women into self-help groups that focused on particular agricultural products. Over time, as these interest groups identified the problems they faced in producing and marketing their new high-value crops, extension agents provided access to the training and funding necessary to arrive at solutions. Bihar, Orissa, Chhattisgarh, and Jharkhand are areas strongly affected by Maoist extremism, so the Indian government commissioned an NGO called Pradanto to promote self-help groups in those areas. This move was prompted by the view that an NGO, unlike a government agency, may find it easier to operate, as there would be a lesser chance that they would encounter resistance from the extremists. Note, however, Munkner’s (1979) literature review of self-help groups, which indicates that the introduction of groups without prior assessment of genuine local demand—or at least their nascent existence—is a common mistake.

Relevance to Mindanao

The Mindanao Development Authority (2011) indicated that agriculture and agriculture-based industries will continue to be the most prominent drivers of Mindanao's economy well into the future. Therefore, livelihood improvements based around agriculture (and agricultural innovation/extension) will be vital. Pertinent to this scenario and given the community-based approach intended by the project is an assessment of the community-based approaches being used within Mindanao's conflict zones. A recent report from the Asia Foundation (2013) shows the findings of such an assessment and the following paragraphs draw extensively from this report.

The government of the Philippines has been one of the leading adopters of community-based development in conflict-affected areas. The government's flagship initiative for addressing conflict, PAMANA (Payapa at Masaganang Pamayanan [literally, Peaceful and Prosperous Community]), includes a major component for expanding community-based development. The second pillar of the PAMANA strategy is "facilitating delivery of basic services at the community level through community driven development and community livelihood interventions."

In the Philippines, the impact of previous CBAs in conflict-affected areas is unclear, and recent evidence points to a mixture of modest positive outcomes along with some worrying trends. For example, a study by Arcand, Bah, and Labonne (2010) found that the introduction of a CBA project in areas controlled by the New People's Army led to an increase in violence, while in areas inhabited by Moro Islamic Liberation Front, the same project led to a reduction in violent incidents.

Agricultural extension, when based around social capital and participatory approaches, is effectively a community-based approach. Participatory forms of community-based approaches have the potential to help reduce intracommunity violence by teaching the people to embrace participatory practices and joint problem solving. One of the reasons why community-based approaches have been widely

used in conflict-affected areas is the assumption that projects implemented at the community level allow for greater responsiveness to local concerns and conditions (Asia Foundation 2013). The key findings from the Asia Foundation study are as follows:

1. Ensure flexibility and adaptation of project designs.
2. Undertake community and subregional conflict analysis.
3. Collect evidence of impact, especially transformative impacts.

In conflict-affected communities, it may be more important to emphasize the process of deliberation on community needs. In these cases, the goal is to help the community benefit from having cooperatively identified and implemented a project.

Agricultural Extension and Social Capital

Social capital can enhance economic outcomes, as indicated in Puerto et al. (this issue). Potentially all of the mechanisms listed there are also relevant to enhancing the process of agricultural extension. Indeed, the point was made earlier in this paper that innovation via agricultural extension is integrally related to social capital—particularly when agricultural extension is based on participatory concepts with a collective dimension.

However, social capital is a contentious subject. Views differ about what constitutes social capital; how it operates; to whom and what the concept applies; and how to delineate between its sources, manifestations, and effects. What is broadly agreed on is that social norms and/or social networks are key elements of social capital and that trust is also part of it, or at least a close proxy for it. Social capital is widely seen as a resource that facilitates cooperation within or between groups of people (Productivity Commission 2003).

Identifying the importance and role of social capital in agricultural extension programs within Mindanao conflict areas is important. This is based on experience in Australia and the Philippines,

where the strengthening of social capital has been a key factor in the creation of new and innovative solutions to agricultural issues. Social capital is defined here as “social relations that are productive and that allow individuals and groups to improve their (economic) well-being.” The relevance of social capital is expected to be especially relevant in conflict areas, where isolation is a consequence of conflict.

Landcare approaches that have been used in Australia and in the Philippines (Landcare Foundation of the Philippines 2009) can be considered compatible with building social capital. Local Landcare groups have been able to generate considerable social capital, which has then been mobilized for the creation of new and innovative solutions to their livelihood problems (Cramb 2007; Sobels, Curtis, and Lockie 2001). In practical terms, the Philippines’s Landcare experience led to improved agricultural and economic productivity, a result of increased levels of trust, better networks, and an enhanced capacity to work collectively for mutual gain. All these are considered important for effective agricultural development in conflict areas. In particular, an earlier experiment in a conflict-affected area of Mindanao gave an insight into this by demonstrating that the social capital developed from farmer group communal activities and group cross visits enhanced adoption and provided the opportunity to create healing and reconciliation amongst previously politically and ethnically polarized groups and communities.

Conclusion

In this paper, modern concepts of agricultural extension were reviewed, with a conclusion that modern extension principles that involve participatory and group processes are fundamentally linked to social capital. The particular implications of social capital are noted to be especially relevant in conflict situations as there is thought to be positive spillovers in relation to peace building from having a strong social capital dimension in extension programs.

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