Re-purposing the Livelihoods of Afghani Farmers: An Examination of Licit Alternatives to Producing Opium Poppy

Timothy K. Kock
M. Craig Edwards, Ph.D.
Department of Agricultural Education, Communications and Leadership
College of Agricultural Sciences & Natural Resources
Oklahoma State University
448 Agricultural Hall
Stillwater, Oklahoma 74078-6032
Tel: 405.744.8141
Fax: 405.744.5176
e-mail: tworustyspurs@yahoo.com

Abstract
As Afghanistan changes and its society and government moves forward, its agricultural sector must remain economically viable to support that progress. Afghani farmers are facing many issues, including challenges that were intensified during the Taliban regime. Poverty has become all too familiar to rural Afghans forcing many to look at alternatives for income generation. In the northern region of Afghanistan, infrastructure is non-existent; roads, electricity, and clean water are often very limited, thus forcing farmers to consider other crops that need little or none of these resources. Although it is against Islamic law, the growing of opium poppy flourishes in this environment and generates incomes well beyond those of licit crops.

This paper describes a program designed to help farmers produce licit crops as an alternative to opium poppy production. The Agricultural Marketing and Production Support (AMPS) program described was a vegetable production and support program designed to respond to a market-driven economy. The vegetables grown had high market value, either fresh sales or processed, and transport availability. As a result of participating in the program, it was hoped that farmers’ incomes would increase, therefore, making them less likely to produce illicit crops such as opium poppy.

This paper outlines factors addressed by the AMPS program and results derived from its implementation in northern Afghanistan during 2006. Findings from this study may have implications for similar programs in other developing countries, especially in nations that also may be struggling to reduce the production of illicit crops by their farmers.

Keywords: Afghanistan, development, farmers, illicit crops
Introduction and Conceptual Framework

As Afghanistan changes and the government and society moves forward, its agricultural sector must be economically viable. Afghan farmers continue to face many troubling issues and challenges in the aftermath of the Taliban regime. Poverty has become all too familiar to rural Afghans, and it is forcing many to look at alternate sources of income. In the northern region of the country, infrastructure is poor to non-existent; roads, electricity, and water for irrigation and human consumption are in short supply, thus forcing many farmers to consider growing illicit crops that need very little or none of these resources. Unfortunately, in the current economic climate, there are distinct advantages to cultivating opium poppy (Mansfield & Pain, 2005). Although it is against Islamic law, opium poppy production flourishes and generates incomes 10 times greater than that of many licit crops (United Nations, 2006).

In other regions of Asia, alternative livelihood programs (ALP) have been catalysts for the development and implementation of schools and related educational opportunities. This aspect alone has enabled many families and communities to seek other forms of income generation that are licit. For example, in the highlands of Thailand, alternative livelihood programs have been critical in building the social contract and establishing the legal and social norms necessary for illicit drug crop producing families to become producers of licit food crops instead (Mansfield & Pain, 2005).

Afghans have been producing opium poppy for generations; many rural Afghans rely on its cash value. Opium poppy production represents an estimated 50% of the country’s GDP. Views on how to eliminate production vary but considerable emphasis has been placed on the development of alternative livelihoods (Mansfield & Pain, 2005).

The program
The Agricultural Marketing and Production Support (AMPS) program was designed to increase agricultural producer incomes through licit crop production. The program provided free/low cost inputs (i.e., seed for okra, tomato, carrot, cauliflower, potato, and onion and fertilizer) to Afghan farmers who were currently producing illicit crops. Each participating farmer received inputs for three jeribs of land (one jerib equals 1/5 of a hectare or about 1/2 of an acre) for a total of 27,666 jeribs or 13,833 acres, as well as training and educational materials for each vegetable crop planted. An earlier study (Kock & Basir, 2006) of market demands determined which vegetables should be produced from an economic perspective, thus enhancing farmers’ potential for selling their produce. Market value, shelf-life and transportability were also key factors in the determination of appropriate vegetables to be planted.

As a condition for participation in this program, farmers agreed to “repay” a portion of the cost ($30 USD) of each seed and fertilizer kit they received. The repayments would be made to their local Shuras (community councils) as one way to assist local communities in addressing current infrastructure concerns, e.g., the building of new schools.

The program was a joint effort between the United States Agency for International Development (USAID) and the Afghan government; it was implemented by a Washington, DC based non-governmental organization (i.e., Planning and Development Collaborative International, Inc. [PADCO]). The Ministry of Agriculture, Animal Husbandry and Food (MAAHF) was used as the vehicle of implementation. The departments of Agricultural Extension in Badakhshan and Takhar provinces (Figure 1) provided names of recipients for this program, and the USAID provided technical and financial support.
Figure 1. Map of Afghanistan with Provinces Identified (CNN [On-line], 2006).

Purpose and Research Questions
The purpose of this descriptive study was two fold: 1) Glean an understanding of the current agronomic situation facing farmers in northern Afghanistan; 2) Measure farmers’ perceptions of the social and economic impact of the Alternative Livelihood Program – Northeastern Region (ALP-N), Agricultural Marketing and Production Support (AMPS) program on themselves and their communities through the production of licit crops. Three basic questions guided development of the pre- and post-harvest survey questionnaires: 1) What were the general production conditions of farmers in the Takhar and Badakhshan Provinces of Afghanistan? 2) What was the general economic state of farmers? 3) Did the ALP-N, AMPS program generate additional income for farmers, thus making them less likely to produce illicit crops?

Methods and Data Sources
A list of beneficiaries or “frame” for the program was provided by the Provincial Departments of Agriculture in the Takhar and Badakhshan provinces. The study’s participants were drawn from a population of 9,222 farmers who were currently producing poppy, i.e., a farmer had to be cultivating an illicit crop to be considered for the program. Of the 9,222 farmers in the ALP-N, AMPS program, 256 (Dillman, 2000) from both provinces completed the pre-harvest questionnaire in May 2006, and a total of 216 farmers completed the post-harvest instrument. Post-harvest data collection was completed in September 2006.

The researcher attempted to ensure that proportionate representations of farmers from each district were selected as study participants. For example, approximately 1000 farmers from the Feyzabad district participated in the AMPS program making up nine percent of the total.
Therefore, nine percent of the farmers selected to be questioned, using every 25th name from that district’s list, came from the Feyzabad district. The same procedure was followed for each participating district.

However, due to safety issues, i.e., concern for the welfare of project staff, only eight of 14 districts could be reached for the purpose of pre-harvest data collection (five in Takhar and three in Badakhshan). Travel concerns in fall 2006, due to “Commander” (i.e., drug-lord) disputes in the Badakhshan Province, also hampered the collection of post-harvest questionnaires; so, only 216 of the original participants were reached at that time. Subsequently, several of the major poppy-producing districts were not included in data collection. So, coverage and sampling error (Dillman, 2000) may be a concern when generalizing results to the entirety of both provinces and to Afghanistan’s opium poppy producers more broadly.

The survey instrument was designed in cooperation with personnel of the Afghanistan Ministry of Agriculture Animal Husbandry and Food (MAAHF). It was translated into Dari, the primary language of northern Afghanistan, before being used with participating farmers. Due to the high illiteracy rate in Afghanistan—estimates range from 70-90% (USAID, March 31, 2006)—the questionnaire was read to each participant by project staff members who were fluent in both Dari and English. These staff members were accompanied by the local Extension Agent in the district or the Director for Extension of that province. The questionnaires were analyzed by personnel of an independent Afghan social marketing and evaluation firm who were fluent in Dari and English, and the results were printed in English and shared with the researcher.

Using a five-point, summated rating scale, farmers were asked to answer 21 questions about their current operations and economic conditions. The scale descriptors were “1” to “5”; varying descriptors were used that fit the context of each item and supported the numeric scale. In addition, the study’s facilitators recorded participants’ statements that pertained to this program and future AMPS-type programs for the development of alternative livelihoods.

**Findings and Conclusions**

The majority of respondents (75%) indicated that they owned their land and farmed one to five jeribs. When asked (pre-harvest) which cash crop was the most important, 78.4% stated wheat, 18.5% indicated vegetables, and only 2.3% answered opium poppy. (All farmers may not have answered honestly regarding whether they grew opium poppy due to the fact that its cultivation is illegal, and at the time of pre-harvest data collection an extensive eradication program was ongoing). The results from this question at post-harvest showed a reduction of 10% for wheat, an increase of 11% for vegetables, and a reduction of .8% for poppy (Figure 2). Following the implementation of this program, the number of farmers who indicated that vegetables were their most important cash crop increased by almost half.
A common statement repeated by many farmers during pre- and post-harvest data collection indicated that even though they produced opium poppy, its cultivation was not considered part of their annual farming operations; so, they did not indicate it on their questionnaires. That may also explain the low percentage of farmers who self-identified themselves as producers of opium poppy.

For both provinces, 72.6% of farmers stated that the month of March is the most common time for planting vegetables, although post-harvest results showed that 45% of participants reached the field in March but 49.3% actually planted in April (This delay may have been a result of implementing the AMPS program late, thus allowing farmers less time to prepare their fields).

When asked, pre-harvest, which vegetable(s) they usually grew, 66.8% of farmers answered potatoes followed by onions at 17.5%. However, the post-harvest data indicated a decline in potatoes to 57.5% and an increase in onions to 19.3% when compared to pre-harvest responses (Figure 3). The reduction in potato cultivation may have resulted from the AMPS program design, which was to limit production thereby influencing market prices, or so it was hoped. (Based on weekly market price information, gathered by ALP-N region staff, none of the six vegetables produced in the AMPS program suffered dramatic price fluctuations following peak harvest. So, one plausible explanation for this finding may have been the program’s attempt to control the amount of a given vegetable produced.)

Also, at pre-harvest, slightly more than one-half (51.5%) of the farmers indicated that they sorted their vegetables. However, post-harvest results found that 72.5% sorted some or all of their vegetables. This finding was promising due to the fact that three trainings were provided to farmers and Extension staff on how to sort vegetables and the benefits of sorting.

Another difference between pre- and post-harvest was the number of farmers who sold 61-100% of their vegetables. Pre-harvest data indicated that 63.5% of farmers sold 61-100% of the vegetables they produced; however, post-harvest results showed only 43.9%, which was a difference of about 20%. So, some farmers sold less of their yield but may have still managed to increase their incomes.
Regarding pre-harvest storage procedures, less than one-half (41.6%) of the farmers reported that they stored produce in underground cellars. However, the post-harvest survey indicated a major change, i.e., only 21.9% stated that they stored vegetables underground. This discrepancy was not explained by the data.

Farmers were also asked, “What was your yearly income last year?” and “Will this AMPS program benefit your family and your community?” Regarding last year’s incomes, 69.5% stated they had an income of 50,000 Afghani ($1,000 USD) (50 Afghani = 1 USD) or less, and within that group, 29% indicated an income between 0 and 10,000 Afghani ($0-$200 USD). However, 30.5% responded that they had an income between 51,000 and 151,000 Afghani ($1,020 – $3,020 USD). So, almost one-third of the farmers reported that they earned an income consistent with to slightly higher than the estimated national Afghan (“opium-derived”) income of $1,800 USD (United Nations, 2005b).

Although data indicated that no change occurred between the two collections, i.e., post-harvest, 69.2% of respondents stated their incomes were between 0 – 50,000 Afghani ($0 - $1,000 USD). Change did occur in the percentage of farmers who claimed various levels of reported income. Based on self-reporting, the percentage of farmers whose income increased to 11,000 - 50,000 Afghani ($200 – $1,000 USD) was 13.5%, and those with incomes totaling 10,000 Afghani ($200 USD) or less decreased by 13.5% (Figure 4). This positive result meant that more farmers increased their incomes to more than 10,000 Afghani ($200 USD) and that fewer farmers were earning incomes of 10,000 Afghani or less (however, some reporting of additional income may have been due to cost savings associated with the purchase of seed and fertilizer, i.e., inputs that were given to farmers as a part of the program and had a value of 6,000 - 12,500 Afghani [$120 - $280 USD]).
Figure 4. Changes in Levels of Income as Reported by Vegetable Farmers in Eight Districts of the Takhar and Badakhshan Provinces, Afghanistan, 2006 ($n = 256$ pre-harvest; $n = 216$, post-harvest).

As for pre-harvest questions about the AMPS program benefiting one’s family and community, 96.7% of participants replied “certainly.” However, the post-harvest results showed a decline of 10% in the number of farmers who answered “certainly” as it related to their families, and a decline of 4% as it pertained to farmers’ communities (Figure 5). These findings were contrary to what was anticipated by the program’s facilitators. The findings may have been due to the program’s late distribution of seed/fertilizer kits, which could have caused farmers to miss peak market prices in some cases, poor germination rates of some vegetable seeds (i.e., okra and potato), and bad weather conditions. As for a perceived decline in benefiting their communities, one possible explanation may have been the program’s inability to have farmers, based on the questionable legitimacy of Afghan government-provided beneficiary lists, repay the cost of seed and fertilizer ($30 USD) to their local Shuras. An outcome that had been intended.

Figure 5. Changes in Perceived Benefits for Family and Community as Reported by Vegetable Farmers in Eight Districts of the Takhar and Badakhshan Provinces, Afghanistan, 2006 ($n = 256$ pre-harvest; $n = 216$, post-harvest).
Recommendations for Future Practice

If future AMPS type programs are to be successful and create a lasting and sustainable impact, i.e., the promotion of alternative livelihoods that rely on licit crop production, they must contain an educational component (e.g., the training of farmers and MAAHF Extension staff). In addition, programs should be implemented on time (get inputs to farmers before they need them), be large enough for small scale production farming (three jeribs), be associated with local cooperative/farmer associations (ensure legitimate beneficiary lists for input repayments), be designed to fit current market-driven demand, and be structured to provide high quality inputs (seed and fertilizer) that increase yields thereby allowing farmers to keep more produce for family consumption (food security) while increasing their cash incomes.

Recommendations for Future Research

International donors are demanding impact from the resources they invest in developing nations. Afghanistan, in particular, is a very large recipient of development aid. The United Nations, Office on Drugs and Crime (UNODC 2005a) estimated that $490 million USD were committed to alternative livelihood programs in 2005, and $1.2 billion was allocated for the next 10 years. Accordingly, an alternative livelihood program, such as the one reported on here, must show a positive impact on the reduction of opium poppy cultivation to justify its continuation. So, by collecting information about farmers who cultivate illicit and licit crops, personnel in development organizations can better design and implement effective programs that may increase farmers’ incomes, and thus make them less likely to cultivate illicit crops.

In addition, the impacts of successful programs should be described and evaluated for the purpose of making improvements, as well as assisting those who may be charged with planning and delivering similar programs in the future. What is more, consideration should be given to local farming practices, including an examination of indigenous knowledge as it relates to producing licit crops (e.g., see Efa, Gorman, & Phelan, 2005) and to meeting farmers’ basic needs before positive behavioral change may occur and then be sustained.

Implications and Discussion

The AMPS program created a cost savings of $120-$280 USD (personal benefit) for each farmer through program-provided inputs on three jeribs of land. What is more, data showed that many farmers increased their incomes in 2006. This finding is important for continuation of alternative livelihood programs and creating an economic environment that may lead to decreases in opium poppy cultivation. Or, as asserted by Mansfield and Pain (2006), “for the poorest and most marginal producers, the eradication of illicit crops without an increase in access to legal income sources has led to increasing poverty” (p. 5). If licit crop production programs can increase farmers’ incomes then the cultivation of illicit crops may start to decline.

One potential community benefit of the program described should have been the repayment of seed and fertilizer costs to a farmer’s local Shura (community council). AMPS program beneficiaries had agreed to repay 1,500 Afs ($30 USD) per jerib to their Shuras, which would have injected about one million USD into their local communities. But because of statements made by MAAHIF officials indicating concerns about the legitimacy of AMPS beneficiary sign-up lists, the Ministry officials had little inclination or means to collect the monies intended for repayment. This outcome resulted in no APL-generated funds for local Shuras to carry out community-based projects that could have supported the development of
education, health, potable water, and infrastructure programs, necessities which are sorely needed in northern Afghanistan. It is hoped that future programs will avoid that omission.

However, a benefit from the AMPS program was higher yields for farmers and the provision of quality produce for consumers through better vegetables. Also, a tangential but significant finding, derived from the post-harvest data, was the number of farmers who stated that MAAHF Extension Agents were helpful during the 2006 season: 78.6% respondents in the post-harvest survey stated that agents helped them compared to only 67.1% in the pre-harvest survey. This finding is important to the AMPS program given the fact that ALP-N provided numerous trainings to MAAHF Extension agents and progressive farmers in both provinces throughout the program. To that end, a statement made by an AMPS participant supported the educational component of the program: “Learning and knowing about new seeds, new farming techniques, planting times, irrigation times, and fertilizing times can help us get a better harvest from our lands and farms” (USAID, August 20, 2006, p. 1). Further, the final question asked of respondents in the post-harvest questionnaire was “Would you participate in future AMPS type programs?” Nearly all (96.6%) replied “certainly,” which strongly suggests that this type of program was perceived to be of some benefit to almost all farmers who participated.

References