The Provision of Extension Services in Afghanistan: What is Happening?

Timothy K. Kock
Department of Agricultural Education, Communications, and Leadership
College of Agricultural Sciences & Natural Resources
Oklahoma State University
tim.kock@okstate.edu

Amy Harder
Department of Agricultural Education and Communication
University of Florida
amharder@ufl.edu

Patrick Saisi
Department of Agricultural Education, Communications, and Leadership
Oklahoma State University
saisi61@yahoo.com

Abstract

Afghanistan’s agricultural sector is extremely important. It provides livelihoods for almost 80% of the population; however, due to 25 years of conflict, Afghanistan’s agricultural sector has been left in ruins. After the fall of the Taliban regime, the world has taken a more proactive approach in rebuilding the country. The Afghan government and NGOs have started to create programs that enhance agricultural production throughout the country. This paper is a synthesis of the literature spanning 2000-2008 pertaining to what has been done thus far in the country and what entities were responsible for those outcomes. This study describes the role of the Ministry of Agriculture, Irrigation and Land’s Division of Extension and how that division has addressed problems in the agricultural sector. The literature suggests that NGOs play a vital role in Extension program implementation, while the Ministry of Agriculture serves primarily as a regulatory body.

Keywords: Afghanistan, agriculture, Extension, government, NGOs
Introduction

After 25 years of war, Afghanistan is facing troubling times (United States Department of Agriculture, Foreign Agricultural Service, 2005). As its government and society move forward, its agricultural sector must become economically viable. Afghan farmers continue to face challenges in the aftermath of the Taliban regime (Kock & Edwards, 2007). The dependence on agriculture is great; it is the life-blood of the country.

Afghanistan is largely an agrarian country which encompasses 647,500 square kilometers that supports 31,889,923 people (Central Intelligence Agency, 2007). During the last decade, the country has experienced a perennial drought which has created hard times in the rural communities (USDA/FAS, 2005). Despite the unfavorable conditions for economic growth, the agriculture sector still plays a major role in the lives of many Afghans. Almost 80% of Afghanistan’s population depends on agriculture and it is traditionally the most important sector of the Afghan economy (United States Agency for International Development, 2007a). However, illicit crop production has become a thriving industry due to the transitioning Afghan government and the Ministry of Agriculture, Irrigation and Land’s (MAIL similar to the United States Department of Agriculture) inadequate economic resources to support implementation of educational programs to out-lying areas. Rural people derive their livelihoods from agriculture in order to support their families (USAID, 2005).

Afghan agriculture depends on a variety of licit and illicit crops, such as vegetable crops, livestock and poppy production. These venues are the major areas of income generation for rural people. According to the United Nations, Food and Agriculture Organization (FAO, 2005), the economy of the country was hinged on agriculture; it was the means of employment for millions of Afghans. This is supported by Toness (2001), who stated agriculture plays a central role in developing countries because most developing countries have rural based economies whose sustainability is linked to natural resources and the management thereof. Afghanistan is no different.

The United Nations, FAO (2004) reported Afghan agricultural production had decreased by 50%, causing additional people to depend on relief supplies from donor countries. Based on the rural driven economy, the Ministry of Agriculture, Irrigation and Land (MAIL) needed to support Afghan farmers to increase licit crop production (USAID, 2006a). The branch of the Ministry that provides this service, the Extension Service, needed to be proactive in addressing the issues facing these people (USAID, 2006b).

According to the MAIL’s National Development Framework written in January 2004, the Ministry of Agriculture was asked by the Afghanistan Central government to create a sustainable and productive environment for development. This task led the Ministry to seek out non-governmental organizations (NGOs) already on the ground to implement extension-type programs. The government of Afghanistan has been reduced to a facilitator rather than an implementer of agricultural rural-based extension programs. In the MAIL report, the private sector was charged with implementation of programs. Therefore, the MAIL placed farmers’ education in the hands of development agencies such as NGOs and United Nations’ agencies. The report clarified that the role of government was to regulate, make policy, monitor, evaluate and foster partnerships, while other development agencies, such as NGOs, would work in the role of implementers.

Although Borcherdt, et al. (2008) argued reconstruction efforts need to take a cooperative approach among governmental and nongovernmental organizations working in Afghanistan, little is actually known about the effectiveness of Afghanistan’s approach to extension. With food security in Afghanistan still a problem despite many organizations working in the agricultural sector, it is important to understand if extension services benefit Afghan farmers by helping to counter the low production and economic hardships facing Afghanistan. Such research may assist organizations with re-strategizing their approaches to providing extension services to farmers in dire need of assistance.

Theoretical Framework

Toness (2001) defined the role of extension as “a field where agricultural professionals play a role in identifying, adapting, and sharing technology that is appropriate to the needs of individual farmers within a diverse ecological and socioeconomic context” (p.25). Communication is an essential part of that role.
According to Rogers (2003), communication is “the process by which participants create and share information with one another in order to reach a mutual understanding” (p. 18). Extension programs typically focus on a specific type of communication, called diffusion. Rogers defined diffusion as a type of communication specific to the transmission of an innovation. The diffusion process has four basic components: (a) the innovation itself, (b) an individual possessing knowledge of the innovation, (c) an individual unfamiliar with the innovation, and (d) a communication channel connecting the two individuals (Rogers). Characteristics of each of the components affect the successfulness of the diffusion process (Rogers). Of particular interest to this study were the characteristics of the individual (or organization) possessing knowledge of the innovation, the communication channels used, and the success of the diffusion process.

The diffusion process occurs most frequently between two individuals sharing common characteristics. The similarity between individuals is referred to as homophily; its converse is heterophily, or the degree to which interacting individuals are different (Rogers, 2003). Rogers said homophily between individuals is characterized by shared group membership, living or working near each other, similar personal and social characteristics, and shared mutual subcultural language. Homophilous communication is “more likely to be effective and thus to be rewarding to the participants” (Rogers, 2003, p. 19). Rogers noted a problem with the diffusion process is that the individual knowledgeable about the innovation is rarely homophilous with the individual receiving the information. Communications can suffer as a result. In Afghanistan, the re-assignment of extension implementation to NGOs and other development agencies rather than to its own government seems counterproductive when considered in terms of homophily and heterophily. It is unknown if this has affected the effectiveness of extension services in Afghanistan.

Rogers (2003) postulated that mass media channels are the most rapid and efficient communication channels for transferring knowledge about an innovation. Included in this category are radio, television, and newspapers. Interpersonal channels are considered more effective, though less efficient, due to the need for face-to-face contact. More recently, the Internet has gained in popularity as an interactive communication channel (Rogers). Previous extension research has recommended using a variety of communication channels but also acknowledged the effectiveness of a channel depends upon the audience (Bardon, Hazel, & Miller, 2007; Cartmell II, Orr, & Kelemen, 2006). Bentley, Barea, Priou, Equise, and Thiele (2007) recommended selecting communication channels based on the context and the complexity of the innovation.

The adoption of an innovation can be interpreted as evidence of a successful diffusion process. The goal of many international extension programs is to facilitate the adoption of behaviors that will lead to increased economic benefits for clientele (Finley & Price, 1994; Tonnes, 2001; USDA/FAS, 2007). For example, an extension program may help a community to develop a cooperative to generate increased economic opportunities for local farmers (Swanson & Samy, 2004). Success in the private sector extension is clearly reflected in the use of, and subsequent improvements in, production (Androulidakis et al., 2002). Therefore, tracking increases in production and its counterpart, income, is a useful way to estimate the impact of the adoption of an innovation.

**Purpose and Objectives**

The purpose of this status descriptive study was to develop an understanding of agricultural extension services as provided by both the public and private sector in Afghanistan.

The objectives of this study:

1. Determine the type of communication channels used to educate farmers in Afghanistan such as mass media, formal trainings, and demonstration plots.
2. Determine the role of the government and NGOs in the provision of agricultural extension services to Afghan farmers.
3. Determine signs of improvement in agricultural production as a result of accessing extension services.

**Methods**

This study consisted of a review of literature, including scholarly journals and documents of government agencies and non-governmental agencies working in the
Content analysis was used as a method to identify systematically the important aspects of Extension services in Afghanistan. Altheide (1985) defined content analysis as “a way of obtaining data to measure the frequency and variety of messages” (p.66). Altheide further stated “content analysis has been used to determine the objective content of written or electronic documents” (p.66).

Finding valuable information on Afghanistan was problematic. A systematic review of non-governmental Web sites such as CNFA, DAI, Oxfam, and Chemonics, and governmental Web sites such as USDA, USAID, and the Afghanistan Ministry of Agriculture, Irrigation and Land helped researchers glean a better understanding of the issues facing the country and its citizens. The literature review spanned from 2000 to 2008; notably, a larger amount of information was available after the fall of the Taliban regime. It was after this time that more governments and non-governmental organizations started to rebuild Afghanistan and its agriculture.

Trustworthiness was obtained through a triangulated review of NGO Web sites, journal articles, Afghan governmental documents, and USAID/USDA documents concerning development in Afghanistan. Erlandson, Harris, Skipper, and Allen, (1993) noted triangulation adds to the truthfulness and credibility of the findings. Two researchers with different development experiences compared governmental documents with information that NGOs published in annual reports and Web-based publications. According to Stake (1995), using data gathered from multiple sources and researchers with different experiences to review data is a theory of triangulation. The documents were reviewed for commonality of the data.

**Findings/Results**

The literature review was conducted in accordance with the three objectives of this study. The findings are shared for each of the objectives below.

**Objective One**

Kock and Edwards (2007) found NGO-driven progressive farmer and extension trainings enhanced income generation in the agricultural sector. The authors suggested radio programs, crop specific training, and on-farm demonstration plots added to the farmers’ ability to increase income. This was buttressed by CNFA (2007), who established demonstration plots as a vehicle for enhancing farmer knowledge concerning current farming practices and provided training to farmers concerning the construction and management of underground vegetable storage units. According to ACDI/VOCA (2008), para-vet trainings benefited farmers in 200 villages and provided the manpower to vaccinate over 136,000 animals.

These finding were supported by USAID. In 2006, USAID reported training programs that created a holistic approach used crop demonstration and radio to increase farmer awareness to new farming practices and new agricultural markets. Due to the extremely high (75%) illiteracy rate in Afghanistan (USAID, 2006), radio has been a very popular media of instruction in Afghanistan. Demonstration plots provided an opportunity for farmers to see what new farming techniques can do for production (ICARDA, 2002).

According to Chemonics (2007), and USAID (2007b), agricultural fairs have also been used to show new farming practices and alternative methods for crop production. The country-wide agricultural fair held in Kabul provided farmers a means to interact with traders and see new farming methods. Chemonics (2007) reported:

> some of the most popular exhibits at the fair were demonstrations of agriculture technologies to improve farmers’ harvests — and bottom line. Laser land leveling — a technology used to increase water usage efficiency by up to 30 percent and improve the quality and consistency of commercial produce — was shown off at the fairground demonstration farm. (p. 1)

**Objective Two**

The MAIL, Policy and Strategy Framework (2004) spelled out responsibilities of both development agencies and the government: “The provision of security, justice and equality, investment in human capital and social safety nets were vested in the Afghanistan government while the private sector engages in production and marketing activities” (p. 3). The government was therefore playing a regulatory role while development agencies were implementing the
extension services to the farmers as inferred from the report.

According to the report of 2004 Food and Agricultural Organization, Regional Conference for Asia and the Pacific, held in Beijing, China, public services in the area of extension education have been dismal compared to the private sector, especially the NGOs (FAO, 2004). It was, therefore, no surprise the Afghanistan government passed that responsibility to the private sector. One reason for this could be that the Afghan MAIL lacked the monies needed to be effective, and therefore relied on NGOs to buttress extension work when working directly with farmers. In support of this, USDA established Agricultural Advisors on Provincial Reconstruction Teams (PRTs) throughout Afghanistan to provide technical and programmatic assistance to NGOs, UN, military, and local people in different geographic regions (USDA, 2007).

Objective Three

According to the World Bank (2007), Afghanistan has experienced economic growth since 2002. The value of non-drug GDP increased by 29% in 2002, 16% in 2003, 8% in 2004 and 14% in 2005. This increase has been attributed to external assistance from the United States and other donor countries. Between 2001-2006, the United States committed over $12 billion in aid for development in Afghanistan and the international community pledged $8.2 billion from 2004-2007 (US Department of State, 2007). Some of the money was earmarked for agriculture to help jumpstart the industry. Through this infusion of donor dollars that funded NGO extension programs, Afghan farmers’ incomes have increased to almost $1,000 USD per year (Kock & Edwards, 2007).

CNFA (2007) estimates potato farmers’ incomes will increase by 49% after being trained on underground storage. In 2006, the World Bank stated “to enable faster economic growth and rural poverty reduction, agriculture needs to grow at least 5% each year over the next decade” (p. 1). Based on the work of Oxfam’s gardening programs, rural Afghan people now have a better diet and will be able to save money on food (Oxfam, 2008). Development Alternatives Incorporated (DAI) stated the organization is in the process of rebuilding the agricultural sector by improving access to markets, inputs, and business services in rural Afghanistan (DAI, 2006). This was supported by Gesellschaft für Technische Zusammenarbeit (GTZ, 2008) who stated “the Afghans people’s economic situation has markedly improved. More wheat is being planted, yields have risen, and cattle breeding has increased” (p. 1). The Food and Agriculture Organization (FAO, 2006) reported “better crop husbandry practices, crop intensification and diversification have improved yields” (p. 3).

Conclusions and Recommendations

This study examined the communication channels used by extension services, which organizations were delivering extension services, and increases in production as evidence of successful extension interventions. Radio had been used to broadcast market reports, on-farm demonstration plots were used to show different cropping methods and seed varieties, and farmer trainings were implemented throughout the country. The Ministry of Agriculture provided oversight of Extension programs, while NGOs worked directly with rural people in program implementation. According to the World Bank (2007), Afghanistan has seen economic growth, which is supported by Kock and Edwards (2007) who found Afghan farmers’ incomes have increased to almost $1,000 USD per year. These types of development work may help the Afghan people migrate out of the economic crisis they are currently facing.

If Afghanistan is going to move forward, it must invest in its agriculture; it must be able to feed its people. Agriculture is a way of life for the majority of Afghans; USAID estimates over 70% of Afghan people derive their incomes through agriculture production (USAID, 2007). This is supported by the Afghan MAIL (2004) report estimating a 6% increase in production and doubling of the production capabilities in the next 12 years will benefit rural Afghans. The report noted “agriculture dominates the Afghan economy and society” (p. 6), thereby supporting the idea that agriculture is extremely important to Afghanistan.

It is important to remember the Afghan government lacks the financial resources to invest heavily in agriculture. Therefore, it relies on donor-supported NGOs to help build the industry. In 2003, USDA invested $5 million for child nutrition and another $9 million for education and nutrition; in 2004, USDA invested another $7 million to promote food security and...
$63 million, in 2005, for rural extension programs (USDA, 2005). The United States is only one of many donors that have invested in Afghanistan; billions of dollars have been spent to support the country in all areas of development.

However, it is important to question the sustainability of foreign government-funded extension services. Each foreign government has its own priorities and funds those projects that fit their concerns (political, social, economical or geographic); if development projects fall outside those concerns, funds may not be available to help support the implementation of other “less important” projects (Margesson, 2007; Parker, 2008). Therefore, it is important that local governments and community members contribute to Extension “development” programs if they plan on providing direction for program design and implementation in the future.

Research about Afghanistan and its agricultural industry is lacking, which creates a void in data collection. Therefore, these researchers recommend future research should investigate how other countries have worked through similar hardships that Afghanistan is facing. There have been studies conducted in Africa, the Middle-East, Asia and former Soviet states concerning extension programming for rural people and how it was implemented. By gleaning a better understanding of international extension-type programming and implementation throughout the world, foreign governments and NGOs may be able to design sustainable development projects that may help people in Afghanistan and other developing countries.

**Implications**

Rogers (2003) said characteristics of each of the components affect the effectiveness of the diffusion process. This study examined the characteristics of the individual (or organization) possessing knowledge of the innovation, the communication channels used, and the success of the diffusion process. The findings from this study help to develop an understanding of the diffusion process in Afghanistan.

Rogers (2003) postulated the diffusion process occurs most successfully when individuals share common characteristics. The diffusion process in Afghanistan did not appear to be negatively affected by assigning responsibility for extension services to the private sector despite the possibility for heterophily to exist. However, the Web sites of many of the NGOs investigated for this study contained little information regarding the location and experience of the staff members; therefore, it is unknown if living conditions simulated those of the farmers. Conversely, the USDA (2007) stated that when hiring Provincial Reconstruction Team (PRT) advisors in Afghanistan the organization looks for people with an agricultural background. In this regard, the USDA staff and Afghan farmers established some degree of homophily which is an asset in the diffusion process (Rogers, 2003).

The success of agricultural development in Afghanistan is hard to measure; the Web sites of NGOs promote positive change, showing yield increases, more income generation for farmers, and new teaching methods used throughout the country. Based on the increases in production and income, the communication channels that were being used seemed to be effective. However, more research needs to done to fully understand the effects of extension services in Afghanistan. It may take years before signs of agricultural improvement are readily available for the country. If the next generation of farmers continues to apply and adapt to new technologies, agriculture in Afghanistan may prosper. Only time will tell.

**References**


