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BUILDING SUSTAINABLE AGRIBUSINESSES IN PAKISTAN

FINAL EVALUATION OF THE AGRIBUSINESS PROJECT

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ACRONYMS

ADB	Asian Development Bank
AI	Artificial Insemination
AITs	Artificial Insemination Technicians
AKRSP	Aga Khan Rural Support Programme
AOR	Agreement Officer's Representative
ASEAN	Association of Southeast Asian Nations
ASF	Agribusiness Support Fund
ASP	Assessment and Strengthening Program
BDS	Business Development Services
BDSP	Business Development Service Provider
CIS	Commonwealth of Independent States
CNFA	Citizens Network for Foreign Affairs
EDT	Enterprise Development Training
EGA	Economic Growth and Agriculture
FATA	Federally Administered Tribal Areas
FEG	Farmers' Enterprise Group
FSC	Farm Services Centers
FTE	Full-Time Equivalent
GB	Gilgit-Baltistan
GCC	Gulf Cooperation Council
GoP	Government of Pakistan
HV/OSV	High Value Off-Season Vegetables
IMAP	International Market Access Program
kg	Kilograms
KP	Khyber Pakhtunkhwa
M&E	Monitoring and Evaluation
MSMEs	Micro, Small and Medium Enterprises
NGO	Non-Governmental Organization
NOC	No Objection Certificate
NRSP	National Rural Support Programme
OAPA	Office of Afghanistan and Pakistan Affairs
OIG	Office of the Inspector General
PAMCO	Punjab Agriculture and Meat Company
PMP	Performance Management Plan
RCDS	Rural Community Development Society
RMA	Rapid Market Appraisal
Rs.	Pakistan Rupees
SOW	Statement of Work
SRSP	Sarhad Rural Support Programme
TA	Technical Assistance
TAP	The Agribusiness Project
TDAP	Trade and Development Authority
UK	United Kingdom
USAID	United States Agency for International Development
USD	United States Dollar
USG	United States Government

PROJECT SUMMARY

Table I summarizes basic information about The Agribusiness Project (TAP).

TABLE I: PROJECT SUMMARY

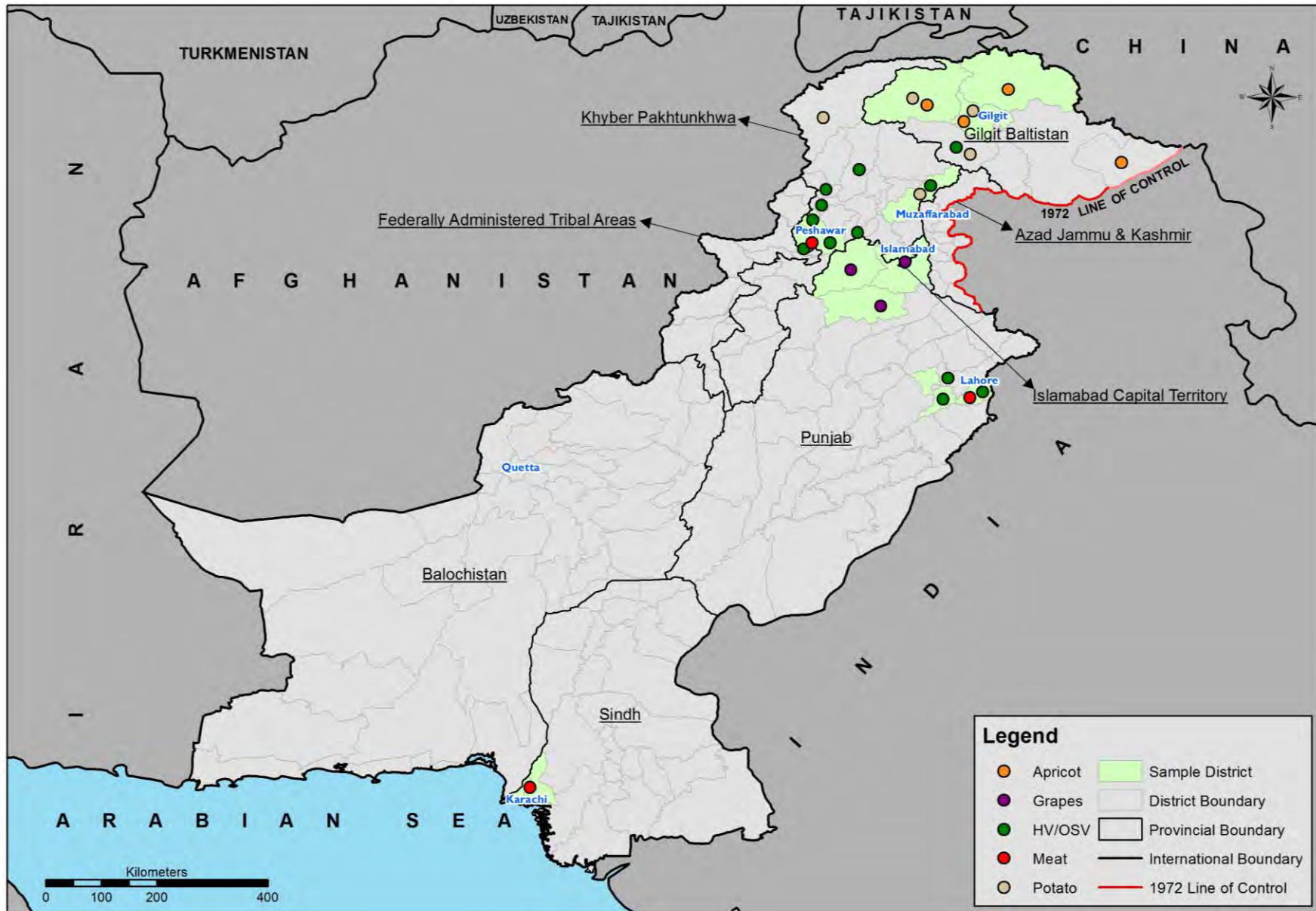
Title / Field	Project/Activity Information
Contract/agreement numbers	AID-391-A-12-00001
Agreement Officer's Representative (AOR)	Mohammad Ghani Khan, Project Management Specialist for Agriculture
Start date	November 10, 2011
Completion date	November 9, 2016, revised to November 9, 2015 ¹
Location	Nationwide, except for Balochistan
Implementing partner(s)	Agribusiness Support Fund (ASF)
USAID/Pakistan Mission Strategic Framework objectives addressed	DO 2: Improved economic status of focus populations. IR 2.1: Improved economic performance of focus enterprises IR 2.1.2: Improved skill development and job placement IR 2.1.3: Increased use of modern technology and management practices IR 2.2.2: Strengthened private sector and civil society engagement in policy-making.
Budget	USAID contribution: U.S. Dollar (USD) 89,412,942, reduced to USD 39,947,381 ² ASF and grantee enterprises cost-share: USD 47,717,980 (the revised project document does not include a revised cost-share figure)

The map in Figure I illustrates the locations of TAP's value chain activities in the apricot, seed potato, high value off season vegetable (HV/OSV), grape, and meat value chains. The shaded districts represent the districts from which the evaluation team selected samples of respondents for site visits and interviews.

¹ USAID/Pakistan. (2013). Modification of Assistance No. 6. Islamabad: USAID/Pakistan.

² USAID/Pakistan. (2013). Modification of Assistance No. 6. Islamabad: USAID/Pakistan.

FIGURE I: LOCATION OF PROJECT VALUE CHAIN ACTIVITIES



Map Development Date : 6th October 2015

Disclaimer : The Boundaries and names used on this map do not imply official endorsement or acceptance by the U.S. Government

Map # 9, Version # 3

EXECUTIVE SUMMARY

USAID/Pakistan's Economic Growth and Agriculture (EGA) office requested the end of project evaluation of The Agribusiness Project (TAP) to guide implementation of a newly designed project that focuses on developing agri-businesses and agricultural value chains. The EGA office also asked for recommendations on how best to engage local organizations as implementing partners.

The evaluation addresses three questions:

1. To what extent was the revised project design relevant to achieving anticipated results?
2. To what extent were the project's activities and implementation approaches effective in contributing to achieving expected results?
3. To what extent, and how, are project interventions likely to produce sustainable results that will endure beyond project assistance? To what extent are non-beneficiary farmers or enterprises replicating project interventions?

Project Background

USAID/Pakistan awarded the five-year USD 89.4 million cooperative agreement for TAP to the Agribusiness Support Fund (ASF), a local organization with no previous USAID experience, in November 2011. A 2013 Office of the Inspector General (OIG) audit concluded that ASF did not have the capacity to implement the project. In consultation with USAID, ASF scaled back the project, focusing on fewer value chains and a more limited geographic area, cutting the budget to USD 39.9 million, and reducing the timeframe to four years.

TAP provides grants and technical assistance to small farmers organized into farmers' enterprise groups (FEGs) and individual grants to agri-businesses, e.g., larger farmers, processors, and exporters. Grants help recipients adopt new technologies and practices to enhance competitiveness and ultimately "support improved conditions for broad-based economic growth, enhanced profitability, and employment opportunities and contribute to poverty alleviation through product and process transformation".³

Data Collection Methods and Limitations

Of the eight value chains which TAP supports,⁴ the evaluation addresses only five, apricot, high-value off-season vegetable (HV/OSV), seed potato, grape, and meat. It relies almost entirely on qualitative data collected from randomly selected beneficiaries and stakeholders. The evaluation team conducted 67 individual interviews and site visits with project beneficiaries and stakeholders, 39 group interviews with

³ Agribusiness Support Fund. (no date). The Agribusiness Project Revised Project Document. Lahore: Agribusiness Support Fund.

⁴ Banana, chilies, citrus, apricot, grape, seed potato, high-value off-season vegetables, and meat.

FEGs, and interviews with 22 individuals involved in design (USAID, ASF). When possible, the team used quantitative performance data and information from project documents to triangulate the qualitative findings.

The data provide a great deal of information to answer how and why questions but suffer from the limitations common to qualitative data, i.e., differences in interview techniques, language barriers, general communication issues, the education level of respondents, and strategic behavior may all affect consistency, validity, and reliability. The evaluation team adequately addressed most of the limitations and is confident in the overall validity of the qualitative data.

Findings and Conclusions

ASF's design of TAP was generally sound, i.e., it planned relevant and effective interventions. It also implemented most activities reasonably well after the mid-term course correction. Its primary implementation failings stemmed from a very long start-up period which delayed substantive engagement with many beneficiaries by two or three years. The late start deprived beneficiaries of the time necessary to gain experience with new technologies and practices before project support ends and may ultimately compromise the sustainability of results. The remainder of this section summarizes findings and conclusions for each value chain and value chain actor.

Apricot FEGs: By relieving binding financial constraints, TAP grants were instrumental in transferring solar drying technologies to FEGs. The technologies and associated training (the design) effectively changed processing (drying) practices, reduced waste, and increased the quantity of dried apricots FEG members produced for sale. The farmers had not yet sold apricots, but when the drying season ends, they should earn additional income from increased quantities and better quality. Farmers in the region do not have a culture of hiring labor, so the intervention has not created jobs. ASF implemented the intervention well. It quickly and effectively corrected a design flaw in the drying tunnels. It is too early to assess the sustainability of the results, which will depend on the durability of the tunnels, and members of two of seven FEGs interviewed questioned their ability to repair the tunnels if they were damaged.

Apricot Grant Recipients: TAP assistance addressed the financial constraints farmers faced establishing commercial apricot orchards. The orchards are not yet producing, so it is too early to assess production outcomes. Orchard owners are experienced apricot producers and, with the training in new cultivation practices provided with the grants, they should be able to increase their production of commercial apricot varieties and therefore their incomes. Once they are mature, the orchards will likely generate some jobs in orchard management and many seasonal jobs in harvesting and processing. However, the scale of the intervention (18 orchards) limits its immediate contribution to job creation or economic growth beyond the orchard owners. It is too early to assess the intervention's success as a replicable model to promote investment in commercially oriented practices (e.g., varieties and cultivation practices).

Grape FEGs: TAP support was instrumental in encouraging FEGs to invest in grape production. Few knew about grapes and none could afford the investment without external support. The FEGs are just beginning to produce and, based on what they had heard from acquaintances that produced grapes and observed market prices, farmers were optimistic about their own prospects. Because of their optimism and sunk investment, FEGs expected to continue producing grapes and had also observed other farmers replicating the vineyards. Grapes seem to offer prospects for full-time and casual labor (for men) but it is difficult to determine actual requirements for additional labor. From an implementation perspective, ASF struggled to provide trellis material on time and in the quantities expected by the FEGs. FEGs also reported suffering large losses due to birds and were disappointed that ASF did not provide nets. The sustainability of results is questionable for these FEGs if they cannot limit bird predation.

Grape Grant Recipients: Individual grant recipients were relatively well-off landowners with other sources of income and were looking for investment opportunities. ASF-sponsored visits to farms with active vineyards convinced them that grapes represented a promising opportunity, a finding that strongly suggests that the demonstration effect of established vineyards contributes to replication, at least for those who can afford the investment. All four farmers the evaluation team interviewed had established their vineyards in early 2014 and had not yet produced or sold significant quantities of grapes. Grant recipients reported hiring labor for the vineyards, but the extent to which they hired new workers as opposed to merely re-assigning permanent labor is not clear. Women's roles in grapes appear confined to packaging. Grant recipients reported that they expected to continue producing grapes if it was profitable and, based on their discussions with owners of established vineyards, they were optimistic about profitability.

HV/OSV FEGs: ASF's interventions with HV/OSV FEGs were largely well-designed and effective. A large majority of FEGs adopted the new technologies and practices, especially the hybrid seeds and vertical farming structures, and increased their production and sales (due to quantity and quality/price) as a result. However, most FEGs were still selling through the local mandis which do not generally reward quality. FEG-level vegetable production also generates a substantial number of jobs, many of which are open to women, due to more labor intensive production practices, higher yields, and a longer production season. FEG members reported that they intend to continue using the technologies and practices promoted by ASF because they are low cost and quite profitable relative to the alternative crops. However, they reported that difficulty finding good quality hybrid seeds in the market may disrupt their plans. ASF struggled to provide some inputs (seeds) on time and of good quality although this problem seems largely confined to activities in Lahore.

HV/OSV Grant Recipients: ASF targeted relatively well-off landowners with capital to invest or specialized knowledge. The data suggest that ASF's strategy of demonstrating new technologies and practices to raise awareness among financially capable farmers may have been effective in stimulating replication. At the individual grant level, the project design (i.e., tunnel farming) appears to have been effective in substantially increasing production, sales, and employment. The only issue with implementation emerged in Lahore and involved the design and/or inspection of tunnels. Tunnel farming appears to offer substantial employment potential for men and for women.

Seed Potato FEGs: ASF's support to seed potato FEGs appears to have successfully transferred new technologies and practices to FEG members, but outcomes (e.g., quantities produced or sold) were not yet directly observable, because most farmers had not harvested their first crop at the time of the evaluation. Based on the evidence from the few who had harvested and farmers' assessment of the quality of the standing crop, the intervention should be effective in increasing the quantity and quality of potatoes and should increase the value of sales. At the FEG level, the potato value chain offers little potential for creating jobs. The intervention is low-cost and probably profitable in the short run, but difficulty obtaining good quality seeds may threaten the sustainability of results. ASF itself seems to have had difficulty providing good quality certified seeds on time. The project's individual grants to establish storage cellars should address this constraint, but it will take a few seasons of experience to assess whether the cellars are effective in increasing the local supply of seed.

Seed Potato Grant Recipients: The grants to support storage cellars addressed financial constraints that prevented farmers from constructing cellars and thus promoted better storage practices in the region. The cellars were appropriate technology that effectively eliminated spoilage during the winter. In addition to having a larger quantity to sell because of reduced spoilage, cellar owners were able to maintain the quality of their stored potatoes and thus receive higher prices in the market. If the practices are sustainable, the cellars should contribute to increasing access to local seed potatoes and

thus address a production constraint FEGs mentioned. However, the high cost of the cellars may prevent the intervention from reaching scale through organic replication.

Meat Value Chain: Training in meat cuts was effective in teaching new skills, but limited penetration into markets that use those skills to advantage has thwarted achieving broader outcomes on sales or employment. Retail butchers were the only trainees who reported results. Most processors and exporters have not yet developed the export market connections to sell high-value boneless cuts. ASF also trained artificial insemination technicians (AITs) to enhance farmers' access to quality private sector artificial insemination (AI) services. The training was effective in strengthening AITs' skills, and one trainee reported that farmers are increasingly aware of the benefits of AI and that his business is growing. However, two of the four trainees interviewed were not in a position to put their training into practice because they were unemployed, and two did not have access to transportation to reach farmers. Feedlot fattening training taught new skills, but not to individuals who were in a position to use them. From an implementation perspective, the experience with AI and feedlot fattening training points to issues with beneficiary selection criteria.

International Market Access Program (IMAP): IMAP events effectively exposed participants to export markets and market requirements. To the large majority of participants (13 of 14 the IMAP participants the evaluation team interviewed) who had participated in similar events without TAP support, the events' added value was the pre-event briefing and access to a branded booth or stall. ASF documented sales of over USD 33 million associated with IMAP events. Since most participants were established exporters, these sales may not (if they merely supplanted sales the participant would have made to other buyers anyway) represent expanded business or access to new markets, buyers, or products. ASF appears to have implemented the logistically difficult activity well with few substantive complaints and many kudos from participants.

Gender Integration: The project explicitly considered women in design only by setting targets for the percentage of female members of project-supported FEGs. It did not have a gender strategy nor did it design interventions specifically to engage women. Development projects cannot create a role for women and, to have a meaningful impact, must deliberately design interventions in value chains in which women play an active role. The established role of women in apricot processing contributed to the project's potential success in benefiting women in this value chain.

Partnerships: ASF's partnerships with local organizations were effective in quickly organizing FEGs for TAP implementation. Interviews with the local implementing partners and their closeout reports revealed two common implementation issues. First, ASF put little or no effort into connecting FEGs to markets. This reflects a limited appreciation for the value chain development approach and potentially limits results. Second, ASF often provided support too late for farmers to benefit fully, if at all. Frequent shifts in strategy, caused in part by USAID, coupled with ASF's problems delivering on grants and technical assistance, complicated implementation for the partners and damaged their reputation with their constituent communities.

Recommendations

- If and when USAID/Pakistan engages local partners, it should do so slowly with relatively modest projects where the negative consequences associated with up-front learning are small. Developing the necessary capacities after the award may delay implementation and limit results. The agency might also consider placing an experienced international firm in a mentoring or capacity-building role and giving it the authority, at least initially, to manage parts of the project.

- USAID/Pakistan should adapt the value of exports indicator to reflect a more meaningful measure of enhanced access to export markets. A more meaningful measure of export capacity might include trends in overall export sales, sales to new buyers or markets, or offering new products to export markets. Any of these would be more direct and feasible measures of increased access to export markets that are not as misleading as the current value of exports indicator.
- If USAID/Pakistan intends to continue supporting agricultural value chain development, it should consider continuing support to at least some of the more promising TAP-supported value chains and beneficiaries to give beneficiaries the additional technical assistance necessary to cement the lessons they have learned and address new challenges that arise as they gain experience with new technologies and practices. The most promising interventions seem to be HV/OSV and grape (FEGs and larger farmers), apricot orchards, and potato cellars.
- If USAID/Pakistan wishes to continue supporting the meat sector with a focus on developing export markets, it needs to take a more holistic approach. A development process that starts by building the capacities of processors to meet a small demand for quality, value-added meat products and linking these processors to export markets may create a demand for better quality meat animals that donors can then support by investing in building feedlot capacity and improving herd quality.
- To improve prospects for sustainability, USAID/Pakistan should require implementing partners to develop sustainability plans during the design phase, review the plans periodically to determine whether sustainability hypotheses are valid, and adapt implementation as necessary if the hypotheses do not hold true. Sustainability plans should be specific to each activity, i.e., in the TAP example, value chains.
- When building and/or strengthening institutions is an important component of a sustainability strategy, it needs to start early in the project so the institutions are engaged, strong, and sustainable. In similar future work, USAID should ensure that building and strengthening institutions occurs early in the project work plan and follow up to make sure it happens.

EVALUATION PURPOSE AND QUESTIONS

The evaluation is an end of project evaluation that takes place six months prior to the official close of the project on December 9, 2015. The Mission has already designed future projects that will focus on developing agribusinesses and agricultural value chains. The evaluation will help USAID/Pakistan's office of Economic Growth and Agriculture (EGA) make decisions about how the project(s) will be implemented. Furthermore, as USAID/Pakistan continues to emphasize implementing through local organizations, the Mission is particularly interested in recommendations and lessons learned regarding if, when, and how to use local organizations as implementing partners, and the evaluation will contribute to this learning.

The primary audiences for the evaluation include the USAID/Pakistan Mission, particularly EGA; the USAID Office of Afghanistan and Pakistan Affairs (OAPA); and the implementing partner, the Agribusiness Support Fund (ASF).

Evaluation Questions

The evaluation Statement of Work (SOW) posed two evaluation questions, each with a detailed explanation that elaborated on the question. The questions focused broadly on project design (i.e., did the project do the right things) and implementation (i.e., did it do things right). The final version of the SOW included a sub-question about the sustainability of results. With the AOR's concurrence, the evaluators created a third question by separating the issue of sustainability from implementation. Annex I contains the evaluation SOW with the completely elaborated evaluation questions. The Assignment Work Plan (Annex 2) includes the final evaluation questions. The top-line questions are:

1. To what extent was the revised project design relevant to achieving anticipated results?
2. To what extent were the project's activities and implementation approaches effective in contributing to achieving expected results?
3. To what extent, and how, are project interventions likely to produce sustainable results that will endure beyond project assistance? To what extent are non-beneficiary farmers or enterprises replicating project interventions?

At USAID/Pakistan's request, the evaluation focused only on the apricot, high-value off-season vegetable (HV/OSV), seed potato, grape, and meat value chains.

PROJECT BACKGROUND

The Agribusiness Project (TAP) originated from a concept note ASF presented to USAID/Pakistan after it completed the five-and-a-half year USD 21.6 million Agribusiness Development Project funded by the Government of Pakistan (GoP) and the Asian Development Bank (ADB).^{5,6} The proposed technical approach framed the project as a continuation, with some improvements, of the ADB-funded project.⁷ ASF stated that the ADB project was the largest award it had ever received, and it was the only award from an international donor that ASF mentioned during interviews. USAID/Pakistan personnel familiar with the award process reported that the embassy was very keen to work with a local organization, and the Mission's assessment of the sector found no other local organizations with the capacity to implement the project. The pre-award assessment conducted in January 2011 rated ASF as high risk, but the Mission ultimately awarded a non-compete sole source agreement to ASF in November 2011, before a follow-up pre-award assessment was completed.⁸

ASF management reported that it originally proposed a USD 50 million project, expecting USAID/Pakistan to reduce the award to around USD 30 million. Instead, USAID/Pakistan ultimately

⁵ Asian Development Bank. (2014). Validation Report: Agribusiness Development Project. Islamabad: Asian Development Bank. Accessed at: <http://www.adb.org/sites/default/files/PVR-354.pdf>

⁶ The project was originally approved at USD 49 million, but ASF spent only USD 21.6 million by the time the project closed. An independent evaluation concluded that actual expenditures fell short of anticipated expenditures because ASF did not complete many of the anticipated activities.

⁷ USAID/Pakistan. (2011). Cooperative Agreement No. AID-391-A-12-00001. Islamabad: USAID/Pakistan.

⁸ When it was completed, the follow-up pre-award assessment concluded that ASF had improved some of its processes and lowered the risk from high to medium.

awarded an USD 89.4 million agreement. Out of concern for ASF's capacity, USAID/Pakistan required ASF to partner with an international sub-contractor to provide technical assistance and services. The Citizens Network for Foreign Affairs (CNFA), a U.S.-based non-profit with experience in economic development and livelihoods, received the sub-award.

A 2013 Office of Inspector General (OIG) audit of TAP concluded that ASF did not have the capacity to manage the project. It also concluded that, 15 months into implementation, the project was behind on its targets for awarding grants, had made no progress in achieving its goal of creating jobs, and ran a risk of not achieving its first goal of contributing to broad-based economic growth. The audit attributed the lack of results to ASF's inexperience with USAID and its consequent difficulty developing compliant grants manuals and work plans. The audit also questioned the sustainability of grant-funded results for Farmers' Enterprise Groups (FEGs) and individual farmers.

In response to the OIG audit, USAID/Pakistan asked ASF to redesign the project with a reduced scope. ASF managers and USAID/Pakistan personnel describe the redesign as a collaborative exercise. An October 2014 modification (number 6) to the agreement formalized the parameters of the redesigned ("de-scoped" as ASF managers refer to it) project. The modification reduced the size of the award from USD 89.4 million to USD 39.9 million, cut the period of performance by one year, and incorporated a revised program description with a smaller scope. The revised project document limited the number of value chains to less than 10 and narrowed the geographic scope to clusters where the project could focus on transforming the value chain and providing effective demonstrations.⁹

Implementation

The overall goal of the revised TAP design is to "support improved conditions for broad-based economic growth, enhanced profitability, and employment opportunities and contribute to poverty alleviation through product and process transformation of selected value chains in the horticulture and livestock sub-sectors".¹⁰ The project has three objectives:

1. Strengthen capacities in horticulture and livestock value chains to increase sales to domestic and foreign markets;
2. Strengthen the capacities of smallholders (through FEGs, individual farmers, and agribusinesses) to operate effectively and efficiently; and
3. Increase productivity and profitability through the adoption of new techniques and technological innovations (among farmers, agribusinesses, and business development service providers).¹¹

During the revision, ASF reduced the number of value chains from 16 identified in the original work plan to eight¹² selected for their potential for "achieving quantitative impact on income and employment, as

⁹ Agribusiness Support Fund. (no date). The Agribusiness Project Revised Project Document. Lahore: Agribusiness Support Fund. Undated, untitled, electronic file provided by ASF and presumed to be the modified program description attached to agreement modification 6.

¹⁰ Agribusiness Support Fund. (no date). The Agribusiness Project Revised Project Document. Lahore: Agribusiness Support Fund.

¹¹ Agribusiness Support Fund. (2014). Agribusiness Project Performance Management Plan Update. Lahore: Agribusiness Support Fund.

¹² Bananas, chillies, citrus, apricots, grapes, seed potatoes, high-value off-season vegetables, and meat.

well as with respect to the distribution of benefit with respect to impacting small producers and enterprises.”¹³

The revised implementation approach includes two components, technical assistance and value chain transformation support. Annex 3 documents the locations of TAP’s work in the selected value chains.

Technical Assistance: The technical assistance component forms and strengthens FEGs so their small farmer members can adopt new technologies, learn new practices, and build their capacities to engage productively and profitably in agricultural value chains. The revised project document describes the strategy of engaging with FEGs as a means to reach a significant number of small farmers and reap the benefits of scale. Support may consist of grants to introduce new crops (e.g., grapes) or new production technologies and practices (e.g., HV/OSV, potatoes, and apricots). ASF always couples grants with technical assistance and training which, at a minimum, involves organizational capacity building but may also include training in production and marketing. ASF sub-contracted the tasks of creating FEGs and building their organizational capacities to established local non-governmental organizations (NGOs) in each region to leverage their connections with local communities and their experience creating and supporting community organizations. Annex 4 summarizes the regions and value chains each NGO supported.

The revised project document describes ASF’s strategy for engaging with FEGs as:

- Determining realistic expectations for their participation in the value chain and preparing them to perform the corresponding functions successfully;
- Partnering FEGs with players in subsequent legs of the journey to market; and
- Fostering relationships in which a fair share of production and post-harvest value added accrues to farmers.

The technical assistance component also includes institutional strengthening. This activity develops the capacities of private sector business development service providers (BDSPs) to provide the services required to contribute to growth in the agriculture and livestock sectors and links the BDSPs to project-supported agribusinesses. Institutional strengthening also incorporates building and strengthening umbrella organizations to represent the value chains and facilitate transformation. These organizations include Value Chain Platforms (VCPs), Farm Services Centers (FSCs) in Khyber Pakhtunkhwa (KP) province and the Federally Administered Tribal Areas (FATA), associations, and cooperatives.

Technical assistance also includes building producers’ and processors’ capacities to comply with international standards and the demands of international markets, e.g., certifications. This activity dovetails with the final activity of the technical assistance component, market access and linkages. This activity assists medium and large agribusinesses and FEGs in a number of ways, including conducting market assessments, developing marketing and branding strategies, organizing business-to-business meetings to establish commercial relationships, and facilitating participation in marketing and export promotion events to introduce agribusinesses to knowledge and potential buyers.

¹³ Agribusiness Support Fund. (no date). The Agribusiness Project Revised Project Document. Lahore: Agribusiness Support Fund. Undated, untitled, electronic file provided by ASF and presumed to be the modified program description attached to agreement modification 6.

Value Chain Transformation Assistance: This component provides grants to agribusinesses to support investments that strengthen and expand value chains. Examples include “farm diversification, greater market penetration and expansion, supply chain participation of small farmers, and product and market diversification by agribusiness enterprises”.¹⁴ Examples of these grants include establishing orchards of new (commercial) varieties of fruit, solar dryers for apricots, storage cellars for seed potatoes, and artificial insemination (AI) to improve the quality of meat animals.

Development Hypothesis and Intended Results

The results framework contained in the revised TAP Performance Management Plan (PMP) describes the project’s development hypothesis in broad terms. It implies that **if** the project strengthens market linkages **and** strengthens the capacities of smallholders and agribusinesses **and** introduces new technologies and practices, **then** the competitiveness of horticulture and livestock value chains will improve, **which will** increase income earning opportunities and **contribute to** improved conditions for broad-based economic growth.

Table 2 summarizes the 13 performance indicators on which TAP reports which point to some of the key intended results, at least from a Mission management perspective.

¹⁴ Agribusiness Support Fund. (no date). The Agribusiness Project Revised Project Document. Lahore: Agribusiness Support Fund. Undated, untitled, electronic file provided by ASF and presumed to be the modified program description attached to agreement modification 6.

TABLE 2: TAP PERFORMANCE INDICATORS

Indicator Definition and Standard Indicator Reference
Number of jobs attributed to program implementation (4.5-2)
Project-related household incomes of U.S. Government (USG) targeted beneficiaries
Value of incremental sales attributed to program implementation (4.5.2-23 modified)
Value of exports of targeted commodities as a result of USG assistance (4.5.2-36 modified)
Number of micro and small enterprises linked to larger-scale firms as a result of USG assistance to the value chain (Custom)
Number of micro, small and medium enterprises (MSMEs), including farmers, receiving business development services (BDS) from USG-assisted sources (4.5.2-37)
Value of new private sector investment leveraged with USG resources (4.5.2-28 modified)
Number of persons receiving training on skill development (Custom)
Number of entities (e.g., farmers or private enterprises) that have applied new technologies or management practices as a result of USG assistance (4.5.2-5 & 4.5.2-42)
Number of hectares under improved technologies or management practices as a result of USG assistance (4.5.2-2)
Number of USG-assisted organizations that participate in legislative proceedings and/or engage in advocacy at all levels (Custom)
Number of rural households benefiting directly from USG interventions (4.5.2-13)
Proportion of female participants in USG-assisted programs designed to increase access to productive economic resources (GNDR-2)

Source: Agribusiness Support Fund. (2013). The Agribusiness Project Annual Progress Report - II, October 1, 2012 - September 30, 2013. Lahore: Agribusiness Support Fund.

EVALUATION METHODS AND LIMITATIONS

The evaluation relied almost entirely on qualitative data with the exception of triangulating qualitative results against the quantitative data ASF reported to USAID/Pakistan. The evaluation team also drew from project reports, studies, assessments, and other documents (see complete list in Annex 5) to assemble a complete picture of the rationale for and elements of the design, implementation strategies, accomplishments, and lessons learned.

Data Collection

The evaluation team reviewed a large number of documents to collect information about project design, implementation strategies, and reported results. It collected primary data through individual and group interviews and direct observation of project interventions. The team's field data collection activities included 67 individual interviews with project beneficiaries (individual grant recipients) and stakeholders/participants (local partners/NGOs, BDSPs, technical assistance (TA) providers); 39 group interviews with FEGs; and interviews with 22 individuals involved in design (USAID/Pakistan, ASF) and/or implementation (ASF). Annex 6 contains the interview instruments. Table 3 summarizes the data collection methods the team used to answer each question and the sources of the data. Annex 7

summarizes the fieldwork schedule, interviews, and site visits. Table 15 in Annex 8 documents the distribution of interviews by value chain and beneficiary type.

TABLE 3: DATA COLLECTION METHODS AND SOURCES

Evaluation Question	Data Collection Methods and Type	Data Sources
Question 1: Design	Document review	USAID/Pakistan's Mission Strategic Framework TAP planning, agreement, performance, and implementation documents
	Semi-structured interviews	TAP staff members, USAID personnel
Question 2: Implementation	Harvesting secondary performance data	TAP monitoring and evaluation (M&E) data from databases and annual and quarterly progress reports
	Semi-structured interviews (qualitative)	TAP beneficiaries (individual grant recipients, IMAP participants, trainees), TAP staff members, local partners/NGOs, participating TA providers and BDSPs
	Group interviews	TAP beneficiaries (FEGs)
Question 3: Sustainability	Document review (qualitative)	TAP planning and other documents
	Semi-structured interviews (qualitative)	TAP staff members, USAID personnel, TAP beneficiaries (individual grant recipients, IMAP participants, trainees), TAP staff members, local partners/NGOs, participating TA providers and BDSPs
	Group interviews (qualitative)	TAP beneficiaries (FEGs)

Sampling

The team selected samples of key informants purposively to capture unique or particularly informed perspectives. These included ASF staff members, USAID/Pakistan personnel, ASF's local NGO partners, and TA providers. For all other interviews, the team selected samples randomly from among the beneficiaries and participants located in areas the team selected for site visits. Sites were selected based on the number of beneficiaries and participants within reach of the central locations in which the team stayed, coverage of major activities, and security. Based on these criteria, the team organized interviews in the areas in and around Islamabad, Lahore, Peshawar, and Gilgit with side trips to the districts of Chakwal, Attock, Charsadda, Manshera, Ghizer, and Hunza. One team member also traveled to Karachi to interview International Market Access Program (IMAP) participants. The districts the team could access from these central sites (the sampling frame) contained between 39 percent and 100 percent of the project's beneficiaries (and 63 percent overall), depending on the value chain and beneficiary type. Annex 8 describes the details of the sampling approach and characteristics of the sample.

ASF provided lists of all project beneficiaries in the selected value chains. The team filtered the lists to retain the selected districts, ordered the lists randomly, and contacted potential interview respondents starting at the top of the randomized lists until it had scheduled the required number of interviews. There is no formula for determining the number of interviews required for qualitative work, but the team selected the number of interviews per group or activity based loosely on the size of the group or activity (e.g., IMAP, meat sector training) and, when possible, tried for no fewer than four interviews per stratum. For example, ASF formed 335 FEGs focused on HV/OSV (55 percent of all FEGs). Consequently, 49 percent of the FEG sample consisted of HV/OSV FEGs. See Annex 8 for more detail.

Data Analysis

The data for the evaluation was almost entirely qualitative. The team used MAXQDA to prepare and analyze the qualitative interview data. The process of analysis included:

- Developed a detailed data analysis plan with table shells that summarized the data in a manner relevant to answering the evaluation questions. For example, one table cross-tabulates themes related to “satisfaction with implementation” in rows with respondent type and value chain in the columns. The frequency of responses in each cell indicated the level of satisfaction or dissatisfaction with a particular facet of implementation by value chain and value chain actor (e.g., FEGs, individual grant recipients, processors/exporters).
- Reviewed a subset of interview transcripts to identify common themes and develop a coding structure. In the context of the example above this meant identifying the facets of implementation respondents mentioned and their reasons for being satisfied or dissatisfied with TAP’s performance relative to that facet of implementation.
- Reviewed all interview transcripts to identify text segments that corresponded to the identified themes and used the software to “code” the segment, i.e., associate the theme with the segment.
- Populated the table shells developed in the data analysis plan with the frequencies of documents that contained one or more instances of a particular theme. Data from semi-structured interviews may contain multiple segments that illustrate a particular theme. Because the frequency of a theme within an interview does not reflect the intensity of the theme, especially in a group interview, using the document rather than coded segments as the unit of analysis is most appropriate.¹⁵ Annex 9 contains the tables the evaluation team developed to analyze the data.
- Looked for patterns of responses in the tables. For example, the tables might reveal a pattern of large frequencies associated with a particular code across respondent types or value chains. They might also reveal a pattern of large frequency values across many codes for a particular respondent type or value chain.
- Retrieved coded segments to develop a nuanced understanding of the story behind the observed patterns. For instance, if a large number of apricot FEG members expressed dissatisfaction with the design of the solar drying tunnels, the team reviewed the individual text segments to understand the aspects of tunnel design that were problematic.

When possible, the team triangulated the results of the qualitative analysis with quantitative data obtained from the project’s reports and M&E system.

¹⁵ This means that the tables reflect the frequency of documents that contain one or more instances of the theme and not the frequency of coded segments.

Data Limitations and Interpretation

Qualitative data are well suited to answering how and why questions but not well suited to collecting quantitative data. Differences in interview techniques, language barriers, general communication issues, the education level of respondents, and the potential for strategic behavior by respondents may all affect the consistency, validity, and reliability of the data. Specific limitations include:

- Qualitative data reflect respondents' perceptions of design, implementation, and results. Perceptions may differ from reality, vary from person to person, and be difficult to interpret without understanding the broader context.
- Qualitative data are well suited to explaining how and why interventions produce results, or fail to produce results; exploring how elements of design and implementation affect outcomes; and learning about contextual factors that may affect results. They are not appropriate for validating quantitative results. In the context of this evaluation, the qualitative data directly addressed the main evaluation questions but were not appropriate for directly validating the quantitative results ASF reported having achieved.
- Translation can lead to a loss of fidelity in qualitative data as can poor communication between interviewers and respondents. The team encountered several occasions where respondents had difficulty consistently discriminating between past and present experiences, comparing across time periods, or differentiating the effects of TAP from other development projects.
- Respondents may also respond strategically in hopes of receiving additional project support.

The team addressed these inherent limitations by developing instruments collaboratively to ensure a common understanding of the instruments; identifying inconsistencies in interviews and probing to resolve them; whenever possible, conducting interviews in the languages with which respondents were most comfortable; and probing to reveal contextual factors that could have affected results. The evaluation team adequately addressed most of the limitations and is confident in the overall validity of the qualitative data. Nevertheless, two interviews had to be discarded because interviewers could not resolve inconsistencies.

When discussing how a project was designed and implemented in a semi-structured interview, respondents are more likely to recall negative than positive aspects. The ratio of positive to negative responses to a particular aspect of the project is therefore meaningless. What is meaningful is the content and frequency of responses which reveal the extent of a perception and the nature of the positive or negative reaction. Similarly, in a semi-structured interview setting it is not possible to interpret "no response." For example, if an individual or group fails to mention the effects of project interventions on potato production, it could mean that they did not experience a change or that they failed to mention a change. Keeping these limitations in mind, the analysis focuses on frequencies of responses rather than ratios of positive to negative responses and does not try to infer the meaning of "no response."

Finally, ASF's progress reports did not provide a consistent time series dataset of indicators or other performance data. Reports often reported achieving a result that was merely in progress rather than completed. Most reports did not disaggregate key results by value chain or value chain actor. These deficiencies made it very difficult for the evaluation team to compile a clear picture of the evolution of project results or to triangulate quantitative with qualitative results.

FINDINGS AND CONCLUSIONS

In a departure from the usual organization of evaluation reports, this section presents findings and conclusions by value chain or component (i.e., apricot, grape, HV/OSV, potato, meat, IMAP, challenge grant) rather than by evaluation question. This organization allows the authors to tell an unbroken story for each value chain that tracks the value-chain-specific intervention from design through to results. The organization frames findings on design, implementation, and sustainability in the broader context of the specific value chain. The conclusions section summarizes conclusions by evaluation question.

Each section begins by describing the development problem in the particular value chain and TAP's strategy for addressing the problem, i.e., the project design. The narratives then draw on the qualitative and quantitative data to describe, in turn, the intermediate outcomes associated with the interventions (i.e., changes in technologies and practices, changes in quantities produced), the long-term outcomes that follow from achieving intermediate outcomes (i.e., value of sales, number of jobs created), and the prospects for sustainable results.

In the apricot, grape, HV/OSV, and potato value chains, TAP supported FEGs and individual grant recipients with different interventions. These sections follow the outline described in the previous paragraph to present findings first for FEGs and then for individual grant recipients.

Apricot Value Chain

ASF's assessment of the apricot sector in Gilgit-Baltistan (GB) reported that the region has great potential for apricot production and is, in fact, one of the main apricot-producing regions in the country.¹⁶ Most rural households cultivate apricot as a cash crop and for home consumption. The report concluded that developing the apricot sector has the potential to accelerate growth of rural economies in the region and offers good opportunities for income and employment in apricot processing. Furthermore, women are largely responsible for cultivating and processing (drying) apricots.

However, there are many barriers to fully realizing the potential of apricot in the region. Many of the apricot varieties are not commercially valuable; fresh apricots are very perishable; poor transportation infrastructure and distance from main markets inhibit access to markets for fresh fruit; commercial scale processing (i.e., drying, pulping) capacity in the region is very limited; and traditional processing (drying) methods by which most apricots are preserved for sale (largely by individual households) have limited capacity and do not meet standards for high-end or export markets. All of these factors contribute to a high level of waste driven largely by non-commercial varieties, limited capacity to preserve large quantities in the short period of time available after harvest, and traditional drying methods that expose fruit to damage from rain and contamination.

To address the limitations of the apricot value chain in GB, TAP:

¹⁶ Agribusiness Support Fund. (2014). The Agribusiness Project (TAP) Gilgit-Baltistan Apricot - Value Chain Competitiveness Assessment. Lahore: Agribusiness Support Fund.

- Formed 80 apricot FEGs. The FEGs were comprised largely of women with a total of 599 female members and 201 male members. The numbers are suspect, however, since ASF's data lists only men as members of several "women's" groups. Furthermore, the seven randomly selected apricot FEGs the evaluation team interviewed were comprised entirely of women. TAP provided grants to individual FEG members to construct a total of 800 solar drying tunnels and supported the grants with training in drying. TAP anticipated that the dryers and technical assistance would increase drying capacity, improve quality, and increase income from sale of dried apricots (largely for women).¹⁷
- Provided individual grants to establish 18 apricot orchards with commercial apricot varieties. ASF expected the orchards to serve as demonstrations of commercially oriented production and thus contribute to broader adoption of commercial varieties and improved practices.
- Provided individual grants for 33 commercial scale solar dryers, perhaps 15 of which were used for apricots.¹⁸ ASF expected the solar dryers to increase processing capacity and provide a market outlet for a greater quantity of fruit.

Apricot FEGs

All seven apricot FEGs the evaluation team interviewed reported receiving solar drying tunnels and training (Table 16 in Annex 9). The grants to FEG members introduced technologies and practices they would probably not have adopted otherwise. Two of the seven FEGs reported that they were not aware of the technology prior to TAP. Three of the seven, however, said they were aware of the technology (two because of prior projects and one because a neighboring farmer had a drying tunnel) but could not afford to implement the technology without financial assistance. Six of the seven FEGs reported attending a four-day training that covered harvesting, washing, grading, drying, packing, storing, and marketing. One of these groups said that the trainer demonstrated processing techniques with a machine and the FEG does not have access to a machine. One group mentioned training in pruning and one in jam-making.

All seven FEGs reported changing their practices as a result of the drying tunnels and training (Table 20 in Annex 9). In particular, all seven mentioned changing from traditional drying methods outdoors on trays, stones, or rooftops to the tunnels. The benefits of improved drying techniques included reduced waste (6 of 7 groups), faster drying times (3 of 7 groups), and less work (1 of 7 groups).

"Before using these solar dryers we used to dry apricots through traditional techniques, i.e., putting all the produce into stick trays and placing them on the rocks in sunlight for days. That technique took apricots six to seven days to dry if there was no rain and/or winds. Additionally, it took a lot of hard work, for instance taking all the baskets inside the house (indoors) at night to prevent the produce from getting damaged from humidity and possible rainfall at nighttime." (Apricot FEG)

¹⁷ TAP M&E data and Agribusiness Support Fund. (2013). The Agribusiness Project Annual Progress Report - II, October 1, 2012 - September 30, 2013. Lahore: Agribusiness Support Fund.

¹⁸ The data provided by ASF does not identify the use of the dryers. However, 15 grants were awarded to recipients in GB where TAP supported only apricot and seed potato.

Six of the seven FEGs reported increasing the quantity of (dried) apricots they produced. They attributed the result to improved post-harvest practices that replaced traditional drying practices and reduced waste (6 of 7 groups - see previous paragraph).

Even though the tunnels and training increased the quantities of dried apricots the FEGs produced, none reported increasing the value of sales (Table 24 in Annex 9). Two of the seven said it was too early to tell. They were using the tunnels for the first time and had not yet sold what they were currently drying. They both said that the quantity and quality were better than what they were able to achieve using their traditional methods, and they were hopeful that the price would be good, citing market prices of Rs. 15-20 per kg for poor quality (faded color) apricots and up to Rs. 100 per kg for colorful and clean apricots.

Regarding employment, none of the seven FEGs reported increasing employment. The three that spoke directly to the issue said that apricot production was a family business and, while they helped each other when necessary, they had no culture of hiring labor. The four that spoke about the role of men and women in apricot production and processing said that women performed the bulk of the labor. Men helped with harvesting and marketing, but women did all of the processing work.

The FEGs were dissatisfied with three aspects of implementation, all related to the tunnels (Table 32 in Annex 9). All seven reported that heat, high winds, and heavy rains had destroyed the plastic covering on the tunnels. All of the members of one FEG and at least some in another FEG (both of whom were using their tunnels for a second season) reported losing much of their crop in the previous season because the tunnels were not adequately ventilated, which increased humidity to a level that spoiled the apricots (i.e., turned them black). They reported that ASF replaced the tunnel ends with breathable mesh in the second year and they were experiencing no problems. The mesh also reduced stress on the plastic during harsh weather and solved the problem of damage due to wind. ASF personnel confirmed the design flaw. None of the four FEGs that had received their tunnels the following year mentioned this issue. Six of the seven groups said that the tunnels were too small to dry large quantities of apricots and wanted larger tunnels so they could use them for other purposes as well, e.g., vegetable production and drying. Six of the seven groups reported that the Aga Khan Rural Support Programme (AKRSP, ASF's local partner) had installed the tunnels near or at the end of the drying season in 2014, so they did not have a full season of experience with the tunnels.

When asked whether they would continue to use the practices they had learned and what might cause them to stop, only two FEGs voiced concerns about continuing the practices, and their concerns were related to the anticipated expense of replacing the plastic covering if it was damaged.

It was not possible with the data provided by ASF for the evaluation team to determine the value of sales or employment ASF attributed to its activities with apricot FEGs.

Conclusions: ASF support was instrumental in relieving financial and awareness constraints to adopting solar drying technologies. The tunnels and training (the project design) were relevant and effective interventions for apricot FEGs. They changed production practices and increased the quantities of dried apricots the FEGs produced, largely by reducing waste, women's work load, and drying time. Because the interventions increased the quantity, quality, and price of dried apricots produced, there is good reason to expect that the tunnels will contribute to increased value of sales as the women gain experience. ASF's only apparent misstep in implementation was the initial design of the tunnels (insufficient ventilation), and it corrected the design quickly and effectively. At the FEG level, the apricot value chain holds little potential to create jobs but does effectively engage, and materially benefit, women. It is too early to assess the sustainability of results. However, the sustainability of any long-term outcomes that do eventually materialize depends on the sustainability of the tunnels, and two of seven FEGs questioned their ability to repair the tunnels if they were damaged.

Individual Grant Recipients

The six individual grant recipients the evaluation team interviewed in the apricot value chain received grants to establish orchards of improved (commercial) varieties. A majority (i.e., at least four) grant recipients reported receiving plants, training (orchard management), tools (for pruning), and infrastructure (poles and wire for a perimeter fence). Two of the six grant recipients said they would not have established the orchards without ASF because they had not considered organized orchards. Four of six said that they could not have afforded the cost of establishing the orchard without assistance.

Only two of the six grant recipients reported changing their practices as a result of TAP, and both mentioned pruning (Table 21 in Annex 9). Since the orchards had not reached bearing age, none of the grant recipients reported changes in production or sales (Table 24 in Annex 9). Five of the six orchard owners reported hiring labor specifically for the orchard – two had permanent workers managing the orchards and four reported hiring casual labor to establish the orchards and build fence (Table 28 in Annex 9). One anticipated that the orchards would require more labor when they started producing fruit, especially for women in picking and processing.

ASF did not report consistent data on results for apricot orchards. The disaggregated second quarter 2015 data provided by ASF reports seven full-time equivalent (FTE) jobs created to establish apricot orchards. The value does not seem unreasonable based on the evaluation findings.

Conclusions: TAP assistance establishing commercial apricot orchards addressed the financial constraints farmers faced adopting the practice. It is too early to determine whether the orchards (the project design) are an effective intervention in terms of the long-term outcomes of leading a transformation to commercially oriented production practices. In the short run, however, there is every reason to believe that the trees will produce fruit and contribute to owners' sales and incomes. Sales will depend on being able to get fresh fruit to markets or processing it, but ASF's assessment of the value chain suggests that commercial varieties are rarely wasted, so there is good reason to believe that the orchard owners will find markets once the trees begin to bear fruit.¹⁹ Once they are mature, the orchards are likely to generate some jobs managing orchards and seasonal jobs in harvesting and processing.

Grape Value Chain

In interviews, ASF staff members reported that the Potohar region (the districts of Jhelum, Rawalpindi, Chakwal, and Attock) in northern Punjab provide an ideal opportunity for producing table grapes. The region can produce early-ripening varieties (Kings Ruby and Seedless Flame) that reach the market before it is glutted with other varieties and before the monsoon rains damage the crops.

Prior to the de-scoping, ASF established 20 grape-oriented FEGs and provided 17 grants to individual farmers to establish vineyards. ASF discontinued its work on the grape value chain during the de-scoping but reinstated it in October 2014 due to demand from producers and USAID/Pakistan's interest.²⁰

¹⁹ Agribusiness Support Fund. (2014). The Agribusiness Project (TAP) Gilgit-Baltistan Apricot - Value Chain Competitiveness Assessment. Lahore: Agribusiness Support Fund.

²⁰ USAID/Pakistan. (2014). Modification of Assistance No. 7. Islamabad: USAID/Pakistan.

When ASF resumed its work in the grape value chain after the de-scoping, it shifted focus away from FEGs to building the capacity of larger vineyard owners to support commercial grape production.²¹ An interview with the National Rural Support Programme (NRSP), ASF's local implementing partner in the region, confirmed this shift in focus.

In the third annual report, ASF reported that it had:

- Formed 17 grape-oriented FEGs and provided the FEGs with grants for trellises sufficient to establish three-acre vineyards and with tools and training to produce grapes.
- Provided grants to 80 individual farmers to establish three-acre vineyards. ASF staff members reported that the rationale for establishing these orchards was to demonstrate the opportunities in the grape sub-sector to other farmers and thus encourage replication.

Grape FEGs

The evaluation team interviewed six of the 17 ASF-supported grape FEGs.²² The six FEGs reported receiving trellises (4 of 6 FEGs), tools (3 of 6 FEGs), and training (4 of 6 FEGs) (Table 17 in Annex 9). Four of the FEGs reported receiving the trellises in 2013 and two received them in 2014. In addition to the trellises, one FEG member received netting to protect the fruit from birds (ASF provided a limited number of nets as a demonstration) and reported installing drip irrigation on his own. Tools included a pruning saw, a cutting tool for harvesting, and a first aid kit. Two of the FEGs said that ASF provided just one set of tools for all FEG members to share. The FEGs reported receiving training on erecting the trellis system, planting, and disease and pest management. The story that emerges from the FEG interviews suggests that ASF conducted most of these trainings in venues other than the farm and trained just a few members from each FEG. One FEG member specifically said that training did not include business training.

None of the FEGs would have cultivated grapes without TAP support. All five of the FEGs that addressed the question said they had no knowledge of grapes and had not considered growing them (Table 19 in Annex 9). One FEG said they could not have afforded the trellises on their own even if they had known of the opportunity. Because they had no prior experience, producing grapes represented a new practice for all of the FEGs.

Because it was their first experience with grapes, the FEGs were not able to say whether quantities produced had increased. The three who spoke about production said they were not sure about the quantity they could ultimately produce because they had only recently established the vineyards (one in 2013 and two in 2014) and they were not fully mature (Table 23 in Annex 9). One reported producing 300 crates of grapes (2,100 kg) from the three-acre vineyard. Because of immature vineyards and limited production, the three FEG that reported selling grapes sold limited quantities. The one that gave detailed information about sales reported selling 2,100 kg for Rs. 40,000 (Rs. 57/kg). One reported earning between Rs. 70,000 and 80,000 selling grapes and the other reported receiving between Rs. 500 and 700 per crate for Kings Ruby. In spite of limited production and experience so far, however, the FEGs were quite optimistic about their prospects with grapes. The project's performance data for the

²¹ USAID/Pakistan. (2014). Modification of Assistance No. 7. Islamabad: USAID/Pakistan.

²² The sample included seven FEGs but one was not active and the team could not conduct an interview.

second quarter of 2015 reports no sales for grape FEGs because ASF collected the data before the harvesting season.

“Now due to this assistance things have changed, for example previously by cultivating a land of three acres we could not earn more than 100,000 per year. However now, thanks to Allah, with this assistance things will improve. Like for example this year (year two of plantation) even though we had some diseases and early rains and humidity affected our crop we still sold about Rs. 70-80,000 worth of grapes.” (Grape FEG)

In grapes in particular, it was very difficult to determine whether farmers were employing additional labor. Larger farmers, and even some FEG members, employed permanent workers who lived on the farm, and they shifted these workers between tasks as necessary. It was sometimes difficult to determine whether a worker in a vineyard represented a new job or merely a new task for an existing employee. It does seem clear, however, that at least three of the FEGs had hired additional labor to manage the vineyards (Table 29 in Annex 9). Three mentioned hiring full-time employees to keep an eye on the vineyard, although these workers do not necessarily work only in the vineyard or represent new employees. Three FEGs also specifically said they employed casual labor for weeding and harvesting. The same caveats apply, i.e., that it is difficult to determine whether these workers represent new employment. The five FEGs that provided an answer all said women have no role in producing grapes. If they have any role at all, it is in packing grapes after harvest, a job they can perform inside their homes. ASF's second quarter 2015 M&E data reports that grape FEGs employed eight FTE workers during the quarter, a value that seems reasonable in light of the interview data.

Five of the FEGs said they expected to continue producing grapes (Table 31 in Annex 9). Four cited the substantial investment they had made in the infrastructure. Two acknowledged that, while they were optimistic, sustaining the intervention would depend on profitability. One alluded to the difficulty of repairing trellises but implied that they would manage to do so. Of five FEGs that responded to questions about replication, three reported that neighboring farmers had observed their vineyards and replicated the model.

A majority of grape FEGs voiced issues with tools (5 of 6 FEGs), infrastructure quality (3 of 6 FEGs), infrastructure design (5 of 6 FEGs), training (5 of 6 FEGs), and timing (5 of 6 FEGs). Table 4 provides additional detail about the nature of the issues.

FEGs viewed nets as critical to the success of their vineyards and were disappointed that ASF did not provide nets. ASF also appears to have had difficulty providing the material for trellises on time or in the quantities FEGs expected.

Conclusions: TAP support was instrumental in encouraging FEGs to invest in grapes. While a few FEGs knew about grapes, none had considered producing grapes themselves. In addition to lack of awareness, without external support FEGs could not afford the investment in trellises necessary to produce grapes. Whether the design (i.e., trellises) is effective will depend on future production and sales. The farmers were optimistic that grapes will be more profitable than the alternatives but, because vines are not yet fully mature, they have no direct experience. The value chain seems to offer prospects for full-time and casual labor (for men) but it is difficult to determine actual requirements for new labor. From an implementation perspective, most FEGs complained that ASF provided the trellises too long after they planted the vines. FEGs also reported suffering large losses due to birds and were disappointed that ASF had not provided nets, material many could not afford on their own. The sustainability of results is questionable for these FEGs if they cannot limit bird predation. There is reasonably strong evidence that other farmers are attempting to replicate ASF-promoted grape production techniques on their own based on the demonstration effect of the FEG intervention.

TABLE 4: IMPLEMENTATION ISSUES – GRAPE FEGs

Issue	Detailed Issues	Number of FEGs
Tools	Poor quality tools relative to expectations	1 of 5 FEGs
	Received traditional tools they already have, not advanced designs they expected	2 of 5 FEGs
Infrastructure design	Need nets to keep birds from damaging crop	5 of 5 FEGs
Training	Need additional training (business, pruning, disease identification and treatment, marketing, storage)	3 of 5 FEGs
Timing	Pillars and wire arrived too long after plants (ASF recommended setting the trellis 3 months after planting and it took between 7 months and a year to receive the trellises.)	4 of 4 FEGs
Infrastructure quality	Quantity of pillars and wire not sufficient for area and less than promised	2 of 3 FEGs
	Poor quality pillars and wire	2 of 3 FEGs

Individual Grant Recipients

The evaluation team selected five grant recipients for interviews. However, nobody was available for an interview at one site, and the farm, including the vineyard, was untended and appeared not to be actively farmed. The findings are thus based on four interviews. Consistent with the design of the intervention, a majority of the five individual grant recipients reported receiving plants (3 of 4 recipients), training (4 of 4 recipients), and trellises (3 of 4 recipients) (Table 17 in Annex 9). Training topics included vineyard management, water management, integrated pest management, pruning, disease identification and management, basic accounting and record keeping, marketing, and trellis construction. Four of the five also said ASF had taken them to visit established vineyards, and two of the four said the visits were instrumental in their decisions to invest.

All grant recipients were relatively well-off landowners with adequate financial resources. Only one, however, had any experience growing grapes, and he reported having only a couple of rows of vines. Of the three recipients who responded to the question, two specifically said they had the financial resources to invest in grape production, but all three said they lacked awareness of the opportunity (Table 19 in Annex 9).

Since three of the four grant recipients the evaluation team interviewed had no previous experience producing grapes, the technologies and practices TAP introduced represented new practices. One specifically said that the most important change in his practices was keeping accurate records of inventory, expenses, and income. Similarly, since it was a new activity for most grant recipients, they could not respond to whether TAP had increased the quantities of grapes they produced or the value of sales. Only one grant recipient, the one with existing vines, reported selling grapes. Three others said their vines were immature and they had nothing to sell. The project's M&E data reported no sales in the second quarter of 2015.

Three grant recipients reported employing additional labor for the vineyard (Table 29 in Annex 9). One reported hiring a permanent vineyard management expert; one reported shifting two existing permanent employees to the vineyard and also hiring 8 to 10 casual laborers during the working season (i.e., weeding, pruning, harvesting); and one said he had hired some casual workers to help erect the

trellises. One also said he had allocated two permanent employees to the vineyard and employed three to four casual laborers for two weeks per month to help. None reported employing women, and all three recipients who responded to the question said that women played no role in grape production. ASF reported that individual grant recipients in the grape value chain created about 28 FTE jobs in the second quarter of 2015. Spread across 80 vineyards, this value seems not inconsistent with the interview data.

When asked whether they intended to continue producing grapes, two of the grant recipients said they expected to sustain the practice. One cited the fact that he is replacing damaged plants as an indicator of sustainability. The other implied that he would decide on the basis of future (i.e., when the vineyard matured) profitability but, citing the experience of a friend in the business, he was confident it would be profitable.

None of the four grant recipients said that other farmers (i.e., not involved in TAP) had adopted the TAP-promoted technologies and practices for grape production. However, three of the four grant recipients the evaluation team interviewed said visits to established vineyards helped convince them to invest. Two said that limited access to irrigation, the cost of waiting three years for a result, and unwillingness to invest in proof of concept for high risk activities may curb other farmers' interest. One also said that limited access to BDSPs and technical assistance were important barriers to replication. One recipient said that the trellises were now readily available in the market, which would facilitate replication.

“As mentioned earlier that the vineyard is only one year old. At present, profit earning is not the purpose. I just want to make it successful in terms of crop establishment. However, my friends who are engaged in the vineyard business are earning good money. A friend from Attock has earned about Rs. 2,800,000 from sale of grapes over an area of 50-60 kanals in a year. That shows that it is going to be a profitable business.” (Grape grant recipient)

Grape grant recipients had no major complaints about implementation.

Conclusions: Individual grant recipients were relatively well-off landowners with other sources of income and were looking for investment opportunities. Visits to farms with active vineyards and ASF's outreach convinced them that grapes represented a promising opportunity. Whether the project is pursuing an effective strategy remains to be seen since most of the vineyards were not yet mature (all four established their vineyards in early 2014) so none of the farmers had produced or sold significant quantities of grapes. The experience of established orchards, however, implies that the design is appropriate. Some recipients appear to have hired some labor and many had assigned permanent workers to the vineyards, but it is difficult to determine the nature of employment effects. What is clear is that women play no role in the grape value chain, at least at the production level. The intervention and results appear sustainable, but ultimately sustainability will depend on profitability. ASF appears to have effectively implemented activities with individual grant recipients in the grape value chain.

HV/OSV Value Chain

ASF's assessment of the HV/OSV value chain concluded that the demand for vegetables in the winter months is strong and that Pakistan has a comparative advantage (based on growing conditions,

inexpensive labor, and geographic proximity) to serve these markets.²³ However, it also identified a number of constraints to increasing the competitiveness of the industry. These include the lack of institutional support for developing markets; limited access to trade finance; low air transport capacity; lack of cold chain infrastructure; production and post-harvest practices that result in high losses and do not meet international demands and standards; and limited availability of production credit.

ASF's strategy in the HV/OSV value chain was to build the capacities of small and larger farmers to produce high-value vegetables and extend the season to provide some portion of production at times when the quantity supplied to the market was low and prices high. Interventions with FEGs and individual farmers focused on domestic markets, while those with traders/exporters (addressed through challenge grants and IMAP) addressed some of the constraints to international market access. TAP's farm-level interventions in the value chain included:

- Forming 335 FEGs in GB (53), KP (222), and Punjab (60). The evaluation team interviewed HV/OSV FEGs in KP (12), Punjab (6), and GB (1).²⁴ The implementation approach varied by region. Interviews with FEGs and local partners revealed that:
 - The Rural Community Development Society (RCDS), the local partner in Punjab, provided tomato and cucumber seed; comprehensive training in production, harvesting, grading, packaging, marketing techniques, and business development; and tools and equipment (cultivation tools, harvesting baskets, scales, packaging material, wheel barrows, and watering equipment).
 - The Sarhad Rural Support Programme (SRSP) (the local partner in Peshawar) and the Hashoo Foundation (the local partner in Mansehra) provided poles and wire to construct structures for vertical farming; cultivation and harvesting tools and equipment (wheelbarrows, cutting tools, cultivating tools, and baskets); hybrid seeds (bitter gourd, tomato, cucumber, green chilies, round gourd, and straight gourd);²⁵ and extensive training on vertical farming, cultivation practices, harvesting, business development and recordkeeping, and marketing.
- Provided 315 grants to individual farmers to construct high tunnels for producing vegetables. Table 14 in Annex 8 documents the distribution of these grants across regions.

HV/OSV FEGs

TAP's support to HV/OSV FEGs varied by region. FEGs in KP and Punjab reported receiving hybrid seeds, tools and equipment (cultivation tools, harvesting baskets, scales, packaging material, wheel barrows, and watering equipment), and comprehensive training in production, harvesting, grading, packaging, marketing practices and techniques, business development, and recordkeeping (Table 17 in Annex 9). The primary difference between implementation approaches in the two regions was that SRSP

²³ Agribusiness Support Fund. (2014). The Agribusiness Project (TAP) HVOSV - Value Chain Competitiveness Assessment for Bitter Gourd, Capsicum, Cucumber, Tomatoes, Squash. Lahore: Agribusiness Support Fund.

²⁴ Table 14 in Annex 8 documents the distribution of FEGs and the sample across regions.

²⁵ SRSP provided seed for bitter gourd, tomato, cucumber, and straight gourd. Hashoo Foundation provided seed for tomato, cucumber, round gourd, and green chilies.

and the Hashoo Foundation (the local partners in Peshawar and Mansehra, respectively) promoted structure/vertical farming,²⁶ while RCDS in Punjab did not.

FEGs reported changing a number of practices (Table 21 in Annex 9). The most common were changes in general production practices (14 of 18 FEGs), new seed varieties (5 of 18 FEGs), and cropping patterns and marketing (4 of 18 FEGs each). Changes in production practices referred to structure farming (5 of the 14 FEGs from KP), changing from broadcasting seed to planting in rows with specified spacing (4 of 14 FEGs), and using small tunnels to establish seedlings early (3 of 14 FEGs).

Fourteen of the 18 FEGs reported that the new production practices increased the quantity of vegetables they produced. They attributed the increase to reduced waste, higher yields, and new technologies and practices (Table 22 in Annex 9). They attributed reduced waste to structure farming, using proper baskets and bags for harvesting and transportation, and to training that helped them identify and treat diseases. They attributed higher yields to improved seeds, longer producing seasons, and structure farming. New technologies and practices referred to better quality seeds and structure farming (Table 5).

TABLE 5: REASONS FOR INCREASED PRODUCTION

Reasons	Number of FEGs	Detailed Reasons	Number of FEGs
Reduced waste	12 of 18	Structures that kept vegetables off the ground	6 of 12
		Proper baskets and bags that reduced damage during harvest and transportation	4 of 12
		Training to identify and treat diseases	3 of 12
Increased yield	11 of 18	Hybrid seeds that were more productive	4 of 11
		Longer producing season	4 of 11
		Structure farming	3 of 11
New technologies and practices	7 of 18	Better quality seed	5 of 7
		Structure farming	2 of 7

“On average we have earned Rs. 500,000 to 600,000 per acre [with bitter gourd] as compare to Rs. 200,000 per acre in traditional way of cultivation.” (HV/OSV FEG)

“Using structure farming, we produce 12 to 15 bags yield per canal [compared to 5 to 7 bags using traditional methods], and we collect the produce every four days. Also the structure farming and use of new seeds gives us yield till even four months.” (HV/OSV FEG)

“Prior to support from TAP we used to grow vegetables during specific months (five to six months a year – because we also used to grow sugar cane) and now the cultivation is carried out almost all the year.” (HV/OSV FEG)

²⁶ Farming on trellises that keep vegetables off the ground.

Ten of the 18 HV/OSV FEGs reported increasing the value of their vegetable sales. Two who reported the value of sales noted values between Rs. 130,000 and Rs. 150,000 per year. None said the value of sales had stayed the same or declined (Table 24 in Annex 9). The 10 FEGs that reported increased value of sales attributed the increase to producing (and selling) larger quantities (7 of 10 FEGs), changing cropping patterns (3 of 10 FEGs), and obtaining higher prices due to grading and learning how to market (2 of 10 FEGs). The project reported incremental sales of USD 363,445 among HV/OSV FEGs in the second quarter of 2015, an average of USD 1,084 (Rs. 108,400) per FEG, values that seem roughly consistent with the thin interview data.

“While growing sugarcane which was the most expensive (selling) of our traditional crop (wheat and corn) from one kanal of land we would make production of about five mann (one mann = 40 Kg) making a profit of about Rs. 20,000 per season. While bitter gourd at time of harvesting would give us 40 bags per week and we would sell one bag for Rs. 120, so in [just] a month during harvesting season we would make 25,000-30,000 so the profit difference is quite huge.” (HV/OSV FEG)

Of the 18 HV/OSV FEGs the evaluation team interviewed, 8 reported hiring additional labor and 10 reported no change in employment (Table 28 in Annex 9). The eight FEGs that reported hiring more labor attributed the requirement to increased quantities produced, a longer producing season, and more labor-intensive structure farming methods (e.g., time tending plants). Specifically, the eight FEGs said they needed extra help with harvesting (5 of 10 FEGs), tending the growing crop (5 of 10 FEGs), and loading trucks for transport to market (1 of 10 FEGs). Although the group interviews with FEGs did not yield quantitative measures of new employment, the evidence suggests that additional employment could be substantial and engage a large number of women. Eight FEGs said they employed only men, three said they employed mostly women, and five said they employed men and women. The project’s performance data for the second quarter of 2015 reported 692 new FTE employees in project-supported FEGs, 67 percent of which were women. Spread across 335 FEGs, this implies just under one-half FTE (i.e., one person employed for six months) per FEG on average, a value that does not seem inconsistent with the interview data.

“Only additional labor was required at the time of harvest. So structure farming has increased the number of days almost four times as compared to before. Before if they were required for 10 to 12 days, now we require additional labor for three months on average if we take six months season.” (HV/OSV FEG)

A number of HV/OSV FEGs were very satisfied with the hybrid seeds (8 of 18 FEGs) and training (5 of 18 FEGs) they received through TAP (Table 34 in Annex 9). They found these interventions to be relevant, beneficial, and effective. However, FEGs also voiced a large number of complaints about project implementation. The most frequent complaints involved the timing of the intervention (10 of 18 FEGs), infrastructure design (8 of 18 FEGs), and training (6 of 18 FEGs). It is important to note that 4 of 18 FEGs (all among the 6 from Lahore) were dissatisfied with the quality of cucumber seed they received.

Issues with timing included seeds arriving after the best season for planting (6 of 10 FEGs) and seeds and structures provided later than promised/expected (3 of 10 FEGs). Issues with infrastructure design focused on dissatisfaction with bamboo instead of steel structures (7 of 8 FEGs). It is important to note that FEGs were not promised steel but merely expressed a preference for it over bamboo. FEGs were not dissatisfied with the training per se, they just wanted more of it (4 of 6 FEGs) and training in marketing (2 of 6 FEGs).

“Due to late receiving of seeds we didn’t cultivate any other vegetables on the 25 kanal for six months. ASF has wasted our time and money and now we are doing work as a laborer in

others' lands due to huge loss. If they had given money for the seeds instead we would have purchased good quality seeds and on proper time.” (HV/OSV FEG)

“Another thing is that if we were allowed to buy the same structure for ourselves and were only provided with cash grant support for this, the quality of material used for these structures in structure farming would have been better. Because bamboos didn't work for us, they were damaged after some time. Now, almost 60 to 65 per cent of the bamboos have been replaced by us on our own.” (HV/OSV FEG)

The four FEGs that were dissatisfied with the quality of the seed they received were all from Lahore and all received cucumber seed. The same four FEGs complained that ASF delivered the seed too late to plant at the correct time.

When asked whether they would continue using the technologies and practices they learned through TAP, 11 FEGs said yes and 2 said no (Table 30 in Annex 9). The two who said they would not continue the practices cited not being able to find certified vegetable seeds in the market. Those who said they would continue cited the profitability (6 of 11 FEGs) and the investment in the structure (5 of 11 FEGs). One of the FEGs demonstrated sustainability by replacing the structure's bamboo poles when they rotted.

“We have stopped the cultivation of vegetables because we didn't find that seed in the market and it's also expensive too. And vegetable is more profitable than the maize, wheat crop. So we want it to continue if we are provided with the seeds.” (HV/OSV FEG)

“But most importantly we need more seed especially hybrid seeds. We can buy them from market but in market the seeds are very low quality and it is difficult to find the trustworthy dealer or seeds locally.” (HV/OSV FEG)

“We will use this practice for sure. For example some of the bamboos provided by TAP are not useable now, but we have replaced the damaged ones from our own pocket. As soon as one bamboo is damaged or is not good enough to use (to stand firm or to hold intact) we immediately replace it.” (HV/OSV FEG)

“We will not stop using this practice. It is much better than before. We will even go for loans but we will not stop using structure farming.” (HV/OSV FEG)

Conclusions: Interventions with HV/OSV FEGs were largely well designed and effective. A large majority of FEGs adopted the new technologies and practices, especially the hybrid seeds and vertical farming structures, and substantially increased their production and sales as a result. Increased sales were driven by both quantity and quality/price even though most FEGs reported selling through their normal channels in local mandis which do not generally reward quality. FEG-level vegetable production also generates a substantial number of jobs, many open to women, due to more labor-intensive production practices and harvesting larger quantities over a longer period of time. Sustainability of results seems likely, especially since the structures are relatively low-cost and quite profitable relative to the alternatives. In fact, several FEGs reported maintaining the infrastructure. The apparent difficulty finding good quality hybrid seeds in the market may threaten sustainability. ASF struggled to provide inputs (seeds) on time and of good quality, although this problem seems largely confined to Lahore.

Individual Grant Recipients

All individual HV/OSV grant recipients received four high tunnels in which to cultivate vegetables. The tunnels and associated training facilitated off-season production, incorporated vertical structures on

which to cultivate high-yielding varieties, and improved quality and yield by providing a controlled environment. ASF staff stated that by providing cost-sharing grants to individuals with land and resources, ASF hoped to demonstrate new technologies and practices to stimulate further private sector investment.

The seven grant recipients the evaluation team interviewed were relatively well-off landowners with other business interests. At least two were lawyers, two were horticulturalists who taught high tunnel farming and had consulted with ASF, and one mentioned being involved in multiple businesses. Six said they had no previous experience with tunnels or commercial vegetable production. When asked whether they could have made the investments without TAP support, five of the seven said they were not aware of the technology and its economic potential (of the two who were aware, one taught high tunnel farming and the other had been involved in multiple agricultural businesses). Only two (the horticulturalist/consultant and a farmer without other business interests) said they lacked the capital to make the investments.

“It is very difficult to establish the high tunnel farm without TAP assistance because tunnel farming is a new method of farming but no one wants to take a risk to invest his money. It’s a quite expensive method.” (HV/OSV Individual Grant Recipient)

All seven grant recipients the evaluation team interviewed reported receiving training. Topics included tunnel farming, disease identification and treatment, enterprise development, and marketing. One grant recipient mentioned practical training in preparing nurseries and transplanting seedlings into the tunnels. Three of the seven mentioned exposure visits to other tunnel farming operations. Five of the seven grant recipients specifically mentioned increasing the quantity of vegetables they produced due to the tunnels (Table 22 in Annex 9).

Since at least six of the seven HV/OSV grant recipients had no previous experience with tunnels, merely adopting tunnel farming represents a change in practices. Six of the seven HV/OSV grant recipients reported that the value of vegetables they sold had increased. Because most had no previous experience producing vegetables commercially, any sale was an increase over previous years. The two respondents in Peshawar reported that a strong windstorm that damaged their tunnels while the crops were standing, but they were able to harvest some of the tomato and cucumber and seemed happy with the result, even though it was less than they expected. Two grant recipients attributed the increase in value of sales to being able to provide tomato to the market early in the season. One cited that he graded his produce and got good prices as a result. Three respondents reported lower than expected sales (one due to adverse weather and one to choosing poor quality seeds) but still seemed satisfied with the result. Although the quantitative data are inconsistent, the four respondents who provided sales data reported sales of Rs. 100,000/day, Rs. 225,000 - 1.1 million per year, Rs. 2,800 - 11,000/week, and Rs 40,000 - 50,000/year. ASF reported no sales for HV/OSV tunnel farms in the second quarter of 2015.

“Despite all the damage due to natural calamity, we liked the new vegetable farming technique as it was far better than the traditional farming in terms of crop management and yield. The yield of hybrid tomatoes produced under tunnel is higher than the conventional vegetable growing method. The production of one acre in open field is equal to 3 kanals (3/8 acre) of production under tunnel farming. So, we are very happy with this new technology.” (HV/OSV Individual Grant Recipient)

Six of the seven HV/OSV grant recipients reported hiring additional labor. The six that reported hiring additional labor attributed the need for additional labor to “production” generally (4 of 6 grant recipients); weeding (2 of 6 grant recipients); harvesting (2 of 6 grant recipients); and marketing (1 of 6 grant recipients). Two of the six specifically mentioned hiring women; two said the culture in their area did not permit women to work in production; and four said that women do work in vegetable

production for hoeing, transplanting, pruning, and picking while men handle land preparation, irrigation, spraying, and marketing. ASF reported that HV/OSV grant recipients created 159 FTE jobs in the second quarter of 2015, 21 percent of which went to women. This represents an average of one-half FTE per grant recipient, which does not seem inconsistent with the interview data.

“Yes, we employed labor. Most of our labor was female. During harvesting and weeding, eight to nine women were involved, some on daily wages and some on monthly basis and they worked for about five to six months. The daily wagers charge Rs. 300/day. Women prefer working within protected areas. I also hired two permanent male laborers for spray and to go to mandi.” (HV/OSV Individual Grant Recipient)

“They have hired three men as permanent labor and eight women as casual labor. During the picking season (almost 7 months in a year) they are hiring additional 20 women and eight men. (HV/OSV Individual Grant Recipient)

HV/OSV individual grant recipients had few issues with implementation. Issues raised by three or more of the seven grant recipients the evaluation team interviewed included tunnel design, training, and timing (Table 6).

Evidence from one HV/OSV grant recipient suggests that ASF's attempt to link producers to large supermarkets was not particularly successful. The producers reported problems complying with buyers' quality requirements, not being properly registered, the timing of purchases, and slow payment mechanisms.

“They [ASF] created linkages with high end markets such as Hyper-star, Metro, Fresh Foods and a few other exporters. However we could not continue with Hyper-star and Metro due to the strict compliances. These stores do not allow farmers to sell their produce as a whole in the market. They take vegetables after grading and select only the best quality and most of our produce goes waste. Therefore we could not strengthen our linkages with such high end markets.

Right now we have 35 bags (20 kg each) of bitter guard and if we take these bags to super markets, they will take half of our produce and will reject half. We had an agreement with Metro but could not sell. These super markets take the product in the morning and picking of vegetables is done in the evening. So, he had to hire a warehouse and two persons to keep the product till morning and marketing. But, the rate was not competitive so we discontinued. The intermediaries in the business take most of the benefit.

The payment mechanism in both Hyper Star and Metro are 15 days. While, in the open market you get instant payments.” (HV/OSV Individual Grant Recipient)

Two of the seven HV/OSV grant recipients whose tunnels were destroyed by wind were already demonstrating a level of sustainability by repairing the tunnels at their own expense. Two others said they expected to continue the practices if they remained profitable.

Six of the seven HV/OSV individual grant recipients said that other farmers had visited their farms to see and talk about the tunnels. Two reported that other farmers had replicated the practice while five said the technology was too expensive for other farmers to replicate without outside assistance. The interviews collected no information about the characteristics of the farmers who replicated the technologies or those who chose not to replicate because of cost.

TABLE 6: IMPLEMENTATION ISSUES – HV/OSV INDIVIDUAL GRANT RECIPIENTS

Issue with Implementation	Detailed Issues	Frequency of Response
Tunnel design	Faulty foundation	2 of 7 grant recipients, all interviewed recipients from Peshawar
	Tunnels need adequate ventilation and different covers to control temperature and control environment	2 of 7 grant recipients
Training	Additional training required	3 of 7 grant recipients (all in Lahore)
Timing	Tunnel installed too late for planting	3 of 7 grant recipients

Four of the seven grant recipients reported that they would not have engaged in tunnel farming without TAP because they were not aware of the technology or the benefits. Only two (teachers who promoted tunnel farming) said they lacked the financial resources but had the knowledge. One recipient confirmed the importance of the demonstration effect by mentioning his reluctance to take the risk on an unfamiliar technology without external support.

Conclusions: ASF targeted relatively well-off landowners with capital to invest or specialized knowledge. The data are difficult to interpret but suggest that ASF's strategy of demonstrating the technology and practices to raise awareness of the opportunity afforded by the tunnels among financially capable farmers may be effective in stimulating adoption. At the individual grant level, the project design (i.e., tunnel farming) appears to have been effective in increasing production, sales, and employment. The only issues with implementation emerged in Lahore and involved the design and/or inspection of tunnels and the quality and timeliness of provision of cucumber seed. Tunnel farming appears to offer substantial potential for employing men and women.

Potato Value Chain

ASF's assessment of the potato value chain concluded that Pakistan's ability to produce potatoes earlier than many other countries and its proximity to Association of Southeast Asian Nations (ASEAN), Gulf Cooperation Council (GCC), and Commonwealth of Independent States (CIS) countries gives it a comparative advantage over European exporters in potato production.²⁷ To capitalize on these opportunities, the report recommended that Pakistan work on improving seed quality and the capacity of producers to meet quality standards and reduce post-harvest losses (in part by adopting better storage practices), promoting value addition, and developing higher value export markets.

TAP addressed issues in the potato value chain at two levels.

- It formed 174 seed potato FEGs in GB (Chitral, Dairer, Ghizer, Gilgit, and Hunza districts) and KP (Mansehra district). The FEGs build the capacities of small potato farmers to increase the quantities and quality of seed potatoes they produce.

²⁷ Agribusiness Support Fund. (2014). The Agribusiness Project (TAP) Potato - Value Chain Competitiveness Assessment. Lahore: Agribusiness Support Fund.

- It provided grants to 11 individual potato producers in the Ghizer and Hunza districts of GB to construct storage cellars. The cellars should reduce post-harvest losses and improve the quality of seed potatoes stored over the winter.

Potato FEGs

All six potato FEGs the evaluation team interviewed reported receiving training and tools (Table 16 in Annex 9). Training included technical training in potato planting methods (land preparation, spacing, and seed quality), crop management (fertilizers, irrigation, and identifying and treating diseases), harvesting, grading (distinguishing good seed potatoes from table potatoes), storage, and marketing. ASF or its partners delivered some training in the classroom and some in the field. Tools included hoes, spades, hand cultivators, knives, measuring tapes, gloves, magnifying glasses, and hand sprayers. Four of the six FEGs reported receiving seeds and two specifically said they did not receive seeds.

All six FEGs said they grew potatoes prior to TAP. However, four of the FEGs reported that they were not aware of the new technologies (certified seed) and practices (cultivation, grading, harvesting, and marketing) prior to TAP. As a result of TAP training, five of the six FEGs reported changing their production practices (Table 20 in Annex 9). Changes included spacing plants properly (3 of 5 FEGs) and using (small) seed potatoes instead of (large) table potatoes for seed, using certified seed, knowing how to identify and treat diseases and pests, preparing and applying fertilizers, planting seed potatoes and table potatoes separately, and rotating potatoes with wheat annually (1 of 5 FEGs each). The one FEG that did not report changing practices said they are using the same cultivation techniques and that the seed ASF provided (late) was inferior to what they could buy in the market.

“In the past most of our potatoes were damaged and they were of poor quality. Insects also damaged the potatoes. But this year we used certified seeds and tried the new methods (which we learnt from TAP providing trainings) and we are expecting that our produce will be good.”
(Seed potato FEG)

“Before this, we used Punjab seed for household consumption which were brought only from Hunza. In Punjab seed, if they give us one bag of seed, they would take two bags in return after harvesting. So, we were in total loss. Therefore, we did not grow on commercial scale. Now, we are still repeating the same seed provided by ASF and quality is good with medium size potatoes. We have not bought any seed from outside. But, we know that we can only use this seed for four to five years and then we need to arrange new seed. After the fourth year the production starts declining so it’s important to replace seed after every four to five years.” (Seed potato FEG)

The FEGs did not receive support from ASF until early 2013 (3 of 6 FEGs) or early 2014 (3 of 6 FEGs). Four of the six FEGs reported that support from TAP increased the quantity of potatoes they produced (Table 22 in Annex 9). They attributed the increase to fewer rotten potatoes (2 of 4 FEGs), planting larger areas (2 of 4 FEGs), and higher yields (1 of 4 FEGs). Only one FEG reported increasing the value of sales, and this was relative to the value of growing wheat on the same land (Table 24 in Annex 9). Two others expected greater profits from selling potatoes based on the appearance of the standing crop but had not yet sold. Another was producing potatoes only for household consumption. The two remaining FEGs did not respond.

“Before these potatoes we used to grow wheat in our four kanal land and we only had Rs. 8,000 to 10,000 profit from it. When we exclude Rs. 4,000 amount for the field expense we only left with Rs. 6,000 profit which was very minimal. In the same field of four kanal when we cultivated the potatoes we get Rs. 40,000 seed from the company and after excluding this seed

amount and spraying cost we are left with Rs. 80,000 round about, so it was huge difference in the profit, (Seed potato FEG)

Four of the six FEGs specifically said that they had not hired additional labor as a result of TAP (Table 28 in Annex 9). Only one implied that some smaller families hired labor to prepare the land (i.e., build ridges in which to plant) but it was not clear if this was a new practice. Those who did not hire labor claimed that farming was a family business and it was not their tradition to hire labor. The groups said that men were responsible for preparing the land, irrigating, harvesting, and marketing while women were responsible for preparing the seed, planting, weeding, and harvesting. ASF reported no employment or sales among seed potato FEGs in the second quarter of 2015.

When asked whether they expected to continue using the practices and technologies promoted by TAP, two of the FEGs said they would and two said they would not. The two FEGs that said they would sustain the practices said they would do so because they found the practices profitable. The two that said they did not expect to continue the practices cited concerns about access to good quality seed potatoes but said they would sustain the practices if they could obtain improved seed varieties. In fact, three of the six FEGs claimed they had limited access to good quality certified seed. The project's individual grants to establish storage cellars were designed to address this constraint but, probably because the intervention is very new, no FEGs reported purchasing seed from cellar owners.

Three of the six FEGs reported that other farmers in their area were starting to adopt the practices promoted by TAP, and two of the FEGs said they were teaching others.

Seed potato FEGs voiced several complaints about implementation. These included concerns about seeds (4 of 6 FEGs), seeds arriving too late for planting (4 of 6 FEGs), and poor quality tools (3 of 6 FEGs) (Table 33 in Annex 9). Issues with seeds included poor quality/rotten seeds (3 of 4 FEGs) and uncertified or ungraded seeds (2 of 4 FEGs). Members of one FEG, however, made a point of saying that the tools dramatically increased their productivity.

“The contractor did not provide the seed that was promised, it was not good (mostly rotten). It had a mix of different varieties too and included Raja, Rado, and Cardinal. Most of it went to waste, for some members 80 percent of it went to waste. We had so many sacks lying by the road that year it was difficult to walk on our road, in the end we just buried them.” (Seed potato FEG)

Conclusions: ASF's support to seed potato FEGs appears to have been influential in promoting new technologies and practices, but the late start makes it difficult to observe results. The FEGs found the training useful and have changed practices as a result, but few have direct experience of quantities produced or the profitability of the intervention. Based on the evidence from those who have harvested and the perceptions of the other groups of the quality of the standing crop, there is good reason to believe that the intervention was effective in increasing the quantity and quality of potatoes the FEGs produced and should increase the value of sales. At the FEG level, the potato value chain offers little potential for creating jobs. The intervention is low-cost and probably profitable, but difficulty obtaining good quality seeds may threaten the sustainability of results in the short term. ASF itself seems to have had difficulty providing good quality certified seed and doing so on time. The project's investments in storage cellars may ultimately address this constraint, but it will take additional experience to determine whether the cellars are effective in improving access to locally produced seed.

Individual Grant Recipients

The evaluation team interviewed five individual grant recipients who received grants to construct potato storage cellars. Three of the five grant recipients said the cellars cost too much for them to have taken

the risk on their own. One said he was not aware of the technology prior to TAP. One grant recipient said he got his grant in 2013, two said they received the grants in 2014, and one received his grant in 2015.

Consistent with the intervention design, all five reported receiving potato storage cellars (Table 16 in Annex 9). Three also reported receiving training (in business management and enterprise development) and tools (helmets, gloves, boots, masks, 45 bags in which to store potatoes, and a first aid kit). Only two of the five recipients specifically reported using the cellars instead of the traditional method of storing potatoes in a hole dug into the ground. One also reported storing potatoes in a rented shop prior to building the cellar.

Four of the five grant recipients reported producing larger quantities of potatoes as a result of the cellars (Table 22 in Annex 9). In this context, increasing the quantity produced meant reducing wastage/spoilage. One reported spoilage losses of 30 percent in traditional storage, and one reported losses of 50 percent. All four respondents said the cellars had completely eliminated losses due to spoilage.

“Before this cellar technology I was facing huge losses (30 percent) of my potato inventory during winter season. Even after completion of cellar, I was not mentally prepared to put all of my produce in it due to an unknown fear of loss. In the last season, I only stored 24 bags (50 kg) in my cellar as a trial. The result of the cellar was excellent as I did not observe any product loss/damage in my stored product during the winter season.” (Potato cellar grant recipient)

Three grant recipients reported increasing the value of potato sales. One reported receiving a high price because he was able to sell potatoes from his cellar in February before other farmers could get potatoes from their traditional stores. The other three who reported increasing the value of sales attributed the increase to receiving a good price for higher quality seed potatoes. Respondents did not provide consistent data on the value of sales.

“The price of potato seed available in the market was Rs. 2,000 per bag. According to him, the demand of his seed potato was high as compared to the seed available as people were well aware of the quality of his seed. According to him, he had received Rs. 500 higher price per 50 kg of seed potato as compared to available seed.” (Potato cellar grant recipient)

Estimates of the value of sales obtained from the interviews do not seem consistent with the values ASF reported in the second quarter of 2015. One cellar owner attributed an increase in sale value to having a larger quantity to sell because of less spoilage. The implied value of what he did not lose was USD 260. Two others who reported selling potatoes said they received a better price because of better quality. Multiplying the difference in price by the quantity sold suggests that they earned USD 224 and USD 448 in additional income. ASF, on the other hand, reported an incremental value of sales of USD 9,093 in the second quarter of 2015, or USD 827 per cellar. The difference between the evidence from interviews and ASF’s performance data may reflect errors in ASF reporting, poor recall in the qualitative data, or inconsistencies due to data from different time periods.

Only three of the grant recipients spoke about employment, and they all reported no change in employment due to the cellars. In fact, one said that it requires more labor to store by traditional methods than in the cellars.

All five cellar recipients said they expected to continue the practice of using the cellars because they had experienced the benefit, and the infrastructure is durable. However, all five said that, in spite of their neighbors’ interest, financial constraints prevented others from replicating the intervention.

The seed potato cellar recipients had no major complaints about implementation. In fact, three specifically said that the grant process was easy and quick.

Conclusions: The grants to support cellars addressed financial constraints that prevented farmers from constructing cellars and thus promoted adoption of better storage technology. The cellars were appropriate technology and effective in reducing (or eliminating) spoilage during the winter. In addition to having a larger quantity to sell because of reduced spoilage, cellar owners were able to maintain the quality of their stored potatoes and thus receive higher prices in the market. While the intervention promises good returns to the cellar recipient, it holds little potential for broader effects such as creating jobs. Furthermore, the high cost of the cellars may prevent the intervention from reaching scale through organic replication.

Meat Value Chain

ASF's competitiveness report for the meat industry concluded that Pakistan has a comparative advantage (large production, little domestic demand for quality meat, and location) in reaching large export markets for high-quality meat.²⁸ The report put global beef exports in 2012 at USD 18.4 trillion annually for frozen meat and USD 20.0 trillion annually for fresh meat. Pakistan's meat industry, however, serves almost entirely a relatively low-value market in fresh carcasses (which account for 98 percent of Pakistan exports) shipped to GCC countries.

Several factors limit Pakistan's ability to access higher value markets, particularly for boneless cuts. Pakistan's livestock industry is dominated by small farmers who produce meat as a spin-off product of dairy farming. They do not have good meat breeds, so meat yield per carcass is low, and the meat does not meet the quality standards and expectations of high-end markets. Farmers have limited knowledge of modern farming practices and don't feed or medically treat cattle in a manner conducive to producing quality meat. Furthermore, Pakistan's meat processing industry is not familiar with meat cuts and does not possess the skilled labor to produce high-value boneless cuts.

To capitalize on the market opportunities, the report concludes that Pakistan must:

- Develop commercial feedlots that can produce high-quality and traceable meat animals;
- Develop the processing skills to produce high-value boneless meat cuts;
- Expand participation (i.e., quantity) and products (i.e., value added) in GCC markets and identify new markets in the region; and
- Acquire Halal accreditations to gain access to a large and growing Halal market, much of it within reach of Pakistani exporters.²⁹

After the de-scoping, ASF's strategy in the meat sector focused only on the supply side, with the possible exception of the few meat processors/exporters who participated in IMAP events (covered

²⁸ Agribusiness Support Fund. (2014). The Agribusiness Project (TAP) Bovine Meat - Value Chain Competitiveness Assessment. Lahore: Agribusiness Support Fund.

²⁹ The team's interview with a technical service provider at the University of Veterinary and Animal Sciences in Lahore confirmed these conclusions.

elsewhere in the report). ASF provided meat cut training to butchers in retail stores and in export-oriented slaughterhouses. It also trained potential feedlot operators, or those who might influence animal feeding, and artificial insemination technicians (to build indigenous capacity for herd improvement).

Meat Cuts and Standardization Training

ASF trained 48 butchers in meat cuts and standardization. The evaluation team interviewed six recipients of meat cuts training: managers of four large processing/exporting companies and two small retail butchers (ASF conducted separate trainings for managers and butchers). The University of Veterinary and Animal Sciences (UVAS) in Lahore conducted the trainings, and the large processors/exporters all mentioned receiving on-site training from an Australian expert whom they praised as being especially good.

Four of the trainees specifically praised the training for its relevance, utility, and quality of delivery. One manager credited the training with changing workers' attitudes toward work and the work environment in his plant, reducing losses in chilling/production, and improving hygiene practices in the workplace. The only substantive negative comment on the training (4 of 6 trainees) was that a single training was not sufficient. One company the evaluation team interviewed was selling boned and vacuum packed meat cuts to a firm that held a contract to supply United Nations peacekeeping forces worldwide and also sold cuts to some other buyers. The owner of the firm said that the ASF training, particularly the Australian butcher, contributed to further building the skills his firm needed to access this market.

The two retail butchers reported increasing the value of their sales as a result of the training. They reported that they were now able to offer meat cuts to customers and anticipated breaking into new markets such as hotels and elite class buyers. One estimated that his sales had increased by 5 percent. Both also said that what they had learned allowed them to operate a much more hygienic shop and their customers noticed this.

Three of the processors/exporters reported that they had not yet put the training into practice because they had not received any orders for meat cuts. One mentioned the risk of entering the market due to export procedures, lack of a cool chain, and freight forwarding problems.

None of the trainees reported increasing employment as a result of the training.

Conclusions: The training was effective in teaching new skills, but limited penetration into markets that use those skills to advantage has thwarted achieving broader outcomes on sales or employment. Retail butchers are the only trainees reporting results so far. Processors and exporters have not yet developed the export market connections to sell high-value boneless cuts. The training will not produce results until processors/exporters develop the markets that demand such cuts but the training and skills are a necessary precursor to gaining access to those markets. The training is, therefore, relevant but not effective without additional effort to support producers/exporters to penetrate markets. One respondent suggested that that may take work on the enabling environment and other aspects of the meat value chain.

Artificial Insemination Training

ASF trained 42 individuals in artificial insemination (AI) to improve access to quality AI services among farmers and improve herd quality. The evaluation team interviewed four recipients of AI training. The trainees received an intensive (40-day) practical training at the Agriculture University of Peshawar. A representative of the university explained that they were able to bring cows in daily and provide the trainees with practical experience that they could get nowhere else. One veterinarian trainee

corroborated this statement from his own experience in school. In addition to the training, all four trainees reported receiving a nitrogen tank for storing semen, an AI gun, gloves, a straw cutter, boots, and an apron.

All four trainees said that the training was extensive and practical. They all specifically mentioned the value of the practical part of the training. Two of the four trainees, both practicing Doctors of Veterinary Medicine (DVMs), reported increasing the value of their sales of AI services as a result of the training. The two who did not report increasing the value of sales were both DVMs but unemployed.

“Most of the farmers have become aware using AI for increased livestock productivity therefore, they are very conscious about this technique. Generally, they do not consider a DVM graduate as doctor if he was not able to perform AI on animals. This training helped us to gain all the practical knowledge of AI so, farmers always prefer us (AI experts). As the confidence of farmer’s increases, they contact us on preference basis to deal their cases and they also refer us to their relative’s. In this way our sales increase. I am in contact with my fallow trainees and they are also performing AI in their villages. This training provided practical knowledge which is a permanent change. By performing AI on animals the breed of my area will be improved in the long run and this equally important for all other villages in which trained and skilled ASF trainees perform AI.” (AI trainee)

Only one of the trainees, a practicing DVM, performing one to two procedures per day, believed the results were sustainable.

Conclusions: Based on four interviews, ASF’s design was effective in increasing skills for individuals who would not have developed the skills otherwise. It did not, however, live up to its potential to increase farmers’ access to quality AI services. Two of the four trainees were not in a position to put their training into practice because they were unemployed when ASF selected them for the training and they did not have access to transportation to reach farmers. From an implementation perspective, this points to issues with beneficiary selection criteria.

Feedlot Fattening Training

ASF trained 50 individuals in feedlot fattening practices. The evaluation team interviewed four of the trainees. Two were DVMs working for government and one was the owner of Stock Feed Company which conducts research on animal fattening and operates commercial fattening operations. Two of the trainees mentioned that the training was useful. While the trainees found the information useful, and one of the government employees said he would communicate what he had learned to farmers, none reported changing their practices or earning additional income because of the training.

“It was a very new topic for me as in KP no one has done anything on the subject matter. I believe, if it is taken in its true spirit, it will become a very good business. The feedlot fattening is a unique opportunity to raise animals quickly for better meat production by feeding them both in green and supplementary feed under controlled environment” (Feedlot fattening trainee)

Conclusions: Respondents provided little evidence that the feedlot fattening training was effective. While they said the training was useful, only one was in a position to put learning into practice. The government DVMs could pass information about animal nutrition on to their farmer clients but this is a far remove from promoting commercial feedlot fattening and, at this scale, will make no meaningful difference in the quality of animals available in the market. ASF may not have taken appropriate care in selecting trainees who could be influential but it may also be that the sector is not yet ready for this type of intervention.

IMAP

With IMAP, ASF aimed to introduce Pakistani processors and exporters to international markets with the ultimate goal of improving access to markets and increasing export sales. To accomplish this goal, ASF provided technical, logistical, and financial support to enable 76 processors/exporters to attend 10 different international exhibitions and fairs (Table 7). In addition to increasing immediate export sales, ASF anticipated that participants would establish networks; gain exposure to new innovations, ideas, and technologies for processing, marketing, value addition, and promotion; and strengthen trade relations.

As of June 2015, ASF reported that IMAP events had stimulated USD 33.31 million in export sales for 23 businesses (Table 7). However, ASF counted any sale attributed to a connection established at an IMAP event as an increase in the value of exports as a result of U.S. Government assistance. Since many IMAP participants were established exporters, however, a sale attributable to an IMAP event may not represent an increase in the value of exports if it supplants a sale the firm would have made anyway. This in no way questions the well-documented sales figures reported by ASF, it merely questions whether exports attributable to an IMAP event represent new business, markets, or buyers attributable to USG interventions.

TABLE 7: IMAP EVENTS

Event	Location	Year	Number of Participants ^a	Value of Sales/Exports (million USD) ^b
Euro Tier 2012	Hanover, Germany	2012	4	4.95
World Food Moscow 2012	Moscow, Russia	2012	10	10.63
AGRAME 2013	Dubai, UAE	2013	10	5.60
Fruit Logistica 2013, 2014, 2015	Berlin, Germany	2013	21	6.81
FoodEx Saudi 2014	Jeddah, KSA	2014	8	2.42
Gulf Food Dubai 2014, 2015	Dubai, UAE	2014	19	2.90
World Food Kazakhstan 2014	Almaty, Kazakhstan	2014	1	-
Grand Total			76	33.31

Source: The Agribusiness Project: Quarterly Progress Report – XV (April 1, 2015 to June 30, 2015). April 2015.

- Because individuals often attended multiple events, this column does not reflect the number of individuals who participated in IMAP events. The report states that 23 businesses reported receiving contracts through the events but not the number who participated.
- The project's PMP defines the indicator as the incremental value of exports relative to the previous year. Project reports, however, appear to count all exports that results directly from an order received at a TAP-supported international exhibition or event.

TAP selected participants through solicitations and its networks and provided grants that covered registration, transportation, lodging, meals, stalls, and design support. The project briefed participants prior to and after the trips. Many of the 14 participants the evaluation team interviewed were well-established firms. Thirteen reported that they had attended international exhibitions before TAP, some with support from the Trade and Development Authority (TDAP) or donors and some on their own. The support from TAP made a difference, however. One participant each mentioned the importance of having a stand/stall, the value of the USAID logo, and the value of being well prepared. Participants spoke positively of the value of making connections and networking (5 of 14 participants) and learning (4

of 14 participants). Eight of the participants praised ASF for very well organized and successful experiences.

“We were introduced to new products, their quality, color and packaging presented by international participants. I also came to know about the international standards and their requirements.” (IMAP participant)

“I've been going to Gulf Food before for two years before ASP, but with the agribusiness people it was more informative. Beforehand they had seminars and meetings and sitting with them, one was from the U.S. and one from Australia, was very informative. Before that in this meet industry I was not aware of the circumstances for making good meetings.” (IMAP participant)

Nine of the 14 participants the team interviewed mentioned negative experiences with IMAP events. Two said the stall was too small. They referred to the same exhibition where they said ASF had booked too late to get a good space. Six said the event in which they participated was not relevant to their business (e.g., a fruit exporter who visited a livestock-oriented event, a meat exporter who visited a dairy event, and an exporter who could not provide the approvals and no-objection certificates (NOCs) required to sell to European buyers at the event).

Seven of the 14 participants said they gained new orders at the exhibitions. The orders ranged in value from USD 150,000 to USD 1.5 million. Gulf Food Dubai proved successful for meat producers. According to the Punjab Agriculture and Meat Company (PAMCO), local exporters received orders of approximately 450 tons of chilled meat as a result of the contacts made at the event. However, four participants specifically stated that they had not made any new sales as a result of IMAP events.

“In AGRAME (2013), I met with a Turkish buyer- Haqan Foods (big company) and had a detailed meeting with them for future prospects. Just after this event, I participated in SIAL China (2013) and got chance to meet with Haqan foods again. The continuous participation in international exhibitions helps a lot to create a long lasting and professional image of any company in front of large international buyers. I treat AGRAME as the base of my relation with Haqan Foods. Furthermore, Haqan Foods introduced two buyers from Azerbaijan and Turkmenistan to our company and we were able to materialize both orders of worth USD 861,480 and USD 452,900 From January 2014 to May 2015.” (IMAP participant)

Only two participants reported hiring new employees as a result of participating in an IMAP event. One routinely hired labor to can products when she had an order but her business was very small and sporadic. The other reported increasing sales of fruit by 60 percent to 70 percent and hiring extra labor to process and pack the fruit.

A number of respondents mentioned external factors that limited results such as the enabling environment (6 of 13 participants), transportation (5 of 13 participants) and market linkages (4 of 13 participants). One mentioned not being able to capitalize on connections he established in Saudi FoodEx because he was not eligible to sell in Saudi markets. Another meat exporter complained that the GoP did not help exporters obtain approvals and NOCs for direct exports. A third participant noted that the lack of rules and regulations regarding exports constrained the firm's ability to export. Limited air transport capacity also limits participants' access to some export markets, particularly for perishable products such as fresh fruit, vegetables, and chilled meat. Another mentioned a requirement that he market his meat through a firm with a slaughterhouse, a requirement that wasted the effort he'd put into developing his brand.

Conclusions: IMAP events were effective interventions to introduce processors/exporters to export markets and market requirements; gain knowledge about how to access these markets; and, for some,

gain new buyers. Their added value to the individuals who had the capacity to attend the events without TAP support was the preparation and access to a branded booth or stall. It is difficult to determine whether the events increased sales however. Since most participants were established exporters, a new buyer does not necessarily mean an increase in the value of exports or even enhanced access to export markets. ASF appears to have implemented the logistically difficult activity well with few substantive complaints and many kudos from participants.

Miscellaneous Findings and Conclusions

This section covers findings that do not fall neatly into value chains or other project components but do contribute to answering the evaluation questions. These include findings on partnerships, challenge grants, sustainability, and gender integration.

Partnerships

ASF engaged local partners to form and strengthen FEGs. The strategy leveraged the partners' established connections with communities and their experience forming and supporting community organizations. Local partners focused on particular regions in which they had a presence and, by default, the region specific value chains (Table 8). This section presents profiles of the partners gleaned from interviews, promotional material, and websites.

TABLE 8: TAP LOCAL PARTNERS AND REGIONAL VALUE CHAIN CLUSTERS

Value Chain	Supported Value Chain(s)	Region
Rural Community Development Society (RCDS)	Citrus, meat, HV/OSV	Punjab
Sindh Agricultural and Forestry Workers Coordinating Organization (SAFWCO)	Chili, banana, HV/OSV	Sindh
Lasooona, Sarhad Rural Support Programme, Hashoo Foundation	HV/OSV	KP
National Rural Support Programme (NRSP)	HV/OSV, grape	ICT, Potohar
Aga Khan Rural Support Programme	Apricot	GB
Aga Khan Rural Support Programme, Lasooona	Seed potato	GB, KP

The evaluation team interviewed five of the partners, AKRSP, NRSP, Hashoo Foundation, and SRSP and reviewed the closeout report from another partner, RCDS.

AKRSP: AKRSP has a long history of supporting agricultural development in GB. It signed a three-year agreement with ASF to form and support FEGs which the de-scoping reduced to two years. The final period of performance was from September 2012 through September 2014 with a no-cost extension through November 2014. AKRSP was responsible for forming FEGs; delivering enterprise development training (EDT) to FEGs; conducting rapid market appraisals (RMAs) for seed potato, apricot, and HV/OSV; and developing concept notes on apricot and HV/OSV.

AKRSP's project completion document reports that the organization was responsible for forming 250 FEGs in the apricot and seed potato value chains, a target ASF subsequently reduced to 166 due to the de-scoping.³⁰ AKRSP reported forming 80 apricot and 92 seed potato FEGs with 2,336 members (1,536 in potato and 800 in apricot) by November 2014. Managers reported that ASF gave them a target of 30 percent women's participation in FEGs and that AKRSP met this target by focusing on the processing side of the potato value chain, an activity that engaged women, and by leveraging women-oriented apricot processing FEGs with which they were already working.

AKRSP managers believed the potato cellars and apricot drying tunnels were relevant interventions that addressed the needs of the communities and AKRSP observed real benefits due to these interventions, especially the solar drying tunnels for apricot. However, AKRSP managers believed that ASF should have helped FEGs develop linkages to markets, an activity in which AKRSP said ASF did nothing.

The only challenge AKRSP managers mentioned about working with ASF was a lengthy procurement process which delayed delivery of infrastructure and tools. The de-scoping compressed the timeframe for achieving results and delayed procurement and delivery of tunnels (apricot) and tools (potato) by a year. It also created some challenges for the organization by limiting the period of time available in which to meet targets. Nevertheless, AKRSP managers believed it was a good move since it focused both partners on achieving targets in a timely manner.

NRSP: NRSP claims to be the country's largest program. It works with 135,000 community organizations representing more than 2 million households in 54 districts across Pakistan. The organization currently manages two USAID grants, the Assessment and Strengthening Program and the Small Grants and Ambassador's Fund. It signed a three-year agreement with ASF in September 2012 and formed 145 FEGs in grape (25 in Attock and Chakwal), peach, HV/OSV (60), pomegranate, meat, and dairy by March 2014 when ASF terminated the contract early. ASF said that the early termination was a result of the de-scoping that shifted priorities to other value chains and regions. NRSP formed the FEGs and provided management and financial skill training. Others provided technical training in agricultural production and marketing. NRSP managers believed the technical experts ASF engaged to provide this trainer were "appropriate".

NRSP is experienced in agricultural development and has a section, natural resource development, which works in all sectors of agriculture. Organization managers reported that forming FEGs was part of NRSP's normal business but value chains were new to them. Their concept of a value chain approach was one that not only helped farmers produce more but also linked them to markets. NRSP managers also defined a successful FEG as: "If their livelihoods are improving because of the intervention than we can say that the FEG is successful", a statement that implies a livelihoods rather than a value chain development perspective.

NRSP managers thought the project design (trellises) was appropriate but reported three major issues with ASF's implementation. They felt that ASF should have given the communities the grant money and "trusted" them to find the best and most efficient way to obtain trellises rather than providing the trellises outright. With ASF's process, trellises arrived too long after FEGs planted the vines, cost more than the communities believed was necessary, and were of poor quality. When pressed, managers could

³⁰ Aga Khan Rural Support Programme. (2014). Agribusiness Support Fund Completion Report, Year 2013-2014. Aga Khan Rural Support Programme.

not mention a specific quality issue but ASF itself determined that the I-shaped trellis supports provided to FEGs were not appropriate and thus provided Y-shaped supports to individual grant recipients. Finally, managers believed that ASF focused only on production and did not make the market linkages that could have enhanced benefits to the farmers.

“The grapes FEGs had to purchase the seedlings on their own. They planted the seedlings and ASF has to provide them poles and wires two months after plantation so the plant can climb up on those things. And they provided these things too long after the plantation and the plants could not manage it. March plantation and delivery of the trellises was July or August. So there was a five or six month delay and this caused a lot of problems at the community level. We took up this issue with ASF and ask them to let the communities do the procurement by themselves. They can procure more quickly, much cheaper, and better quality.” (NRSP)

NRSP managers also said that ASF's criterion that FEG members own land was inconsistent with its target of 30 percent female members because land a household owns is almost never in the woman's name. NRSP adapted the criterion to refer to household land ownership and met its targets for female FEG members. NRSP reported that women participated in all stages of grape production except marketing, a statement which directly contradicts information provided by the grape FEGs the evaluation team interviewed.

Hashoo Foundation: The Hashoo Foundation focuses on three areas: economic development, human capital development, and social protection. Economic development focuses entirely on agriculture, i.e., honey, horticulture, agribusiness development, and dairy. Foundation managers reported they were already working in seed potato and HV/OSV. The foundation signed a two-year agreement with ASF in December 2012 and submitted concept notes to work in seed potato, HV/OSV, and dairy. ASF approved the foundation to work in the seed potato and HV/OSV value chains in March 2013.

The Hashoo Foundation formed the FEGs and provided enterprise development training. ASF arranged for technical experts (extension agents) to provide technical training. The foundation's close out document reported that it had formed 80 FEGs, 40 each in HV/OSV and seed potato. It formed 15 FEGs in each value chain in its first year and the balance in the second year.³¹

The foundation's close out report concluded that the FEGs were effective organizations for collective action and had gained important capacities for production. FEGs are connected with markets and a contract farming arrangement was very successful. However, the report and an interview with foundation managers highlighted some implementation problems as well. In particular:

- ASF never progressed, as planned, to form FEGs into clusters and associations which could have enhanced their collective strength in purchasing inputs and marketing.
- ASF did not provide certified seed so FEGs produced table potatoes which sell for less than seed potato.
- ASF implemented a livelihood approach by supplying only inputs and technical assistance to FEGs. It did not attempt to link FEGs to processors or markets.

³¹ Hashoo Foundation. (2014). Project Completion Report: The Agribusiness Project (TAP) Formation of Enterprise Groups. Hashoo Foundation.

- Delays in grants caused inputs to arrive too late for the agricultural season and compromised results.

The closeout report also identified the lack of good quality seed as a potential barrier to sustainable results.

RCDS: RCDS operates in Punjab and, under the de-scoped TAP, supported 60 HV/OSV FEGs. The project's closeout document reports that it began working with ASF in October 2012 and ended in December 2014 but the report was otherwise poorly written and uninformative.³² RCDS formed the FEGs and trained them in management (legal and financial), leadership, accounting, and marketing.

SRSP: SRSP signed a three-year agreement with ASF in October 2013 to form 400 FEGs in six districts of KP in the HV/OSV and strawberry value chains. The organization's close out report and an interview with senior management found that ASF encouraged the organization to form the FEGs within the first two years and then spend a year consolidating the groups and forming associations. The de-scoping, however, reduced the term of the agreement to two years, limited the value chains to HV/OSV, and reduced targets to 134 FEGs in three districts. Furthermore, SRSP formed FEGs around structure farming, tunnel farming, mushroom farming, and food and fruit processing. ASF ultimately approved only the first two which limited the supported FEGs to 82. However, ASF did not provide the grants for tunnels on time so SRSP had to reorganize the 24 FEGs organized for tunnel farming to structure farming instead. The frequent strategy shifts frustrated and harmed farmers, delayed implementation, and damaged SRSP's reputation.

After forming the FEGs, SRSP trained them in business, FEG management, enterprise development, and the importance of value chain analysis. SRSP then helped the FEGs apply for grants from ASF, many of which had to be resubmitted as requests for structure farming after ASF did not provide tunnel farming grants in time for the season. Even these grants were late and the FEGs did not receive the structures until September 2014.

During implementation, ASF took too long to approve grants and provide other support (tools and training) which resulted in much of the support arriving too late in the agricultural season to be useful. The delays created hardships for farmers when they'd set aside land for an intervention that did not materialize.

SRSP's closeout report contained some particularly thoughtful lessons and recommendations:

- Timing is important in agriculture. Agricultural development projects need to develop, and strictly adhere to, pre- and post-production activity plans.
- Small FEGs (4-7 like-minded and progressive members) work more effectively and seamlessly as an enterprise. These smaller groups should be clustered into associations to leverage collective bargaining power.
- To create the capacity to identify issues early and seek timely remedies, at least one member of each FEG should participate in an advanced level/extensive technical training.

³² Rural Community Development Society. (2014). The Agribusiness Project's Completion Report. Rural Community Development Society.

- The office-bearers in each FEG should receive advanced book keeping training in order to improve cost accounting, profit and loss calculations, and record keeping for the entire group.
- Facilitate networking with line agencies to help build farmers' relationships with the available technical resource pool.

Conclusions: The partnerships were largely effective in quickly organizing FEGs for TAP implementation. Interviews with the local implementing partners and their closeout reports revealed three common implementation issues. First, ASF put little or no effort into connecting FEGs to markets. This reflects a limited appreciation for the value chain development approach and potentially limits results at the FEG level. Second, ASF was habitually late delivering on its promised support. As a result it often provided support too late for farmers to benefit fully, if at all. Third, poor communication between ASF and partners contributed to misunderstandings and, perhaps, promises to FEGs that did not materialize. Poor communication and frequent shifts in strategy, caused in part by USAID, coupled with ASF's problems delivering on grants and technical assistance, complicated implementation for the partners and damaged their reputation with their constituent communities.

Challenge Grants

The original project document recognized that: "Many Apex FEGs, medium and large businesses in the agriculture value chain, and agribusiness-oriented NGOs have the capacity to productively absorb ... multi-million investments, contribute significantly to the objective of having a transformational impact on job creation, incomes and economic growth."

ASF anticipated using challenge grants to finance activities that would strengthen value chain linkages. The project document provided illustrative examples of using the grants to support 1) medium and large-sized producers, input providers, cold chain, packaging, and other enterprises that provide services on contract to other value chain actors and 2) investors taking advantage of liberalized marketing laws to establish more efficient wholesale marketing facilities.

ASF awarded seven relatively large challenge grants to selected businesses with a total value of USD 143,569 (Table 9).

TABLE 9: CHALLENGE GRANTS

Grant Product	District	Purpose of Grant	TAP Share USD
Reefer	Khairpur	Provide cooling for removing field heat and temporary on-farm storage for fruits and vegetables.	\$9,072
	Swabi		\$9,072
Screen House	Hyderabad	Promote availability of disease free fruit plants.	\$23,216
	Lahore		\$23,216
	Malakand		\$23,216
Fresh Pack	Lahore	Modified atmosphere packing facility to increase shelf life of fruits and vegetables for domestic and export markets and reduce waste.	\$45,928
Fruit Processing Solar Unit	Malakand	No information	\$9,849
Totals			\$143,569

Source: M&E data provided by ASF.

The evaluation team interviewed two challenge grant recipients, Green Revolution and Fresh Pack.

Green Revolution: Green Revolution supplies agricultural inputs such as pesticides, fertilizers, seeds, and plant stock (olives, grape, and citrus) to farmers. The company received a cost-share grant for two screenhouses. The screenhouses will help the business produce disease-free certified citrus plant stock. The firm was already providing certified citrus plants on a small scale from its existing (small) screenhouse and saw the challenge grant as a way to expand this aspect of the business.

Green Revolution met with ASF, agreed on the structures and location, and signed a grant agreement in 2013. After Green Revolution deposited money with ASF, ASF selected a vendor and paid the vendor to build the screenhouse. However, ASF engineers rejected the screenhouse design after the vendor completed the work. Green Revolution reported that the vendor had built screenhouses for ASF before and these had also been rejected. Green Revolution incurred significant additional costs to bring the screenhouse into compliance with ASF standards.

The screenhouses are not yet operational so the company has not yet benefited from their use. The company expects to increase sales of citrus plants and hire additional workers to manage the screenhouses when they are completed.

Green Revolution managers believe that if ASF had checked on the vendor periodically, it could have avoided the problem with the unsatisfactory screenhouse. Green Revolution is optimistic about the future of its business but would welcome assistance to share technical knowledge with other (U.S.) companies. The company also saw value in a grant for equipment to treat citrus for export markets.

Fresh Pack: Fresh Pack is a fruit and vegetable processor and exporter. The company received a cost-share grant for modified atmosphere (vacuum) packing (MAP) and related equipment (generator, cold store, reverse osmosis water treatment equipment, and other smaller pieces). Fresh Pack also participated in an IMAP market exposure event and ASF helped link the firm to date growers in Dera Ismail Khan to procure a particular variety of date. The grant recipient was a former marketing director at ASF but left in 2012 to restart his export business.

Fresh Pack applied for a challenge grant in 2013 and reported that the grant process was easy. However, it took two years to receive the (imported) MAP equipment, a delay Fresh Pack attributed to an “unorganized” effort by ASF and government red tape required to import machinery. The respondent reported that ASF was supportive and responsive in all other respects. The company has installed the equipment and is testing it before using it commercially. The respondent said he was not in a position to take the financial risk of purchasing the equipment without ASF support.

Because the equipment is not yet in commercial operation, it has had no effect on the company’s production or sales. The respondent reported, however, that he is optimistic about export sales because export markets in the UK, U.S., Germany, and GCC countries demand vacuum packed products and prices are high. The respondent expects to increase his labor force proportionally to sales and said he prefers to hire women for processing, grading, cleaning, and packing because they are more productive than men.

Fresh Pack expects to continue using the equipment because of the substantial investment and anticipated demand for the product. However, he said that there are no technical experts in MAP technology in Pakistan to help him implement the new practices. He believes that other investors are waiting to see how he fares before making similar investments.

Conclusions: The relatively small investments in the two companies the evaluation team interviewed hold some promise for strengthening their respective value chains if they are connected to other value chain actors. Green Revolution supplies citrus trees and will be motivated to find customers. Fresh Pack may or may not increase sales sufficiently to expand the market for its inputs and thus producers. ASF proved incapable of effectively managing procurement processes which delayed results for both grantees.

Sustainability

Previous sections presented data on the likely sustainability of results in the four value chains. This section presents other evidence related to sustainability that is not value chain specific. The original project document mentioned sustainability in the context of ASF's organizational sustainability and seemed to take the sustainability of beneficiaries' results for granted: "The measure of sustainability achieved under the project will be the emergence of viable value chains in the horticulture and livestock markets. These value chains will be self-sustaining because they are profit-driven and not donor driven."

The revised project document (after the de-scoping) gave greater lip service to the sustainability of results but did not describe a strategy to achieve sustainability. It still seemed to take the sustainability of results for granted as a natural outcome of improved competitiveness: "Competitiveness of the chain as a whole will ensure sustainability of the market share and growth thus creating more jobs and income generation opportunities." If ASF produced a separate sustainability plan or strategy, it did not share it with the evaluation team in spite of several requests.

The revised project document seemed to adopt more realistic and scaled back expectations for the results that small farmers could achieve: "In this revised proposal we have combined a strengthened FEG mechanism with expanded options for sustainable and profitable small farmer value chain and market participation. Specifically, we propose to enlist private sector stakeholders within each value chain as primary entry and contact points for small producer beneficiaries. This approach will replace, in large part, the project's prior dependence on an illusory scheme of converting small producers to impresarios and their associative organizations to vertically integrated enterprises." To the extent that these revised expectations are more achievable, they may also be more sustainable. This does not, however, constitute a focus on sustainability or a sustainability strategy.

ASF staff members described replication as an important part of the project's strategy to achieve the scale necessary to transform value chains and achieve truly sustainable results. However, neither the original or revised project documents, which are attached to the agreement and specify the technical approach, nor any of the project's annual reports, mention replication in this context.

Gender Integration

Much of Pakistan's agricultural sector is male-dominated. ASF, in its original project description, attributes this to "social barriers" and a "result of low awareness of potential opportunities for women". ASF sought to address the paucity of women's involvement by actively seeking their participation in value chain activities and in their own hiring practices. ASF's SOW proposed that at least 30 percent of the total project benefits accrue to women and also specified that it would hire a gender manager.

ASF met its targets for involving women largely through FEGs. In fact, women's involvement was one of the seven criteria ASF used to select the original 17 value chains. The de-scoping dropped most activities which specifically engaged women such as goats and kitchen gardening. According to one USAID/Pakistan official, the Mission encouraged ASF to drop these value chains because they were not successful from either a livelihood or a value chain perspective; the fact that they also eliminated many

women-focused activities was an unanticipated consequence. Of the eight value chains selected as part of the redesign, women played a dominant role only in the apricot value chain (Table 10).

TABLE 10: WOMEN'S PARTICIPATION IN FEGS

Value Chain	Number of FEGS	Number of Male Members	Number of Female Members	Percentage Female
Apricot	80	201	599	75%
HV/OSV	335	3,693	1,227	25%
Potato	173	2,388	373	14%
Grapes	17	233	10	4%
Total	605	6,530	2,209	25%

The project document stated that ASF would develop a gender integration plan in the second year of the project. However, ASF did not provide the document to the evaluation team in spite of several requests. The plan, according to ASF's third annual report, "included steps that will be required to incorporate gender during design, planning, implementation and monitoring and evaluation stages of the project interventions." The only gender integration activities mentioned in progress reports involved data collection tools and training of ASF staff in December 2013.

Very few women are engaged in exporting. According to the staff person in charge of IMAP, women were encouraged to participate, however, "only a handful of participants (they) worked with were women." Similarly, ASF advertised grant opportunities and included sex as a selection criterion but few women applied. USAID/Pakistan personnel said they were aware of the difficulties ASF faced engaging women and said that ASF "kept their eyes open" for opportunities since they knew they would be under pressure from USAID/Pakistan.

Conclusions: The project explicitly considered women in design only by setting targets for the percentage of female members of project-supported FEGs. There is no evidence that it deliberately selected value chains for their potential to benefit women or made any other design decisions to engage women. Not surprisingly, TAP did not directly benefit many women in terms of increasing their meaningful participation in supported value chains. The culture provides few, if any, employment opportunities for women in the potato, meat, and grape value chains. Women may work in these value chains but not as paid labor. Development projects cannot create a role for women and, to have a meaningful impact, must deliberately design interventions in value chains in which women play an active role. The established role of women in apricot processing contributed to the project's potential success in benefiting women in this value chain. In the HV/OSV value chain, women stand to benefit from increased employment in harvesting.

CONCLUSIONS BY EVALUATION QUESTION

The conclusions in the findings and conclusions sections for each value chain and activity document value chain or activity-specific conclusions. The overarching conclusions in this section address issues of design, implementation, and sustainability more broadly.

Design

- The project's planned interventions addressed real barriers to more profitable participation in agricultural value chains for many beneficiaries. Awareness of new practices and a comfort level sufficient to make the investment was a greater concern than financial constraints for both FEGs and larger farmers who received individual grants. The project's grant support to influential larger farmers who could afford the investments without assistance can be justified only in the context of reducing the risk of an unfamiliar investment and thus developing demonstrations of project-supported interventions and the interviews provided persuasive evidence that the grant-funded investments were effective demonstrations. Several individual grant recipients, particularly in the grape value chain, made their investment decisions based in part on the experiences of other farmers. At the FEG level, neighboring farmers were replicating low cost technologies and trying to learn the practices promoted by TAP.
- ASF introduced appropriate technologies and practices in each of the four agricultural value chains (apricot, seed potato, grape, and HV/OSV). The interventions changed production practices and, when implemented in time, increased quantities produced and incomes. Interventions that had not yet matured showed good prospects for increased production and sales. Prospects for job creation varied by value chain and value chain actor. FEGs and individual grant recipients in the potato value chain produced few, if any, additional jobs while interventions in HV/OSV created a substantial number of jobs and grape a more modest number. HV/OSV was particularly effective at increasing employment because it is labor intensive but profitable enough to justify the additional labor. It is also an activity that often falls into the realm of women's work. On the other hand, interventions in the potato value chain did not produce many jobs because quantities produced did not increase dramatically and producers have no culture of hiring labor.
- Relatively low-cost investments at the FEG level in HV/OSV (structure farming) have the potential to yield substantial returns in terms of increased production, sales, and employment. Furthermore, the investment is relatively small, within the reach of many FEGs (as demonstrated by the fact that some are replacing rotted bamboos and other FEGs are replicating the structures), and very profitable. Additional technical assistance will probably be necessary to expand the intervention as will ready access to high yielding seed varieties.
- TAP was not particularly successful at increasing access to export markets. Its flagship export-oriented initiative, IMAP, was valuable in exposing participants to global standards, market demands, and new ideas. A relatively large number of participants reported making connections at the exhibitions that led to a sale. However, most IMAP participants were established exporters and many had been to exhibitions on their own prior to TAP. While they made a connection at an exhibition that resulted in a sale, current reporting does not reveal whether that sale represented increased business or whether it merely supplanted another sale. ASF also did not put much effort into facilitating international certifications necessary to access many export markets. Few IMAP participants, other than a few meat exporters, however, mentioned

this as a constraint – but they were also selling largely into markets (e.g., GCC countries) with fewer requirements.

- TAP worked across several levels of the selected value chains. It supported small producers (FEGs), larger producers (individual grants), and processors/exporters. However, ASF did not implement a true value chain development approach because it failed to effectively connect the actors at different levels of the value chain or to address value chain deficiencies its assessment reports identified. For example, FEGs in all supported value chains, and the local partners that formed the FEGs, reported that ASF made no attempt to link them to markets. Consequently, most were selling their produce in the mandis which effectively separated them from high-end buyers. The few attempts to connect FEGs directly to supermarkets failed because they overreached the capacities of the FEGs to supply these markets. ASF's revised project document may actually have represented a realistic step back from a value chain development approach with FEGs when it proposed to "enlist private sector stakeholders within each value chain as primary entry and contact points for small producer beneficiaries" to replace "the project's prior dependence on an illusory scheme of converting small producers to impresarios and their associative organizations to vertically integrated enterprises". The evaluation team saw little evidence of private sector engagement with FEGs in this role.

The meat value chain provides another example. Interventions in the value chain were largely disconnected and premature in the sense that they did not address some of the broader structural issues in the industry that influenced results (e.g., barriers erected by an unfavorable enabling environment, Halal accreditation, effectively connecting processors to buyers for value-added meat products). ASF also seemed to have difficulty identifying appropriate beneficiaries for feedlot fattening and AIT training.

- ASF paid little more than lip service to productively engaging women and empowering them in selected value chains. It is admittedly difficult to engage women in agriculture in Pakistan and ASF attempted this before the de-scoping with women-focused interventions such as goats and kitchen gardens. USAID/Pakistan was instrumental in removing these value chains during the de-scoping because officials saw no benefit from a livelihoods or an economic growth perspective. While it was not the intent, the de-scoping removed many of the women-focused activities leaving only the apricot value chain that was dominated by women and directly benefited women. While USAID/Pakistan is partly responsible for weakening the project's engagement with women, ASF did not appear to take engaging women seriously. It had no gender strategy document and the project document had no meaningful targets or specific strategies for benefiting women.
- ASF targeted domestic and international markets appropriately. It did not try to connect FEGs, or many individual grant recipients, directly to international markets because few had the capacity to navigate complex export requirements and logistics. It focused its export-oriented interventions largely on established exporters and tried to connect them to new markets. To the extent that IMAP participants were also grant recipients or beneficiaries of other interventions, ASF started to develop the value chain to the extent that it simultaneously linked beneficiaries to markets and built their capacities to meet market demands. These examples seem to be the exception rather than the rule however.

Implementation

- The greatest challenge to achieving results was the late start of farm-level implementation. In all supported value chains, beneficiary farmers received the necessary support to begin production

only since 2013 and many are producing and marketing for the first time in the 2015 season. Their limited experience with the interventions made it difficult to assess effectiveness in terms of long-term outcomes and calls into question the sustainability of the results since ASF won't be around to provide additional technical assistance should it be necessary as farmers learn how to apply new practices. While ASF management of the project was largely responsible for the slow start, USAID is also culpable for awarding a very large agreement to a high-risk partner that had never implemented such a large project and had no experience with USAID processes and then dramatically changing strategy midcourse.

- ASF struggled to provide some interventions on time, a serious misstep in an agricultural development project where seasons dictate strict adherence to timing. Local partners attributed the delays to slow grant and procurement processes. Whatever the cause, however, it points to poor management of a critical aspect of implementation that had serious implications for beneficiary farmers. While beneficiaries in all value chains complained of poor timing, the issue of sequencing came up much less often, (i.e., with two potato FEGs, five HV/OSV FEGs, and one grape FEG). Sequencing issues involved training coming after seeds (5 of 6 FEGs) and the structure coming after the seeds (1 of 6 FEGs).
- ASF's management deficiencies harmed beneficiaries and the reputations of local partners. Farmers made decisions with financial and livelihood consequences based on expectations of timely support. When that support did not materialize on time or was of poor quality, it had financial repercussions for households with limited financial resilience to absorb the loss. Poor communication with local partners or a failure to honor commitments also damaged the reputation of some partners when they could not deliver on communities' expectations.
- ASF's strategy of engaging local partners to form FEGs and build their capacities effectively leveraged partners' expertise and presence in project-supported communities and probably contributed to forming FEGs much more quickly than ASF could have on its own. However, poor communication between ASF and partners led to misunderstandings that slowed implementation, formed incorrect expectations among FEGs, and damaged partners' credibility with their constituent communities. Cumbersome procurement and payment procedures coupled with partners' lack of familiarity with USAID requirements also slowed implementation and frustrated partners.

Sustainability

- Because interventions began very late and most are not fully mature, it is difficult to assess prospects for sustainability. Low-cost, relatively simple, and profitable interventions (e.g., structure farming for HV/OSV) are more likely to be sustainable than high-cost, technical, or low margin interventions (e.g., solar drying tunnels for apricot). In all cases, however, sustainability will depend on continuing technical assistance and the availability of key inputs (e.g., hybrid seeds). The technical assistance is not readily available in either the private or public sectors in Pakistan and vegetable and potato producers, in particular, reported that it was difficult to obtain high quality certified seeds. Continued donor support for technical assistance will likely be necessary to improve chances for sustainability, especially with FEGs. Donor support could also play an important role in improving access to productivity-enhancing inputs.

RECOMMENDATIONS

- ASF struggled initially to implement TAP and got off to a very slow start. It was not familiar with USAID's requirements and did not fully grasp the value chain development approach. Nevertheless, ASF built its own capacity during the process and is now a more capable partner for future donor-funded projects. If and when USAID/Pakistan engages local partners, it should do so slowly with relatively modest projects where the negative consequences associated with up-front learning are small. The agency might also consider partnering the organization with an experienced international partner, at least initially, as a mentor as the organization builds its capacity. The partnership agreement will have to give the international partner the role or authority necessary to guide initial implementation appropriately.
- When implementing through local organizations, USAID should ensure that the organization has the capacity to meet USAID's reporting requirements and processes. Developing these capacities after the award may delay implementation and limit results. If a pre-award assessment concludes that an organization does not have these capacities, USAID/Pakistan should stipulate that the organization engage the expertise necessary to develop the processes and materials (e.g., accounting systems, grants manuals) quickly before or immediately at the start of implementation.
- USAID/Pakistan should adapt the value of exports indicator to reflect a more meaningful measure of enhanced access to export markets. As ASF, and other implementing partners, now report on the indicator, it includes any sale participants make as a result of participating in a project-supported marketing event. This is not a meaningful measure of competitiveness for established exporters. More meaningful measures might include trends in overall export sales, sales to new buyers or markets, or offering new products to export markets. Any of these would be more direct and feasible measures of increased access to export markets that are not as misleading as the current value of exports indicator.
- If USAID/Pakistan intends to continue supporting agricultural value chain development, it should consider continuing support to at least some of the more promising TAP-supported value chains and beneficiaries. Because of the late start under TAP, many beneficiaries, particularly FEGs, will require additional technical assistance to cement the lessons they've learned and address new challenges that arise as they gain experience with new technologies and practices. For value chains and interventions deemed particularly promising, additional donor support may be required to accelerate replication and achieve the scale necessary to transform the value chain and produce truly sustainable results. The most promising interventions at this point seem to be HV/OSV and grape (FEGs and larger farmers), apricot orchards, and potato cellars.
- If USAID/Pakistan wishes to continue supporting the meat sector with a focus on developing export markets, it needs to take a more holistic approach. ASF's approach of working on several discrete and disconnected segments of the value chain achieved little because they were not mutually reinforcing and were not demand driven. A development process that starts by building the capacities of processors to meet a small demand for quality value-added meat products and linking these processors to export markets will create a demand for better quality meat animals that donors can then support by investing in building feedlot capacity and improving herd quality.
- To improve prospects for sustainability, USAID/Pakistan should require implementing partners to develop sustainability plans during the design phase, review the plans periodically to determine whether sustainability hypotheses are valid, and adapt implementation as necessary if the hypotheses do not hold true. Sustainability plans should be specific to each activity, i.e., in the TAP example, value chains.

- When building and/or strengthening institutions is an important component of a sustainability strategy, it needs to start early in the project so the institutions are engaged. ASF did not establish the institutional platforms to support the value chains early or help them become effective advocates for the value chains. In similar future situations, USAID should ensure that building and strengthening such institutions occurs early in the project work plan and follow up to make sure it happens.

ANNEXES

Annex I: Evaluation Statement of Work



USAID
FROM THE AMERICAN PEOPLE



THE AGRIBUSINESS PROJECT EVALUATION STATEMENT OF WORK

MARCH 12, 2015

The Agribusiness Project

EVALUATION STATEMENT OF WORK

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ACRONYM LIST

ASF	Agribusiness Support Fund
BDS	Business Development Services
DO	Development Objective
EGA	Economic Growth and Agriculture
FATA	Federally Administered Tribal Area
FEG	Farmers' Enterprise Group
HV/OSV	High-Value/Off-Season Vegetables
IR	Intermediate Result
KP	Khyber Pakhtunkwa
M&E	Monitoring and Evaluation
MSF	Mission Strategic Framework
MSI	Management Systems International
NGO	Non-Governmental Organization
OIG	Office of the Inspector General
PMU	Program Management Unit
RSP	Rural Support Project
TAP	The Agribusiness Project
TPM	Team Planning Meeting
USG	United States Government
USAID	United States Agency for International Development
VCP	Value Chain Platform

INTRODUCTION

IDENTIFYING INFORMATION ABOUT THE PROJECT

The United States Agency for International Development in Pakistan (USAID/Pakistan) awarded the \$90 million, five-year Agribusiness Project (TAP) to the Agribusiness Support Fund (ASF), a local not-for-profit organization, in November 2011. Based on the findings of a 2013 audit by the Office of the Inspector General (OIG), USAID reduced the period of performance to four years and the award amount to \$40 million. The current end date for the agreement is November 2015.

TAP was designed to create and strengthen agribusinesses and thus transform agricultural production in key value chains from a subsistence to a commercial orientation. It was expected that by doing so, producers, processors, and marketers would approach their agricultural activities from a business perspective as opposed to the livelihoods perspective that has been prevalent in the country in the past. The project was, therefore, mandated to provide business development services (BDS) to entrepreneurs in addition to routine management capacity building. The project was also expected to promote adoption of new technologies in the horticulture and livestock sectors with a particular emphasis on processing and sales in order to increase incomes of the enterprises which, in turn, was expected to create employment opportunities.

TABLE 1: PROJECT SUMMARY

Title / Field	Project/Activity Information
Contract/Agreement Numbers	Cooperative Agreement # AID-391-A-12-00001
Agreement Officer's Representative	Mohammad Ghani Khan
Start Date	November 10, 2011
Completion Date	November 9, 2015
Location	Nationwide, except Balochistan
Name of Implementing Partner	Agribusiness Support Fund (ASF), a local not-for-profit organization
USAID/Pakistan Mission Strategic Framework Linkages	DO 2: Improved economic status of focus populations. IR 2.1: Improved economic performance of focus enterprises IR 2.1.2: Improved skill development and job placement IR 2.1.3: Increased use of modern technology and management practices IR 2.2.2: Strengthened private sector and civil society engagement in policy-making.
Budget	\$89 million, reduced to \$40 million.

DEVELOPMENT CONTEXT

Agriculture constitutes the largest sector of Pakistan's economy and a majority of Pakistan's population is directly or indirectly dependent on agriculture. Agriculture contributes 21 percent to the country's Gross Domestic Product, employs more than 44 percent of the formal labor force of Pakistan and is the largest source of foreign exchange earnings. However, continued reliance on a few major crops (e.g., cotton, wheat and sugarcane), stagnation in the growth of crop yields, and the absence of a vibrant high-value agribusiness sub-sector has held back agriculture sector growth as a whole. Over-dependence on

traditional crops has had a significantly negative impact at both the macro and micro levels, impeding rural development, growth in household incomes, and economic growth in general.

The horticulture and livestock sub-sectors are characterized by inefficient production and marketing systems, resulting in a lack of responsiveness to market needs. A lack of awareness with respect to market chains and an inability to satisfy increasingly demanding market requirements for product quality, volume, and continuity of supply continue to deprive producers, especially smallholder farmers, of potential opportunities. A more competitive agribusiness sector can contribute to export-led growth, food import substitution, enhanced food security, employment creation, and poverty reduction. To realize these potentials, support must be given across value chains to improve competitiveness and enhance capabilities to respond to domestic, regional, and international market opportunities.

A lack of competitiveness in rural enterprises, nation-wide economic stagnation, rising inflation, and a persistent energy crisis have impeded development of Pakistan's agricultural sector and slowed rural economic growth and employment generation. Pakistan urgently needs to improve competitiveness in agriculture in order to gain international market share and generate employment opportunities.

PROBLEM OR OPPORTUNITY ADDRESSED

The national strategies of the Government of Pakistan have been pursuing diversification into the horticulture and livestock sector as a way to increase economic growth and eradicate poverty. Being relatively neglected, the horticulture and livestock sub-sectors are constrained by low productivity, high rates of post-production losses, low levels of value addition, and the inability of value chain actors to comply with export market quality standards. The lack of value chain linkages among stakeholders (input suppliers, farmers, service providers, traders, processors) is a demonstration of market failures and has resulted in the slow growth in export products.

The project was conceived based on the potential the agriculture sector presented in the country owing to its size, structure, and relevance to poverty reduction. The horticulture and livestock sub-sectors offer potential for increased employment and income generation through diversification into high value production systems, product and process innovation, value addition, and greater market orientation. Realizing this potential requires investment in downstream and upstream agribusiness functions. However, the cost to mobilize entire value chains has been prohibitive and beyond the capacity of individual enterprises, thus warranting TAP-supported interventions.

FOCUS AREAS AND GROUPS

The project focuses on increasing the competitiveness of Pakistan's horticulture and livestock sectors. The project expects to achieve its goal by strengthening the capacities of smallholder farmer groups (FEGs), individual farmers, and agribusinesses in selected value chains to operate effectively and efficiently and meet the demands of high value markets.

The project's value chain activities take place in areas of the country where they are most relevant (Table 2).

TABLE 2: LOCATION OF VALUE CHAIN ACTIVITIES

Value chain	Province	Districts
Apricot	Gilgit/Baltistan	Gilgit, Hunza, Ghizer, Ganche
Banana	Sindh	Matiari District, Tando Allahyar District, Hyderabad District
Chilies	Sindh	Umerkot District, Kuni Tehsil
Citrus	Punjab	Sargodha District and Mandi Bahaudin District
HV/OSV	Khyber Pakhtunkwa	Peshawar District, Nowshera District, Charsadda District, Mansehra District, Swat District
	FATA	Bajaur Agency, Mohmand Agency
	Punjab	Pothohar, Lahore, Sheikupura, and Nankana Sb.
Livestock	Khyber Pakhtunkwa	
	Punjab	Lahore District
Seed potato	Gilgit/Baltistan	
Grapes	ICT, Punjab	Potohar, Chakwal, and Attock

DEVELOPMENT HYPOTHESIS

The overall goal of TAP is “to support improved conditions for broad-based economic growth, enhanced profitability, and employment opportunities and contribute to poverty alleviation through product and process transformation in selected horticultural and livestock value chains”.¹

The project pursues its goal through three objectives: 1) strengthen capacities in horticulture and livestock value chains to increase sales to domestic and foreign markets; 2) strengthen the capacities of small holders (through FEGs, individual farmers, and agribusinesses) to operate effectively and efficiently; and 3) increase productivity and profitability through adoption of new techniques and technological innovations (among farmers, agribusinesses, and business development service providers). If TAP is successful in meeting these objectives, farmers and agribusinesses in the selected value chains should become more competitive, increase sales to domestic and foreign markets, increase their profitability, and contribute to broad based economic growth in the sector. This will lead to increases in employment and income and thus increase the economic status of the focus populations in Pakistan.

INTENDED RESULTS

The project contributes to the USAID/Pakistan Mission Strategic Framework Development Objective (DO) 2: Improved economic status of focus populations. The Intermediate Results (IRs) applicable to TAP include: IR 2.1: Improved economic performance of focus enterprises; IR 2.1.2: Improved skill development and job placement; IR 2.1.3: Increased use of modern technology and management practices; and IR 2.2.2: Strengthened private sector and civil society engagement in policy-making.

More specifically, the goal of TAP is “increased income generating opportunities”. It expects to achieve this result by increasing the competitiveness of (selected) horticulture and livestock value chains; strengthening market linkages in selected value chains; strengthening the capacities of smallholder farmers and farmer enterprises; and improved technological innovation.

¹ See Agribusiness Project Final Year Work Plan

Key performance indicators include:

- Number of jobs attributable to program implementation
- Value of incremental sales attributable to program implementation
- Beneficiary increased income
- Increased production volume
- Value of new private sector investment leveraged with USG resources
- Number of entities that have applied new technologies or practices
- Number of persons receiving training or skills development
- Number of micro-enterprises linked to larger-scale firms
- Number of micro, small, and medium enterprises (MSMEs) receiving BDS services
- Number of organizations that participate in legislative proceedings/engage in advocacy
- Number of hectares under improved technologies or management practices
- Number of rural households benefiting directly from USG interventions
- Proportion of female participants in USG assisted programs

APPROACH AND IMPLEMENTATION

The project initially focused on 16 value chains, including potato, meat, strawberry, peach, dates, guava, chilies, grapes, apricot, banana, apple, high value off-season vegetables (HV/OSV), pomegranate, tomato, and dairy. Initial targets were very ambitious, e.g. creating 1.3 million new jobs, forming 3,000 FEGs, 315,000 small holders benefiting from formal agreements with buyers, 100 farmers/enterprises assisted in acquiring quality certification for improved access to high end markets, 45,000 farmers receiving technical and business training, organizing 2,500 farmer field schools, and leveraging over 37 million dollars of private sector investment. The project initially began supporting value chains across the country and lost focus on creating transformations in specific locations which could become models for the rest of the country.

A March 2013 OIG performance audit of TAP concluded that TAP had not achieved most of its objectives/targets. The audit recommended that USAID/Pakistan develop an action plan to ensure program goals would be reached by the end of 2016, or, if the goals could not be reached, determine if the agreement signed with ASF should be discontinued. USAID decided to continue the project, but to reduce its scope it from five to four years with an overall life of project funding of \$40 million instead of the initial \$89 million and reduce the number of value chains from 16 to 8. The revised project has much less ambitious targets (Table 3).

TABLE 3: REVISED TARGETS AND ACHIEVEMENTS - DECEMBER 31, 2014

Indicator	Revised Targets	Achievements			
		2013	2014	2015	Total
Jobs Created (#)	13,135	5,234	2,482	1,148	8,864
Household incomes (\$)	2,908,000	689,383	963,621	946,411	2,599,415
Value of incremental sales (\$)	39,468,788	11,644,966	12,399,847	4,711,741	28,756,554
Value of exports (\$)	27,145,926	10,315,120	10,329,278	3,304,266	23,948,664
Households benefiting (#)	28,209	8,938	12,817	2,498	24,253
Private Sector Investment Leveraged (\$)	7,600,000	813,701	5,461,584	1,810,409	8,085,694

The project focuses on creating and strengthening agribusinesses using the value chain approach as a strategy for achieving its primary objectives: increased income (profitability) and employment. TAP

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focuses on stimulating the growth of medium and large size enterprises, while positioning smaller production units and enterprises (in the form of FEGs) to profitably participate in the resulting agricultural sector growth, thereby increasing employment and income generation.²

The project strategy is firstly to identify and address weakness and market failures, and then to deliver a package of technical assistance and cost-sharing grants to strengthen private sector and market systems to address identified constraints. The project's technical assistance and grants to agribusinesses aim to increase agricultural production and promote product (e.g., through value addition) and process (e.g., new technologies and practices, certifications, market access) in selected horticulture and livestock value chains. The support will enhance profitability and employment opportunities, improve conditions for broad-based economic growth, and contribute to poverty alleviation.

The project's cost-sharing grants will mobilize private sector investment in agribusinesses and related enterprises geared to developing value chains that effectively create employment. The project will also build the capacities of Non-Governmental Organizations (NGOs), Rural Support Projects (RSPs), BDS providers and other community organizations to provide agribusiness support services in their communities. Implementation of activities is being carried out in collaboration with international and local partner organizations having relevant experience in market /enterprise development and rural development related activities.

The project contains two primary components: 1) technical assistance for capacity building and program support and 2) partnership window cost-sharing grants, each of these components, and their sub-components are described below.

- I. **Technical Assistance for Capacity Building and Program Support:** Under this component TAP provides on-going technical assistance and capacity building support to upgrade and strengthen the targeted value chains.
 - a. **Technical Assistance and Capacity Building Support under Quality Assurance and Food-Safety Compliance Certifications Program:** The project helps enterprises obtain demand-based certifications required to access high end markets (domestic and export).
 - b. **Technical Assistance and Capacity Building Support under International Markets Access Program:** This activity expects to facilitate a significant increase in targeted value chains' sales to domestic (high end) and export markets by supporting key stakeholders (e.g., selected enterprises, processors, market functionaries, and exporters) to participate in international exhibitions, trade shows, trade fairs, and other international trade promotion events.
 - c. **Development and Operation of Value Chain Platforms:** The activity established 8 Value Chain Platforms (VCPs) with the purpose of validating findings of the project's value chain assessment studies³ and developing consensus among key stakeholders regarding value chain development priorities. The platforms brought together a broad range of stakeholders to develop value chain road maps, address specific or general gaps, and to develop a common vision and agreed strategies for addressing them.

² See Revised Technical Proposal submitted by ASF on July 31, 2013

³ ASF conducted value chain assessment studies for all the chains that they were implementing

- d. Technical Assistance for International Market Linkages Program:** The International Market Linkages Program provides technical assistance for agricultural marketing and brand development directed to identifying and capitalizing on opportunities to link Pakistani agricultural products to high-price markets.
- e. Technical and Managerial Trainings:** The project offers a diversified program of technical and managerial trainings to farmers, enterprises, agricultural professionals, and other relevant stakeholders to build necessary capacities within the prioritized value chains. Technical and managerial training is also integrated with the grants component. The project will not issue any grant unless the business plan includes a capacity building component. Since NGOs will oversee most of the farmer organizations, they will be responsible for providing training on how to work together as a group. Individuals and institutions with expertise in the field of production and post-harvest handling will conduct technical capacity building activities. Business Development Service providers will be engaged to help individuals and FEGs in business planning, business management and marketing.
- f. Organization of Kissan Field Schools in Selected Value Chains:** To address issues of low productivity and quality assurance at the farm level it was imperative that farmers have the necessary skills and capacities to increase productivity and quality. The project supports Field Schools for FEG members and farmers from surrounding areas.
- g. Technical Assistance and Capacity Building of BDS Providers:** International experience indicates that the viability and profitability of agribusiness enterprises depends on the speed at which each enterprise is able to develop the skills, know-how, expertise, and understanding of the dynamics of markets in the face of a fast-changing economic environment. Demand-driven external BDS, which include a wide range of services to help enterprises improve management, performance, access to markets, and competitiveness, can help agribusiness enterprises develop these capacities. The project provides support to build the capacities of BDS providers working specifically with the targeted value chains and also in cross-cutting areas such as quality certifications.
- h. Formation of Farmers' Enterprise Groups (FEGs):** TAP implements this activity through NGOs, RSPs and other community organizations. The activity establishes FEGs comprised of small farmers within identified clusters and provides the FEGs with matching grants for value added activities (processing, grading/packing, storage and marketing) on a commercially viable and sustainable basis. The organization of FEGs facilitates collective action and joint access to services and resources.
- i. Partnership Window Cost-Sharing Grants.** This component provides a cost-sharing grants program that offers a wide range of grant products to all players within targeted value chains including agribusinesses (e.g., processors, exporters, transporters, service providers), individual farmers, FEGs, farmers' associations, and other key value chain actors in order to address weakness and market failures with the objective of strengthening the private sector and market systems and supporting integration into domestic and export market chains. Investments focus on up-stream marketing and processing (off-farm) aspects of the value chains to foster value addition and to capitalize on the strengthened production-level capacities supported under the technical assistance component. Specific types of grants include:

- a. **Support to FEGs** – Grants to FEGs address key constraints to production, value addition, or marketing.
- b. **Support to FEG's Clusters, Farm Services Centers, Farmers and Business Associations and Cooperatives**– These include FEGs' clusters, Farm Services Centers, business associations, and cooperatives (which may scale-up from the FEG formation component of the project). Other existing registered farmers' cooperatives and associations including business associations (exporters, processors etc.) and other similar establishments, which are in the process of registering are also eligible for support.
- c. **Support to Individual and Corporate Farmers**– Eligible applicants included individual and corporate farmers and enterprises interested in setting up and/or enhancing on-farm production and allied facilities.
- d. **Support to Research & Development/Private Sector Agriculture Extension Services** – Eligible applicants included private sector extension service providers, research institutions, farmers' associations, individuals or enterprises proposing to commence private sector extension services or research projects; processors, exporters, brokerage firms, electronic & print media/information dissemination services and lead retailers who were involved or sought to be involved in the provision of extension services to farmers as part of their business.
- e. **Enterprise Development Grants (Challenge Grants)** – These grants support start-up or expansion of partnership concerns, private limited companies, and public limited companies engaged in agribusiness activity, e.g. processors, traders, exporters, cool-chains, packagers, and transporters.
- f. **Enterprise Development Grants (Lead Company Grants)** – These grants support start-up or expansion of partnership concerns, private limited companies, and public limited companies engaged in agribusiness activity (e.g. processors, traders, exporters, cool-chains, packagers, and transporters) located in underserved regions of country.

Table 4 provides examples of interventions in each of the project-supported value chains.

TABLE 4: INTERVENTION EXAMPLES BY COMPONENT AND VALUE CHAIN

Value chain	Technical assistance	Transformation support/grant packages
Apricot	Designing and layout for new orchards, technical and managerial training in drying technology, introduction of packaging material for dried produce and certification.	- Package 1: New orchard establishment (new varieties) and orchard management toolkits in Gilgit/Baltistan; - Package 2: Installation of solar dryers for improved dehydration of apricots; - Package 3: Introduction of improved packaging for dried apricots.
Banana	Technical training in orchard management, managerial training (farm management software), improvement in harvesting and post harvesting practices and exposure to best practices in the Philippines or Caribbean countries.	- Package 1: Tyvek bags for protection of bunches from diseases and improve quality - Package 2: Designing of cardboard packaging for local market and marketing trials; - Package 3: Designing and provision of cold/ ripening chain/containers; - Package 4: Establishment of pack-houses; - Package 5: Display stall in super chains
Chillies	Technical training on managing the issue of aflatoxins, improving drying practices, storage and packaging, certification and improvement of market linkages.	- Package 1: Provision of Geo Text as a material used for drying by small farmers/FEGs; - Package 2: Solar drying units and mechanical dryers; - Package 3: Support for testing facilities for aflatoxin and other infestations.
Citrus	Introduction of GAP, technical and managerial training, farm management software, introduction of improved irrigation practices in orchards and strengthening associations for extension and advisory services.	- Package 1: Tyvek sheet for weed/pest management and improving product quality; - Package 2: Introduction of multipurpose orchard management technology; - Package 3: Establishment of customs terminal in Bhalwal/Sargodha.
Seed potato	Technical assistance, training, facilitating certification scheme, protocols for true to type seeds production and facilitation of market linkages.	- Package 1: Provision of improved seed, tool kits and packaging material for seed potato; - Package 2: Establishment of commercial cellars in the seed potato production areas.
Livestock/meat	Technical and managerial training on meat/dairy farm management, improved nutrition, husbandry practices, development of halal certification campaign, halal protocols and development of certified auditors, save the calf and strengthening of feed industry.	- Package 1: Technical and financial support to stakeholders of Halal Meat Industry of Pakistan in production, certification and marketing; - Package 2: Feed improvement; - Package 3: Breed improvement mainly through artificial insemination
High value & off-season vegetables	Technical and managerial training for natural off-season vegetables production and high value greenhouse farming, improved handling/presentation and market linkages.	- Package 1: Tool kits and packaging material for off-season vegetables growers in natural off-season pockets; - Package 2: Support in establishment of greenhouses in selected urban centres; - Package 3: Introduction and testing of improved packaging.

RATIONALE FOR THE EVALUATION

The evaluation is a final evaluation but it takes place during the last year of TAP's implementation and will, therefore, not produce a complete or final assessment of the project.

EVALUATION PURPOSE

Because TAP will end soon, the evaluation will focus primarily on informing future programming instead of improving current performance. The mission expects to use the evaluation to guide decision making regarding approaches the mission should adopt when designing or implementing future Economic Growth and Agriculture (EGA) activities focusing on agri-business development. In particular, as USAID continues to emphasize implementing through local organizations, the mission is particularly interested in recommendations and lessons learned regarding if, when, and how to use local organizations as implementing partners for future EGA activities of this type.

AUDIENCE

The primary audiences for the evaluation includes: 1) the USAID/Pakistan mission, particularly the EGA Team, 2) the USAID Office of Afghanistan and Pakistan Affairs, and (3) the implementing partner, ASF. USAID and other stakeholders will use the evaluation report to inform future policy and programs.

EVALUATION QUESTIONS

Broadly, the evaluation asks for an independent assessment of the extent to which the project design and implementation contributed to, or detracted from, project effectiveness, engagement of women, and replication and sustainability of results. The two evaluation questions are phrased in terms of the relevance of design choices and the effectiveness of implementation approaches in the context of achieving expected results in the Pakistan context. Each of the questions should highlight not only what worked but what did not and how and why characteristics of design and implementation contributed to, or failed to contribute to, expected results. The evaluation should also identify unanticipated results and generate recommendations for the design and implementation of future projects to improve performance.

I. To what extent was the revised project design relevant to achieving anticipated results?

Explanation: The evaluation should examine the project's revised design, particularly whether it changed its approach from one oriented toward livelihoods development to forming and/or developing sustainable agribusinesses. Specifically, it should examine the relevance, in the Pakistan context, of the redesign to supporting the project's planned results of facilitating business growth, increasing employment, and increasing incomes by increasing businesses competitiveness. It should explore the extent to which the design accounted for the operating environment (including business development services, availability of finances, and technical capacity building); determine the extent to which the revised design incorporated women and women's issues whenever appropriate; and assess the extent to which the redesigned project was appropriate to encouraging and facilitating replication of project activities and results. The evaluation should assess whether the project design took appropriate advantage of both local and international expertise, specifically of the local implementing partner. Finally, the evaluation should document instances where the implementing partner adapted the design in response to

learning or changes in the operating environment and assess whether the adaptations were appropriate in terms of improving performance.

2. To what extent were the project's activities and implementation approaches effective in contributing to achieving expected results?

Explanation: To address this question, the evaluation should examine the extent to which the project's implementation facilitated business growth and development of sustainable agribusinesses through increased competitiveness and employment in the agriculture sector. The evaluation should assess the extent to which the project has achieved its targets, whether targets were realistic or appropriate, and the extent to which it is benefiting participants, particularly in terms of increased incomes. Some specific issues the evaluation may explore include whether project interventions are correctly sequenced such that they facilitated participant's capacity development and if and how project activities have affected production, processing, value of sales, and value of exports.

The evaluation should also explore the extent to which the project's implementation facilitates replication of its activities and results. In this regard some specific interventions the evaluation may explore include:

- Introduction of the new varieties and vineyard management techniques in grapes in Potohar region
- Use of a controlled environment for production of high value off-season vegetable
- Introduction of new varieties and production of improved seed for potato production in Northern Pakistan
- Shift from subsistence production/processing to commercial production/processing of apricots in Northern Pakistan
- Adding value to meat production in terms of producing and exporting meat cuts compared to the traditional practice of exporting animal carcasses
- Minimizing disease in citrus through improved orchard management practices
- Improving quality and increasing quantity of banana through better crop management practices
- Increasing exports of banana from Sindh to rest of Pakistan as well as other countries in the world using improved packaging and processing
- Decreasing level of aflatoxin in chili production in Sindh and thus making the produce export worthy

In addition, the evaluation should examine the extent to which the project implementation incorporated women whenever appropriate and assess whether the project implementation took appropriate advantage of local and international expertise.

EVALUATION DESIGN AND METHODS

The evaluation will employ a mixed methods approach utilizing document review, semi-structured interviews, expert interviews, group interviews, secondary data, and site visits to collect data from project and USAID staff, beneficiaries and participants, stakeholders, and sector experts. The evaluation will rely largely on qualitative data but will incorporate quantitative data and analysis to the extent that project-collected Monitoring and Evaluation (M&E) data and other secondary sources permit.

DATA COLLECTION METHODS

The evaluation will collect data from a number of sources using a variety of methods including reviewing project design and performance documents and sector analyses/reports; semi-structured interviews with project staff, USAID personnel, sector stakeholders, and selected participants/beneficiaries; expert interviews with sector experts including staff of other donor agencies working in the sector; group interviews with FEG members; and secondary data gleaned from project surveys and other data collection activities, performance reports, and other sources (e.g., national statistics or surveys). The illustrative Getting to Answers table in Annex I summarizes potential data collection methods, data sources, sampling procedures (when applicable), and anticipated analyses.

The evaluation design will be sensitive to the requirements of collecting data from men and from women. Female team members will interview women and visit female-dominated activities while both male and female team members will visit with and interview men.

DATA ANALYSIS METHODS

The evaluation will employ rigorous methods to analyze qualitative and quantitative data. Qualitative data will provide rich evidence of the outcomes associated with project interventions and, more importantly, how project interventions contributed to anticipated results, reasons interventions may have failed to produce anticipated results, and unanticipated results. The evaluation team will use rigorous content analysis and coding techniques to identify key themes in the qualitative data and use quantitative analysis (e.g., descriptive statistics, cross-tabulation, or regression) methods to report results and identify patterns and correlations in the data.

If the evaluation team is able to obtain relevant and high quality quantitative data from the project M&E system, it will use methods appropriate to the data to identify patterns and draw out findings.

The analysis will disaggregate results by sex whenever applicable and draw out sex-specific conclusions and recommendations.

METHODOLOGICAL STRENGTHS AND LIMITATIONS

Strengths: The variety of data collection methods and sources employed in the evaluation facilitate triangulation across methods and sources which will strengthen the credibility and depth of findings and thus the validity of conclusions and recommendations.

Limitations: Project interventions are geographically disbursed and it will probably not be practical to visit all sites, or perhaps even all activities or value chains. The evaluation will also rely largely on qualitative data which is not as easily generalized as quantitative data from a representative survey. This raises the potential for biased results. Careful design of the field work and selection of respondents as well as triangulating findings across multiple sources and methods will serve to minimize bias.

EXISTING DATA

Documents available to the evaluation team include:

- The Agribusiness Project, Activity Approval Document, July 2011.
- Audit of USAID/Pakistan's Agribusiness Project, Office of the Inspector General, June 2013.
- USAID's Agribusiness Project, Request for Application, United States Agency for International Development, August 2011.

- USAID's Agribusiness Project, Cooperative Agreement, United States Agency for International Development, November 2011.
- Agribusiness Project, Project Approval Document.
- The Agribusiness Project, First Annual Progress Report (APR-I), November 10, 2011 – November 9, 2012. December 2012.
- The Agribusiness Project, Annual Progress Report II (01 October 2012 – 30 September 2013), December 2013.
- Performance Monitoring Plan. USAID's Agribusiness Project. December 2011.
- The Agribusiness Project, Implementation Plan, October 2013 to September 2014. November 2013.
- Performance Monitoring Plan Update. Agribusiness Project. June 2014.
- Revised Project Document (no date or title)
- USAID's Agribusiness Project, Quarterly Report, from 10 November to 31 December 2012.
- USAID's Agribusiness Project, Quarterly Progress Report IV, July-September 2012, October 2012.
- The Agribusiness Project, Quarterly Progress Report V, October-December 2012, January 2013.
- USAID's Agribusiness Project, Bi-Weekly Report up to the December 20, 2011.
- USAID's Agribusiness Project. Annual Work Plan – November 2011-November 2012. December 2011.
- The Agribusiness Project, Annual Work Plan (Project Year 2)– October 2012-September 2013, December 2012.

EVALUATION PROCESS

Management Systems International's (MSI) evaluation process includes:

1. Mobilize team
2. Review documents – consultants' homes of origin
3. Team Planning Workshop – Islamabad
4. Plan evaluation field work and design data collection instruments
5. Conduct fieldwork
6. Analyze data
7. Brief USAID in initial findings, conclusions, and recommendations
8. Writing draft report
9. Deliver draft report to USAID
10. Review and revise report
11. Deliver final report and upload to the DEC

EVALUATION PRODUCTS

DELIVERABLES

Deliverables under this evaluation include:

- **Debriefing Note-Outline:** The evaluation team will prepare and submit a debriefing document that outlines the team's preliminary findings, conclusions, and recommendations at

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least 24 hours in advance of the briefing. This may also be accompanied by a presentation of the findings.

- **Debriefing with USAID/Pakistan's Program Management Unit (PMU) and EGA office on Findings, Conclusions, and Recommendations:** The team will present the major findings of the evaluation to USAID/Pakistan. The team will consider USAID comments for use in the draft report, as appropriate.
- **Draft Evaluation Report:** The report will answer the evaluation questions and will include findings, recommendations, and conclusions across the components/sub-components. The draft evaluation report (not to exceed 30 pages) will be submitted to USAID/Pakistan's PMU and EGA office for review and comments. USAID will submit all comments to the evaluation team leader and evaluation advisor.
- **Final Evaluation Report:** The final evaluation report will incorporate final comments provided by the USAID/Pakistan PMU and the EGA office. USAID comments are due within 10 days after the receipt of the initial final draft.
- **One-page Brief:** A brief on the key qualitative and quantitative findings and conclusions relative to the evaluation questions will be developed for use by USAID decision makers and other interested stakeholders. This document will be written in English and can be translated and disseminated as desired by USAID's PMU and EGA office.
- **A Presentation to USAID/Pakistan:** A presentation on the final report will be given to USAID's PMU and EGA, and implementing partners as desired.

REPORTING GUIDELINES

The evaluation report will follow standard guidelines as laid out in Appendix I of USAID'S Evaluation Policy and operationalized in Automated Directives System 203.3.1.8 (Documenting Evaluations), reproduced in Annex 2. The evaluation report will follow the structure given below (the section titles and order are illustrative):

- Title page
- Table of contents and table of tables and charts
- List of acronyms
- Acknowledgements
- Program summary
- Map showing the location of program activities
- Executive summary (ideally not to exceed five pages)
- Evaluation purpose and evaluation questions
- Program background. This information provides important context for understanding the evaluation purpose, questions, methods, findings and conclusions and includes:
 - the problem statement;
 - the theory of intervention;
 - the design of the program;
 - the program's results framework; and,
 - program implementation, including the current status of the project.
- Evaluation methods and limitations, describing in detail the evaluation design and methods with explanation as to why they were chosen, with additional information provided in the annexes, if required.
- Summary of data analysis, including methods and other relevant observations.

- Findings and conclusions. This section (or sections) will include findings and conclusions for each evaluation question. If there are a large number of findings, there will be a synthesis or summary of findings for each question that establishes the connection with the conclusions that follow.
- Recommendations. This section will highlight key recommendations formulated as actionable statements of what remains to be done, consistent with the evaluation's purpose, and grounded in the evaluation's findings and conclusions.
- Annexes
 - Evaluation Statement of Work
 - Evaluation Methods and Limitations
 - Data Collection Instruments
 - Data Analysis Plan
 - Bibliography of Documents Reviewed
 - List of individuals and agencies contacted
 - Disclosure of Any Conflicts of Interest
 - Statement of Differences (only if applicable)
 - Evaluation Team Bios

TEAM COMPOSITION

The evaluation team will consist of two international experts (one male and one female) and two Pakistani sector experts (also one male and one female). One of the international experts will serve as the team leader and that individual will be a senior level evaluator with at least some experience in agriculture. The second international team member may be a senior or mid-level expert and should have some experience in evaluation and agricultural development. The two Pakistani experts should be experts in agriculture and agribusiness development in Pakistan. All team members must be fluent in English and have strong writing skills. A statement of potential bias or conflict of interest (or lack thereof) is required from each team member.

The evaluation team will include:

One Team leader/evaluator: A senior expatriate evaluator with a background in agriculture, agricultural development, and agricultural value chains and experience in Pakistan. The team leader will assign responsibilities within the team and ultimately be responsible for:

- Designing specifics of the evaluation approach;
- Supervising execution and implementation;
- Conducting spot checks of team member's work;
- Guiding data analysis; and
- Drafting reports, presentations and other deliverables.

The team leader should have the following qualifications:

- At least a master's degree in a relevant field with at least 15 years of experience or Ph.D. in a relevant field with at least 10 years of experience.
- Demonstrated experience in conducting high quality evaluations to USAID standards. Specific experience in agriculture and agribusiness development is a plus.
- Excellent communication (written and spoken) and interpersonal skills.
- Native fluency in written and spoken English.

Evaluation and/or agriculture specialist: A senior or mid-level expatriate evaluation and/or agricultural development specialist. If the team leader is male, the evaluation specialist will be female and vice versa.

- At least a master's degree in a relevant field with 10 years of experience.
- Demonstrated experience in conducting high quality evaluations to USAID standards. Specific experience in agriculture and agribusiness development is a plus.
- Excellent communication (written and spoken) and interpersonal skills.
- Native fluency in written and spoken English.

Agriculture and value chain sector specialists: Two Pakistani sector experts (one male and one female) in agriculture and/or agricultural value chains.

- At least a master's degree, or equivalent, in a relevant field with at least ten years specific professional experience in the field of agricultural development, particularly in agribusiness development and in horticultural crops and livestock.
- Fully conversant with the principles, business models, and development approaches of agribusiness development / private sector development.
- Prior experience working in Pakistan.
- Prior experience evaluating similar projects.
- Excellent analytic and writing skills and command of written and spoken English and Urdu. Fluency in the languages spoken by interview subjects is a plus.
- Willing and able to travel in the project areas.
- Sensitivity to issues related to local culture and gender.

All evaluation team members will provide a signed statement attesting to a lack of conflict of interest, or describing an existing conflict of interest relative to the project being evaluated.

EVALUATION MANAGEMENT

An MSI evaluation manager will work with the evaluation team as necessary to ensure compliance with MSI and USAID evaluation processes and guidance; participate, and facilitate if necessary, the Team Planning Meeting (TPM); and manage logistics.

Evaluation team members will spend a week prior to arriving in Pakistan reviewing project documents and drafting initial findings from the document review. The team leader will draft initial chapters of the report.

On arrival in Pakistan, the entire team will engage in a two-week TPM. Specific activities include:

- Meeting with USAID to review evaluation objectives, gain a thorough understanding of the assignment, and revise evaluation questions and methodology if necessary.
- Meeting with the implementing partner to learn about implementation, identify relevant beneficiaries/participants for field visits, and discuss field logistics including issues of sampling and partner support for field work.
- Designing the field work (e.g., select sites for data collection or observation, identify key informants and other stakeholders for interviews, schedule meetings, arrange field logistics).
- Design data collection protocols and instruments.
- Assign roles and responsibilities for team members.

The team will depart for three weeks of field work immediately following the TPM. Because of the necessity of having sex-specific sub-teams (in order to interview female beneficiaries) the team will travel together and split into two sex-specific teams when necessary. If there are particular sites with only women-focused activities, the team may diverge during field work. Team members will write up field notes while in the field and meet daily to discuss emerging findings, conclusions, and recommendations. The project covers much of the country and MSI will require guidance from the implementing partner to plan the field work to collect representative data from project activities and to determine the amount of time required for field work. The illustrative schedule of evaluation activities (Table 5) and level of effort schedule (Table 6) assume three weeks of field work but the actual time required may be more or less.

The team will return to Islamabad following the field work and spend two weeks analyzing the data, drafting report sections, and preparing a debriefing presentation for USAID.

TABLE 5: ILLUSTRATIVE EVALUATION SCHEDULE

Activity	Weeks																	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Pre-arrival team work																		
Team Planning Meeting																		
Field work																		
Data Analysis																		
Debriefing and report writing																		
Internal review & revision																		
Branding and editing																		
Submit draft report																		
USAID review																		
Revise report																		
Submit final report																		

TABLE 6: ILLUSTRATIVE LEVEL OF EFFORT SCHEDULE

Tasks	Level of Effort (days)			
	Expat team leader (STTA)	Expat team member (STTA)	Pakistani team member (STTA)	Pakistani team member (STTA)
Pre-arrival				
Document review and initial findings	4	4	4	4
Draft initial chapters	2			
Team Planning Meeting	12	12	12	12
Field work	18	18	18	18
Quantitative/qualitative data analysis	12	12	12	12
Report writing and initial findings debriefing	6	6	6	6
Internal review/ revisions	3			
Final revisions	3			
Travel	4	4		
Total	64	56	52	52

ANNEX 2: REPORTING GUIDELINES

1. The evaluation report must represent a thoughtful, well-researched, and well organized effort to objectively evaluate what worked in the project, what did not work, and why.
2. Evaluation reports must address all evaluation questions included in the scope of work. The evaluation report should include the evaluation statement of work as an annex. All modifications to the statement of work, whether in technical requirements, evaluation questions, evaluation team composition, methodology or timeline need to be agreed upon in writing by the technical officer.
3. Evaluation methodology must be explained in detail and all tools used in conducting the evaluation such as questionnaires, checklists, and discussion guides will be included in an annex in the final report.
4. When evaluation findings address outcomes and impact, they must be assessed on males and females.
5. Limitations to the evaluation must be disclosed in the report, with particular attention to the limitations associated with the evaluation methodology (selection bias, recall bias, unobservable differences between comparator groups, etc.).
6. Evaluation findings must be presented as analyzed facts, evidence, and data and not based on anecdotes, hearsay, or simply the compilation of people's opinions. Findings should be specific, concise, and supported by strong quantitative or qualitative evidence.
7. Sources of information must be properly identified and listed in an annex.
8. Recommendations must be supported by a specific set of findings and should be action-oriented, practical and specific, with defined responsibility for the action.

Note:

These guidelines are taken from Automated Directives System 203.3.2.8 (Documenting Evaluations) - <http://transition.usaid.gov/policy/ads/200/203.pdf> - which is based on Appendix I of USAID Evaluation Policy: Criteria to Ensure the Quality of the Evaluation Report.

Annex 2: Assignment Work Plan



Final Evaluation of the Agribusiness Project (TAP)

Assignment Work Plan EVL.002

June 8, 2015

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1. ASSIGNMENT WORK PLAN

Assignment Work Plan (AWP) Number	EVL.002
AWP Title	Final Evaluation of the Agribusiness Project (TAP)
USAID/Pakistan AWP Manager	Mohammad Ghani Khan, Program Management Specialist
USAID/Pakistan Unit	Economic Growth and Agriculture Office
MSI/PERFORM Learning Facilitator	TBD
MSI/PERFORM Technical Manager	Doug Krieger, Technical Director, MSI Home Office
Start Date	June 10, 2015
End Date	October 15, 2015
Total AWP Cost Estimate	

2. ASSIGNMENT PURPOSE

The purpose of the evaluation is to inform future programming. USAID/Pakistan expects to use the evaluation to guide decision making regarding approaches the Mission should adopt when designing or implementing future Economic Growth and Agriculture (EGA) activities focusing on agri-business development. USAID/Pakistan is particularly interested in recommendations and lessons learned regarding partnering with and implementation by a local organization. There are two key evaluation questions posed in the final statement of work (SOW)¹: 1) To what extent was the revised project design relevant to achieving anticipated results; and 2) To what extent were the project's activities and implementation approaches effective in contributing to achieving expected results.

3. DELIVERABLES

The deliverables outlined in the final SOW² are:

- Debriefing note outline
- Debrief with USAID/Pakistan's PMU and EGA office of initial findings, conclusions and/or recommendations³
- Draft evaluation report

¹ See pages 16-17.

² See pages 19-20.

³ In the draft learning product timeline developed by the PMU, this is listed as data utilization session. The format of this debrief will be discussed during the team planning workshop.

- Final evaluation report
- One-page brief on key findings and conclusions
- Presentation to USAID/Pakistan and other key stakeholders

4. ANTICIPATED SCHEDULE OF ACTIVITIES

The draft schedule of activities is provided in the table below.

Assignment begins	June 10
Team planning workshop	June 16 – June 23
Data rehearsal	June 23
Submission and finalization of evaluation plan and instruments	June 24
Fieldwork	June 24 – July 15
Analysis	July 16 – July 30 ⁴
Submission of debriefing note outline on draft findings and conclusions	July 30
Debriefing with USAID/Pakistan on draft findings, conclusions, and/or recommendations.	July 31
Presentation to USAID/Pakistan and other stakeholders	August 7
Submission of draft report to USAID/Pakistan	August 21
Comments received from USAID/Pakistan	September 10 ⁵
Submission of one-pager on key findings and conclusions	September 15
Comments received from USAID/Pakistan on one-pager	September 21
Submission of final report to USAID/Pakistan	September 24
Submission of final one-pager to USAID/Pakistan	September 24
Assignment ends	October 15

⁴ Eid-al-Fitr is tentatively scheduled from July 16-18, 2015.

⁵ The proposed schedule takes into account national and U.S. holidays. Eid-ul-Azha is tentatively scheduled from August 24-26, 2015. Labor Day is on September 7.

5. ANTICIPATED LEVEL OF EFFORT

Position	Name	Preparation	Travel	TPW	Field Work	Analysis	Findings Debrief	Draft Report	Final Debrief	Final Report	Total LOE
Evaluation Team Leader	Doug Krieger	4	3	7	19	13	1	8	1	6	62
Evaluation Specialist	Jill Tirnauer	4		7	19	13	1	6		2	52
Value Chain Specialist	Syed Noman Ali	3	2	7	19	11	1	2	1		46
Value Chain Specialist	Zohra Khanum	3	2	7	19	11	1	2			45
PERFORM Evaluation Manager/Field Researcher											
MSI Technical Director/Advisor (HO Review)	Himatullah	4		7	19	9	1				40
	TBD	1				2		3		2	8
Total LOE											253
Field Researcher (female)	TBD		1	2	18						21
Field Researcher (female)	TBD		1	2	18						21
Field Researcher (male)	TBD		1	2	13						16
Field Researcher (male)	TBD		1	2	18						21
Total LOE for Data Collection											79

6. COST ESTIMATE

The estimated cost is broken down by four line items:

Direct Labor	
Other Direct Costs	
Subcontractors	
MSI Core Support*	

*MSI Core Support includes project core costs that cannot be allocated directly to the assignment. This percentage is calculated by dividing the total approved core costs in the contract by the total contract value.

7. PERFORM COR APPROVAL

[COR will indicate approval by signing below or indicating "approval" by return email].

Contracting Officer's Representative (COR)

Date

Sadia Naseer Khan, or designate

Annex 3: Locations of Value Chain Clusters

TABLE 11: TAP VALUE CHAIN CLUSTERS

Value Chain	Geographic Clusters		
	Northern Region	Central Region	Southern Region
Apricot	Gilgit/Baltistan		
Banana			Matari, Tando Allahyar, Hyderabad
Chilies			Umerkot (Kunri Tehsil)
Citrus		Sargodha and Mandibahaudin	
High value/off season vegetables	KP/FATA	ICT/Potohar/Punjab (High value green house)	Sindh
Livestock and meat	KP/FATA	Lahore, Sahiwal, Okara, Multan, Muzaffargarh	Karachi
Seed potato	Gilgit/Baltistan, Chitral, Mansehra		
Grapes		ICT, Rawalpindi, Chakwal, Attock	

Source: TAP Revised Project Document

Annex 4: Local Partners

TABLE 12: TAP LOCAL PARTNERS

Value Chain	Supported Value Chain(s)	Region
Rural Community Development (RCDS)	Citrus , Meat & HV/OSV	Punjab
SAFWCO	Chili, banana, HV/OSV	Sindh
Lasooona, SRSP, Hashoo Foundation	HV/OSV	KP
NRSP	HV/OSV, grape	ICT, Potohar
AKRSP	Apricot	GB
AKRSP, Lasooona	Seed potato	GB, KP

Annex 5: Documents Reviewed

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- Agribusiness Support Fund. (2014). *The Agribusiness Project (TAP) Potato - Value Chain Competitiveness Assessment*. Lahore: Agribusiness Support Fund.
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Annex 6: Data Collection Instruments

The Agriculture Project Evaluation

Interview Guide - Agribusinesses/Grant Recipients

Learn how the respondent knows TAP (by what name) and use that name throughout the interview.

1. Can you briefly describe your business?
 - a. What do you do?
 - b. How long have you been in this business?
2. Do you own this business?
3. When did you begin receiving support from TAP?
4. What kinds of support have you or your company received from TAP. (*Probe for training, certifications, tools/equipment, exposure visits, marketing exhibitions, grants, other*)
 - a. **Grants:** *If the respondent received a grant: ask about the grant, e.g., purpose, application process, ease of application, how it was administered, timeliness of receipt, other*
 - b. Could you have made these investments in your business without TAP assistance? If yes, how? If not, why not?
5. Have you changed the way you do your business as a result of the assistance? How? If not, why not? (*Probe for relevance of each type of assistance*)
6. Did these changes affect the value of your sales? If yes how? (*Probe for access to different markets, higher prices, larger quantities sold, standardization, certifications*)
7. If relevant: Did these changes affect the value of your exports? If yes how? (*Probe for access to different markets, higher prices, larger quantities sold, standardization, certifications*)
 - a. If relevant: How important were certifications to accessing international markets?
8. Do you employ only men, only women, or both men and women?
 - a. Did these changes affect the number of workers you employ? If yes how? (*Probe for producing/processing/marketing large quantities, more/less efficient practices, more/less labor intensive practices*)
 - i. If employment increased: What kinds of jobs were created (skilled/unskilled, seasonal/full-time, men/women)
 - ii. Phrase as relevant: What roles do men and women have in your business?
 - iii. Ask only if employment increased: Do you know what the new workers you hired were doing before you hired them? Probe to understand whether the jobs were new jobs (hire people who were not working) or better jobs (hired people who were working for less)
9. As relevant: You've told us that sales/exports/jobs have changed as a result of assistance from TAP. Do you think these are permanent changes or are they only temporary? Explain. (*Probe for reasons results might be temporary*)

10. Since you started receiving support from TAP, are there other things internal or external to your organization that affected the value of your sales or exports or the number of people you employ? Please explain?
11. Are there other changes that could take place in your industry that would improve your business? Explain. *(Probe for constraints in other parts of the value chain. Probe specifically for availability of BDS, financing, TA/human resource capacity)*
12. Other than things we've already discussed, do you have suggestions for how the assistance could have been improved? *(Probe as appropriate for quality of assistance/TA, timing, sequencing, relevance, completeness, grants if relevant)*
 - a. *If not already mentioned and as appropriate, probe for plant varieties; crop production and management practices and technologies; value addition/processing; certifications.*
13. Do you know of examples of other businesses that have started copying the practices or technologies you are using because of TAP. Explain. *Probe to understand whether the replication was really a result of a demonstration effect of TAP.*

The Agriculture Project Evaluation

Interview Guide – ASF Management

1. How did the project change from the original design to the de-scoping in 2013, in addition to the reduction in value chains? (*Probe for approach, partnerships, grants, management*)
2. In your opinion, what were the main reasons for the de-scoping?
3. To what extent were others outside ASF involved in the project re-design? (*Probe for USAID, international partners, stakeholders*)
4. How were the final eight value chains selected? (*Probe for potential for results, geographic location, USAID priorities*)
5. What were the strengths of the re-design/original design?
6. What were the weaknesses of the re-design/original design?
7. What was the role of CNFA and JE Austin? How well did the partnership work?
 - a. What worked well
 - b. What didn't work
8. How did you select local partners (IPs)?
 - a. Did they use different approaches in the field? Were some approaches more successful than others?
 - b. Were some IPs stronger than others? If so, who? What made them stronger?
9. How did you go about selecting experts/institutions to provide TA and training?
 - a. International and local expertise
 - b. BDS providers
10. To what extent were the planned interventions sufficient for achieving desired results?
11. What other interventions should the project have implemented that wasn't part of the original design to address weaknesses or gaps in the various value chains?
12. To what extent did the project incorporate sustainability into the re-design/original design of TAP? (*Probe for whether it was an explicit objective or stated in a concept note or strategy*)
13. Was there a specific objective of including women in the design of TAP? If so, what was the approach? Did it work?
14. What do you think is the project's biggest success?
15. What do you think could have been done better?
16. Did ASF and its partners implement the project as designed? If not, how and why did you deviate from the design or planned implementation approaches?
17. Were there any challenges to managing a project of this size? How did ASF address these challenges?
18. Were there any challenges to implementation? Probe for:
 - a. Changes in forming and working with FEGs

- b. Managing grants
 - c. Managing partnerships
 - d. Value chain platforms
 - e. Linking value chain actors
 - f. Certifications
 - g. Managing vendors for infrastructure
 - h. Technical assistance providers
 - i. IMAP events)
19. Please describe how the M&E plan was developed following the redesign. How were targets set? Did they change? If so, how and why did they change?
 20. Can you describe the role of BDSPs. How did you work with them and what do they do?
 21. What constitutes a successful FEG?
 22. What will make the value chain platforms/business associations created by TAP successful? What was their role in the project and how do you envision their role after TAP ends?
 23. What are the prospects for sustainable results? Is there anything else the project or future projects should do to ensure sustainability?
 24. Do you have an exit strategy? What is it?

The Agriculture Project Evaluation

Interview Guide – ASF Grapes Value Chain Lead

Background

1. ASF added the grape value chain back in fairly late (October 2014). Can you explain why it was added back in and why ASF believed it was important?
2. What is the market for grapes? Demand?
3. Did ASF work in the grape sector under the ADB project?

FEGs

4. What did ASF hope to accomplish with grape FEGs?
5. Did you accomplish these objectives? If not, why not?
6. How important was a demonstration effect to accomplishing results and did it materialize?
7. Why did ASF terminate support to grape FEGs in 2014 (NRSP)?
8. All of the grape FEGs we spoke with were selling in local mandis. Are there any examples where ASF has been able to link grape FEGs to other markets? If not, why not?
 - a. Do FEGs have trouble reaching other markets because of inherent capacity limitations, insufficient time with ASF, implementation issues?
9. Did ASF experience any challenges working with FEGs in the grape sector? Explain?
10. What local partners did you work with to support grape FEGs?
11. What was your experience with local partners for grape FEGs?
 - a. What were they responsible for (forming FEGs, training (what kind), marketing, ...)
 - b. Were they qualified to do what you expected of them? Explain.

Grant Recipients

12. How were grant recipients in grapes selected?
13. What did ASF hope to accomplish with grape grant recipients? What were your objectives?
14. How important was the demonstration effect and has it materialized?
15. Most of the grant recipients we spoke with were selling in the local mandis. Are there any examples where ASF has been able to link grape FEGs to other markets? If not, why not?

General

16. What were TAP's most significant accomplishments in the grape sector?
17. What were the greatest challenges you faced and how did you overcome them?

The Agriculture Project Evaluation

Interview Guide - BDSPs

Describe the project and learn how respondents refer to it (e.g., TAP, ASF) and use the name they're familiar with throughout the interview.

1. Can you describe your business? What services do you provide, what kind of businesses do you work with?
2. What kinds of support have you received from TAP. *(Probe for training, tools/equipment, other)*
3. Has your business changed as a result of the assistance? How? If not, why not?
 - a. *Probe for ability to offer different services, quality of services, new clients, other*
 - b. *Probe for relevance of each type of assistance*
4. Did these changes affect the amount of money you earn from this business? If yes how? *(Probe for access to different clients or services, higher fees, other)*
5. Did these changes affect the number of workers you employ? If yes how?
 - a. If employment increased: What kinds of jobs were created (skilled/unskilled, seasonal/full-time, men/women)
 - b. *Phrase as relevant:* What roles do men and women have in your business?
 - c. *Ask only if employment increased:* Do you know what the new workers you hired were doing before you hired them? Probe to understand whether the jobs were new jobs (hire people who were not working) or better jobs (hired people who were working for less)
6. As relevant: You've told us that sales/jobs have changed as a result of assistance from TAP. Do you think these are permanent changes or are they only temporary? Explain. *(Probe for reasons results might be temporary)*
7. Since you received training from TAP, are there other things internal or external to your organization that affected the value of your sales or exports or the number of people you employ? Please explain?
8. Are there other changes that could take place in your industry that would improve your business? Explain.
9. Other than things we've already discussed, do you have suggestions for how the assistance could have been improved? *(Probe as appropriate for quality of assistance/TA, timing, sequencing, relevance, completeness, grants if relevant)*

TAP Evaluation

Focus Group Discussion Guide –Farmers’ Enterprise Groups

Introduction and Purpose of Discussion

Assalam-o-alaikum, thank you for coming here today. We are grateful that you are giving us your time.

Before we begin, we will introduce ourselves. [The moderator and the note-taker should introduce themselves]

We are here to discuss with you about The Agriculture Project which is being implemented by the Agriculture Support Fund (ASF) and [name of local implementing partner] and how this project may have helped you with your [name of supported crop] growing, harvesting and selling. Through this discussion, we will ensure that your ideas and opinions are heard.

We would like to record these discussions so that we remember and do not miss any of the ideas that you give us. The details of these discussions will not be shared with anyone and your names will be kept confidential - so please do not worry and feel free to express your ideas.

Your participation in this discussion is voluntary and we really hope you are willing to participate actively and with enthusiasm. We would like to ask you about your experience with date growing and harvesting and selling and how the different training and equipment you have received has helped you improve your production, harvesting and farm sales.

Will you allow us to record this discussion? Thank you

Introductory Questions	
1. Can you tell me something about your farming activities. How large is your farm and what do you grow?	
2. When did this FEG begin receiving support from TAP?	
We want to talk first about your production of [name of supported crop] including the practices and technologies you use to grow and harvest [name of supported crop]. We'll talk about processing and selling later.	
3. Since you began working with TAP, what kinds of support have you received from [name of project/partner] for growing, harvesting, processing, or selling [name of supported crop]?	<i>Probe only if necessary</i> • Did you receive any training? Explain. • Did you receive any tools? Explain. • Did you receive any equipment? Explain. • Did you receive any plants or seeds? Explain. • Did you receive help selling? Explain.
4. How do you work together as a group to benefit from the support you received?	<i>Probes to understand how the group functions. Suggested probes:</i> • How do you share infrastructure such as tunnels or dryers? • Do you all own land? If not, are some of you tenants on land owned by other member of the group? • Do you plant, cultivate, harvest, process, or sell individually or as a group?
5. Since you began working with TAP, have you received support from any other organization or project for growing, harvesting, processing, or selling [name of supported crop]? Describe.	<i>Probe (anything else?) to discover all types of support.</i>
6. Are you using different equipment or practices to grow, harvest, or process [name of supported crop] because of the support you received from [name of project/partner]? Explain.	Note that some respondents may not have grown [name of supported crop] prior to the project. <i>Probe only if necessary to understand the extent to which TAP support influenced production, harvesting, or processing practices.</i> • Are you using different varieties? Explain. • Are you using different techniques, tools, or equipment? Explain. • Are you using different inputs or using inputs differently? Explain. • Anything else? Explain.

7. Have the different equipment and practices affected the quantity of [name of supported crop] you produce? Explain.	<i>Probe only if necessary. Probes should focus on learning <u>how</u> the practices affected the quantity they produced.</i> • Has it changed the amount of land you planted to [name of supported crop]? How? • Has it helped increase yields? How? If not, why not?
8. How, if at all, have the different equipment and practices affected the quantity of [name of supported crop] you lost/wasted? Explain.	<i>Probe only if necessary</i> • Better harvesting or handling practices. • Better production practices • If not, why not?
9. How, if at all, have these practices affected the cost of producing and selling [name of supported crop]? If it costs more, is the added cost worth it?	<i>Probe only if necessary. Probes should focus on learning <u>how</u> the practices affected production and marketing costs.</i> • Did adopting the practices cost more than your usual practices? • Did the practices save you money, perhaps by saving time?
10. Which of the new equipment and practices you use to grow, harvest, process, or sell [name of supported crop], did you find the most useful in increasing your profits from [name of supported crop]? Why?	<i>Probe only if necessary and applicable about,</i> • New varieties • New production practices • Tools and equipment • Value addition • Marketing
11. Are there other kinds of support you still need that could increase your profits from growing [name of supported crop]? Explain.	•
12. Did you know about these technologies and practices before receiving support from TAP? If yes, why weren't you using them, why not?	<i>Probe only if necessary.</i> • Did you not know about the practices? • Were you not able to afford to implement the practices? • Were you not able to obtain necessary tools or other inputs?
13. You've told us about new practices you are using now to produce, harvest, process, or sell [name of supported crop]. Can you think of any reasons you might stop using these practices in the future?	• If a tool or piece of equipment breaks, could you afford to repair or replace it? • Is there anything else? <i>Keep probing until participants can't think of other reasons.</i>
14. How likely is it that you will continue to use these practices in the future? Explain.	•
Employment	
15. Do you employ any labor that you pay, either in cash or in-kind?	<i>Use this as a filter to know how to ask the following questions.</i>

16. Has the number of people you employ to produce, harvest, process, or sell [name of supported crop] changed when you started using the practices and technologies you received from TAP? Explain.	<i>Probe for the reasons they need more or less labor requirements for growing, harvesting, and processing?</i> <i>Probe for changes in number of men and women employed.</i>
17. Are the laborers you employ men, women, or both men and women?	<i>Use this as a filter to know how to ask the following questions.</i>
18. <i>If they employ more labor:</i> What kind of jobs are these people doing? What kind of jobs are men doing? What kind of jobs are men doing? Are the jobs seasonal jobs or full-time jobs?	<i>Probe for details on the different types of jobs men and women do in producing, harvesting, processing, and selling and what kind of jobs have been created.</i>
19. Do you know what these laborers were doing before you employed them?	<i>Probe to understand whether the project created new or better jobs.</i>
Closing Questions	
20. Is there anything that TAP could have done better? Explain.	<i>Probe if necessary:</i> <i>Were there things about the support you received from TAP that did not work or did not work as well as you expected? Explain.</i>
21. Since you received the support from TAP, do you know of other farmers or FEGs that have seen what you doing and have started doing the same things? Explain.	<i>Probe to understand whether the replication was really a result of a demonstration effect of TAP.</i>

TAP Evaluation

Focus Group Discussion Guide –Farmers’ Enterprise Groups

Introduction and Purpose of Discussion

Assalam-o-alaikum, thank you for coming here today. We are grateful that you are giving us your time.

Before we begin, we will introduce ourselves. [The moderator and the note-taker should introduce themselves]

We are here to discuss with you about The Agriculture Project which is being implemented by the Agriculture Support Fund (ASF) and [name of local implementing partner] and how this project may have helped you with your [name of supported crop] growing, harvesting and selling. Through this discussion, we will ensure that your ideas and opinions are heard.

We would like to record these discussions so that we remember and do not miss any of the ideas that you give us. The details of these discussions will not be shared with anyone and your names will be kept confidential - so please do not worry and feel free to express your ideas.

Your participation in this discussion is voluntary and we really hope you are willing to participate actively and with enthusiasm. We would like to ask you about your experience with date growing and harvesting and selling and how the different training and equipment you have received has helped you improve your production, harvesting and farm sales.

Will you allow us to record this discussion? Thank you

Introductory Questions	
22. Can you tell me something about your farming activities. How large is your farm and what do you grow?	
23. When did this FEG begin receiving support from TAP?	
We want to talk first about your production of [name of supported crop] including the practices and technologies you use to grow and harvest [name of supported crop]. We'll talk about processing and selling later.	
24. Since you began working with TAP, what kinds of support have you received from [name of project/partner] for growing, harvesting, processing, or selling [name of supported crop]?	<i>Probe only if necessary</i> • Did you receive any training? Explain. • Did you receive any tools? Explain. • Did you receive any equipment? Explain. • Did you receive any plants or seeds? Explain. • Did you receive help selling? Explain
25. How do you work together as a group to benefit from the support you received?	<i>Probes to understand how the group functions. Suggested probes:</i> • How do you share infrastructure such as tunnels or dryers? • Do you all own land? If not, are some of you tenants on land owned by other member of the group? • Do you plant, cultivate, harvest, process, or sell individually or as a group?
26. Since you began working with TAP, have you received support from any other organization or project for growing, harvesting, processing, or selling [name of supported crop]? Describe.	<i>Probe (anything else?) to discover all types of support.</i>
27. Are you using different equipment or practices to grow, harvest, or process [name of supported crop] because of the support you received from [name of project/partner]? Explain.	Note that some respondents may not have grown [name of supported crop] prior to the project. <i>Probe only if necessary to understand the extent to which TAP support influenced production, harvesting, or processing practices.</i> • Are you using different varieties? Explain. • Are you using different techniques, tools, or equipment? Explain. • Are you using different inputs or using inputs differently? Explain. • Anything else? Explain.
28. Have the different equipment and practices affected the quantity of [name of supported crop] you produce? Explain.	<i>Probe only if necessary. Probes should focus on learning how the practices affected the quantity they produced.</i> • Has it changed the amount of land you planted to [name of supported crop]? How? • Has it helped increase yields? How? If not, why not?
29. How, if at all, have the different equipment and practices affected the quantity of [name of supported crop] you lost/wasted? Explain.	<i>Probe only if necessary</i> • Better harvesting or handling practices. • Better production practices • If not, why not?

30. How, if at all, have these practices affected the cost of producing and selling [name of supported crop]? If it costs more, is the added cost worth it?	<i>Probe only if necessary. Probes should focus on learning how the practices affected production and marketing costs.</i> • Did adopting the practices cost more than your usual practices? • Did the practices save you money, perhaps by saving time?
31. Which of the new equipment and practices you use to grow, harvest, process, or sell [name of supported crop], did you find the most useful in increasing your profits from [name of supported crop]? Why?	<i>Probe only if necessary and applicable about,</i> • New varieties • New production practices • Tools and equipment • Value addition • Marketing
32. Are there other kinds of support you still need that could increase your profits from growing [name of supported crop]? Explain.	•
33. Did you know about these technologies and practices before receiving support from TAP? If yes, why weren't you using them, why not?	<i>Probe only if necessary.</i> • Did you not know about the practices? • Were you not able to afford to implement the practices? • Were you not able to obtain necessary tools or other inputs?
34. You've told us about new practices you are using now to produce, harvest, process, or sell [name of supported crop]. Can you think of any reasons you might stop using these practices in the future?	• If a tool or piece of equipment breaks, could you afford to repair or replace it? • Is there anything else? <i>Keep probing until participants can't think of other reasons.</i>
35. How likely is it that you will continue to use these practices in the future? Explain.	•
Employment	
36. Do you employ any labor that you pay, either in cash or in-kind?	<i>Use this as a filter to know how to ask the following questions.</i>
37. Has the number of people you employ to produce, harvest, process, or sell [name of supported crop] changed when you started using the practices and technologies you received from TAP? Explain.	<i>Probe for the reasons they need more or less labor requirements for growing, harvesting, and processing?</i> <i>Probe for changes in number of men and women employed.</i>
38. Are the laborers you employ men, women, or both men and women?	<i>Use this as a filter to know how to ask the following questions.</i>
39. <i>If they employ more labor:</i> What kind of jobs are these people doing? What kind of jobs are men doing? What kind of jobs are women doing? Are the jobs seasonal jobs or full-time jobs?	<i>Probe for details on the different types of jobs men and women do in producing, harvesting, processing, and selling and what kind of jobs have been created.</i>
40. Do you know what these laborers were doing before you employed them?	<i>Probe to understand whether the project created new or better jobs.</i>
Closing Questions	

41. Is there anything that TAP could have done better? Explain.	<i>Probe if necessary:</i> • <i>Were there things about the support you received from TAP that did not work or did not work as well as you expected? Explain.</i>
42. Since you received the support from TAP, do you know of other farmers or FEGs that have seen what you doing and have started doing the same things? Explain.	<i>Probe to understand whether the replication was really a result of a demonstration effect of TAP.</i>

The Agriculture Project Evaluation

Interview Guide – IMAP Participants

1. Can you please tell us a little about your company; what is your main activity, do you export, what other types of activities are you engaged in (e.g. trading, processing, farming, etc.)
2. What kinds of support have you received from ASF Project? Probe if necessary for:
 - a. Participate in any national/international business promotion/marketing event
 - b. Branding and marketing support
 - c. Support for improving packaging, export operation, and export documentation
 - d. Support to obtain certifications required by international markets
3. Are you selling to new international markets/buyers (i.e., who you did not sell to before ASF) as because of the support you received from ASF? Explain.
 - a. Probe to understand attribution, e.g., previous export experience and specifically how ASF support expanded opportunities or market access (certifications, introductions, exposure). Did new markets displace existing markets with little or no increase in overall sales volume? If so, were new markets more lucrative or more desirable?

Exposure Visits

4. Can you tell us how the exposure visit/exhibition you attended with ASF support?
 - a. What was the purpose, a study tour, exposure visit, marketing exhibition, etc.
 - b. What costs did ASF cover and which were your responsibility? Probe as appropriate for travel, lodging and meals, exhibit space/booths, other)
5. What was the most important benefit to you of participating in the event? Probe if necessary for knowledge, contacts, contracts, other.
6. Did participating in the event affect the value of your sales and/or exports? Please explain how? If not why not?
 - a. If you found new buyers, did you sell only once or did you establish a longer-term relationship with the buyer?
7. You incurred a cost in time and money to participate in the event. Was it worth it for your business to participate in the event? Why?
8. Had you been to similar events before your participation in this event (with or without assistance e.g. donor, government) ?
9. Have you been to similar events since you received the assistance from ASF. Which ones? Did you receive any support to attend/participate?

Other type of assistance e.g. branding, certifications, packaging, B2B linkages etc

10. If applicable: Did the other types of assistance you received from ASF affect the value of your sales and/or exports? Please explain how? If not why not? (Probe for change in quantities sold, changes in price or cost, more/less efficient practices or technologies)

Employment

11. Do you employ only men, only women, or both men and women?

- a. Did these changes affect the number of workers you employ? If yes how? (*Probe for producing/processing/marketing large quantities, more/less efficient practices, more/less labor intensive practices*)
 - i. If employment increased: What kinds of jobs were created (skilled/unskilled, seasonal/full-time, men/women)
 - i. Phrase as relevant: What roles do men and women have in your business?
 - ii. Ask only if employment increased: Do you know what the new workers you hired were doing before you hired them? Probe to understand whether the jobs were new jobs (hire people who were not working) or better jobs (hired people who were working for less)

Sustainability

- 12. If applicable: Do you think you continue the new market connections, practices, and technologies you adopted with ASF support after ASF is finished? If yes, how? If no, why not?
- 13. If applicable: What could make it more likely that your business will continue to experience the benefits you achieved with ASF assistance?

Strengths and Weaknesses of TAP

- 14. In your opinion, what do you think ASF could have done to achieve better results for your business? Explain.

The Agriculture Project Evaluation

Interview Guide – Implementing Partners

1. What is the expertise of your organization? Did you have experience in agricultural value chains or agricultural development before working with TAP? Please describe that experience.
2. What was your role in implementing TAP? (Probe for role in forming and supporting FEGs.)
3. How did you come to partner with ASF on TAP? How would you describe your partnership?
4. What were your main objectives working with FEGs?
5. What latitude were you provided in designing and delivering technical assistance and/or training?
6. Did you work with local and international experts? If yes, what did you think of the quality of consultants provided?
7. Did you know that the project was redesigned in 2013?
 - a. In addition to reducing the number of value chains, how did the project change from the original design? (Probe for changes in the approach, partnerships, roles of IPs, nature and use of grants, management)
 - b. In your opinion, what were the main reasons for the re-design?
 - c. Were you involved in the re-design?
 - d. If yes, to what extent were you involved and who else was involved? (Probe for international partners, USAID, other stakeholders)
 - e. Did the re-design affect your work or your role in TAP? How?
8. In your opinion, what were the strengths of project's design?
9. In your opinion, what were the weaknesses of the project's design?
10. Was there a specific objective of including women in the design and implementation of your work for TAP? If so, what was it? Did it work?
11. What challenges did you face implementing the project? (Probe for any problems with FEGs, grants, linkages to processors or markets, outside technical assistance)
12. How did you overcome these challenges?
13. In your opinion, what constitutes a successful FEG?
14. What challenges do FEGs or larger farmers/corporate farmers face linking to markets in the _____ value chain?
15. In your opinion, how likely is it that FEGs will be able to sustain the results they've achieved under TAP after TAP assistance ends? Why are the results sustainable?
16. What will be the challenges to sustaining results?
17. Is there anything else the project or future projects could do to increase prospects for sustainable results?
18. What would you have done differently as an IP for this project?

The Agriculture Project Evaluation

Interview Guide – Meat Industry Managers

Learn how the respondent knows TAP (by what name) and use that name throughout the interview.

1. What kinds of support have you or your company received from TAP. (Probe for training, certifications, tools/equipment, market linkages, grants, other)
2. Have you changed the way you do your business as a result of the assistance? How? If not, why not? (Probe for relevance of each type of assistance)
3. Did these changes affect the value of your sales? If yes how? (Probe for access to different markets, higher prices, larger quantities sold, standardization, certifications, exports)
4. If relevant: Did these changes affect the value of your exports? If yes how? (Probe for access to different markets, higher prices, larger quantities sold, standardization, certifications)
5. If relevant: How important were certifications to accessing international markets?
6. Do you employ only men, only women, or both men and women?
 - a. Did these changes affect the number of workers you employ? If yes how? (*Probe for producing/processing/marketing large quantities, more/less efficient practices, more/less labor intensive practices*)
 - i. If employment increased: What kinds of jobs were created (skilled/unskilled, seasonal/full-time, men/women)
 - ii. Phrase as relevant: What roles do men and women have in your business?
 - iii. Ask only if employment increased: Do you know what the new workers you hired were doing before you hired them? Probe to understand whether the jobs were new jobs (hire people who were not working) or better jobs (hired people who were working for less)
7. As relevant: You've told us that sales/exports/jobs have changed as a result of assistance from TAP. Do you think these are permanent changes or are they only temporary? Explain. (Probe for reasons results might be temporary)
8. During the past 4 years, are there other things internal or external to your organization that affected the value of your sales or exports or the number of people you employ? Please explain?
9. Are there other changes that could take place in your industry that would improve your business? Explain. (Probe for constraints in other parts of the value chain. Probe specifically for availability of BDS, financing, TA/human resource capacity)
10. Other than things we've already discussed, do you have suggestions for how the assistance could have been improved? (Probe as appropriate for quality of assistance/TA, timing, sequencing, relevance, completeness, other)

The Agriculture Project Evaluation

Interview Guide – TA Providers

Learn how the respondent knows TAP (by what name) and use that name throughout the interview.

1. What is your field of expertise and what role did you play in implementing ASF's project?
2. What knowledge do you expect trainees to acquire after successful completion of their courses or the assistance you provide?
 - a. What results did the selected approach attain? Did you ever follow-up on your graduates (success ratio, best practices being followed)
3. How was the course work/syllabus designed (was it your prerogative based on your technical expertise or did ASF develop the material)?
4. What results did the selected approach attain? Did you ever follow-up on your graduates (success ratio, best practices being followed)
5. Were you approached at the right time by ASF regarding the technical assistance provision? *(Probe about sequencing of interventions)*
6. In your opinion what interventions/ assistance would have helped more to produce better results in terms of skills, knowledge, productivity, sales etc.?
7. To what extent do you think the project design accounted for the operating environment (including business development services, availability of finances, and technical capacity building)?
8. Do you think the designed course of assistance was beneficial in developing a successful business or partnership strategy(ies) in current context?
9. Did the course and/or technical assistance extended by you have any emphasis on women learning?
10. How do you think the technical assistance has changed the productivity and the subsequent sales?
11. How useful do you think the assistance packages provided were? (Tools and/or equipment if provided)
12. Were new crop varieties (i.e., grapes, potatoes, apricots) introduced by the project appropriate and effective (in terms of productivity, sales, market demand etc.)?
13. Do you think the crop varieties introduced by the project were according to the current market requirements? In terms of:
 - a. Production and management Techniques
 - b. Business development
 - c. Increase in sales or exports
14. Did the assistance provided focus on domestic and international markets appropriately? Was its approach (market events, certifications) effective?
15. Was the quality, content, and delivery of training(s) and technical assistance, appropriate?
16. Were the interventions appropriate to the particular/ given context? Why?

17. What kind of assistance/services did you provide to the ASF/TAP? (Adaptation of modern production techniques, marketing, business management technologies)
18. In your opinion the current services provision practice would increase in the production of target value chain and/or profitability of the value chain?
19. To what extent the capacity building services will change the efficiency?

The Agriculture Project Evaluation

Interview Guide – USAID

1. Were you involved in the original design of TAP?
2. In addition to the reduction in value chains, how did the project design or implementation change during the de-scoping in 2013? (Probes: approach; partners; grants; concerns about management)
3. In your opinion, what were the main reasons for the de-scoping?
4. How were the final eight value chains selected? (Probes: potential for results, geographic location, USAID priorities)
 - a. Did USAID play any role in the decision?
5. Do you know how ASF selected local partners like NGOs, TA providers, international partners?
6. To what extent did the project design specifically address sustainability and how?
7. Did the project design include a specific strategy for including women? Explain.
8. Did ASF and its partners implement the project as designed? If not, how and why did it deviate from the design or planned implementation approaches?
9. To what extent were the planned interventions sufficient for achieving desired results?
 - a. What other interventions should the project have implemented that wasn't part of the original design to address weaknesses or gaps in the various value chains?
10. Were initial targets realistic and achievable?
11. How were new targets established after the redesign? What role did USAID play in setting new targets?
12. Did ASF encounter any particular challenges implementing the project? Explain. (Probes: managing grants, selecting appropriate partners, identifying appropriate technical expertise, facilitating links between value chain actors, ...)
13. What role are the value chain platforms expected to play after TAP ends?
 - a. What will make them successful?
14. Does the project have a specific strategy for sustainability or an exit strategy?
15. In your opinion, are project results sustainable? Why?
 - a. Are results in some value chains or for some value chain actors (e.g., FEGs versus individuals) more sustainable than others? How and why?
 - b. Is there anything else the project or future projects should do to ensure sustainability?
16. Can you think of examples where the project's intervention has leveraged private sector resources to enhance results throughout the value chain?
17. What do you think is the project's biggest success?
18. What do you think could have been done better?

The Agriculture Project Evaluation

Interview Guide – ASF Value Chain Leads

1. Can you describe your professional experience in the _____ value chain?
2. Why did ASF decide to work in the _____ value chain? (Probe for rationale for selecting the value chain, e.g., contribution to project objectives, USAID priority, ASF experience, other donor support)
3. What constraints and opportunities did ASF's assessment of the _____ value chain identify? (Probe to identify all constraints and opportunities along the entire value chain, not just the things ASF chose to work on)
 - a. Who conducted the assessments? (Probe for local or international experts, ASF or contracted)
 - b. How satisfied are you with the quality of the assessment? Why? (Probes: was it complete, was it accurate, was it informative, did it cover the entire value chain – demand and supply sides,...)
 - c. Were other stakeholders or local experts involved in the assessments?
4. What interventions did ASF design and implement to address identified constraints and take advantage of opportunities? (Probe for interventions along the entire value chain, which VC actors did ASF work with and how, were interventions sufficient, were any unnecessary)
5. In your experience, what worked particularly well in ASF's support to the _____ value chain and why? (Probes: were interventions appropriate, were they effective in increasing sales, exports, jobs, or income)
6. In your experience, what did not work well and why? (Probes on whether interventions were appropriate, did ASF and USAID internal processes/procedures cause any problems, was the grant process easy and quick,
 - a. Did you experience any internal or external challenges working with this value chain? Explain. (Probe for issues related to design or implementation, e.g., grant processes, procurement, experience with local partners/TA providers/vendors/service providers, other)
7. In your experience, was the project successful in increasing the value of sales and exports, creating jobs, and improving incomes for beneficiaries in the _____ value chain? How?
 - a. In your opinion, which of the interventions was most effective or most important to achieving results?
8. In your opinion, what could ASF have done better to achieve better results?
9. In your opinion, how likely is it that the benefits beneficiaries have achieved will continue after ASF ends? How and why?

Annex 7: Interviews

TABLE 13: LIST OF INTERVIEWS AND SITE VISITS

Individual	Organization	Position	Location	Role in TAP/evaluation
6/13/15				
Shad M	ASF	CEO	Islamabad	Implementer
Inamullah Khan		Senior Advisor M&E		Implementer
6/19/15				
Saeed ur Rehman	ASF	Value Chain Lead, Grapes	Islamabad	Implementer
Rhustam Khan		Value Chain Lead, HV/OSV (north)		
Mohammad Akbar		Regional Coordinator, FATA and KP		
Shafqat Ali Syed		Director, Grants and Contracts		
Muhammad Ashan Riaz		Value Chain Lead, Meat Sector		
Aeyesha Gulzar		National Coordinator		
6/22/15				
Saeed Iqbal	ASF	Value Chain Lead, Regional Coordinator	Islamabad	Implementer
6/25/15				
Muhammad Ashan Riaz, Ph.D.	ASF	Value Chain Lead, Meat Sector	Islamabad	Implementer
6/26/15				
Ashlaq Hussain	NRSP	Project Coordinator	Islamabad	Implementing partner
Mohammad Khalil Farooq	NARC	Director, Agriculture Poli-Technique Institute	Islamabad	Pre-qualified service provider
Raja Zaheer Ahmed	Individual Farmer	Vineyard Owner	Islamabad	Grape individual grant recipient
Husnain Chaudry	Individual Farmer	Son of vineyard owner Shahid Mahmood Caudry	Islamabad	Grape individual grant recipients (2)
6/27/15				
Mansoor Ayaz, M. Shafir Khan and M. Siddique	Individual Farmer	Son of vineyard owner MNA Ghulam Sawar Khan and nephew of vineyard owners M. Shafiq Khan and M. Siddique	Islamabad	Grape individual grant recipients (3)
Syed Tanvir	Individual Farmer	Brother of Syed Asad Ali Shah, owner of the farm	Islamabad	Grape individual grant recipient
Jibran Naseer	Individual Farmer	Son of vineyard owner ³³	Islamabad	Grape individual grant recipient
Noshaba Shehzad Masud	Shehzad Asia International	Owner	Islamabad	IMAP participant
Mohammad Ghani Khan	USAID/Pakistan	AOR	USAID/Pakistan	AOR
6/28/15				
Kot Key	FEG		Attock	Grape FEG
Choudhry Abad	FEG		Attock	Grape FEG
Zarkhaiz Pakistan	FEG		Attock	Grape FEG
Modrotha I	FEG		Attock	Grape FEG
6/29/15				
Mogla FEG group	FEG		Chakwal	Grape FEG

³³ His father, who was the grantee, recently passed away and his son inherited the farm.

Individual	Organization	Position	Location	Role in TAP/evaluation
interview				
Akwal FEG group interview	FEG		Chakwal	Grape FEG
Zaffar Iqbad	Individual farmer		Chakwal	Grape individual grant recipient
6/30/15				
Rustam Khan	ASF	Value Chain Lead, HV/OSV (south)	Lahore	Implementer
Muhammad Hyat Jaspel, Ph.D.	UVAS	Professor, Meat Science Department, Business Incubation Center	Lahore	BDSP
Farzand Ali	Shafi Food Pvt. Ltd.	Supervisor/Lead Butcher	Lahore	Meat Cuts and Standardization Training participant
Adeel		Supervisor/Lead Butcher		
Muhammad Junaid	Kold Kraft	Manager, Quality Assurance	Lahore	Meat Cuts and Standardization Training participant
Ali Khan		Production In-charge		
Amir Sajjad	Individual farmer		Lahore	HV/OSV individual grant recipient
7/1/15				
Mr. Murtaza	RCDS	Chief Executive Officer	Lahore	IP
Farrah Hassan	Individual Farmer		Lahore	HV/OSV individual grant recipient
Shamoon Sadiq	Fresh Pak	Executive Manager Operations	Lahore	IMAP participant and Challenge Grant recipient
Azam Sahib	Abedin International	Administrastor	Lahore	Meat Cuts and Standardization Training
Mian Abdul Hannan	Tazij Meat and Food	Managing Director	Lahore	IMAP participant
Mr. Konrad		External Consultant		
Dr. Mohammad Ibrahim	Feed Stock (Pvt) Ltd.	Managing Director	Lahore	Feedlot Fattening
Dr. Maqsood Shah Mohammad		Dairy consultant	Lahore	Feedlot Fattening participant
Multani Vegetable Group	FEG		Lahore	HV/OSV FEG
Pakaman Vegetable Group	FEG		Lahore	HV/OSV FEG
FEG-Sahara Vegetable Group	FEG		Lahore	HV/OSV FEG
FEG-Khudpur Vegetable Group	FEG		Lahore	HV/OSV FEG
7/2/15				
Haneef Farm Vegetable Group	FEG		Lahore	HV/OSV FEG
Khokar Vegetable Group	FEG		Lahore	HV/OSV FEG
Naveed Sadiq	PAMCO	Ex. Manager Operations	Lahore	IMAP Participant
Muhammad Zahidd Durrani	Hunza Organics	CEO	Lahore	IMAP participant; resource person
Tahir Yousef	Green Revolution	Assistant Technical Manager	Lahore	Challenge Grant recipient
Mian Asif Maqbool	Taha Trading	Proprietor	Lahore	IMAP participant
Ch. Muhammad Imtiaz Elahi	Individual Farmer		Lahore	HV/OSV individual grant recipient
Muhamad Tahir, son of	Individual Farmer		Nankana	HV/OSV individual grant

Individual	Organization	Position	Location	Role in TAP/evaluation
Muhammad Ashraf	Individual Farmers		Nankana	recipient
Zohaib Rameez				HV/OSV individual grant recipient (3 grants)
Sajjid Mehmood				
Naveed Hussain				
7/4/15				
Phool	FEG		Peshawar	HV/OSV FEG
Maimar	FEG		Peshawar	HV/OSV FEG
Green House	FEG		Peshawar	HV/OSV FEG
Chand	FEG		Peshawar	HV/OSV FEG
Mohammad Naveed			Peshawar	AI Training participant
Mohammad Nisar	Private Veterinarian		Peshawar	AI Training participant
Muhammad Nauman			Peshawar	AI Training participant
Rafi Ullah			Peshawar	AI Training participant
Shahzad Gul	Tahir Shah Beef and Mutton Shop	Partner	Peshawar	Meat Cuts and Standardization Training participants
Lal Zada		Partner		
Haji Habib ur Rehman	Jan's Meat Shop		Peshawar	Meat Cuts and Standardization Training participants
Masood Ahmed Malik	Sunny International	Managing Director	Peshawar	IMAP participant
Naseem Akthar	New Shan Enterprises		Peshawar	IMAP participant; BDSP training provider
Mr. Muhammad Ishaq	MFEDO		Peshawar	HV/OSV FEG member; BDSP training provider
7/5/15				
Dr. Saima Bibi			Peshawar	Feedlot Farming participant
7/6/15				
Muhammad Akbar	ASF	Regional Coordinator, HV/OSF (north)	Peshawar	Implementer
Zahid Kurshid	SRSP	Project Manager	Peshawar	Implementing partner
Ahmed Rizwan	NWFP Agriculture University	Director of Planning and Development	Peshawar	Business Service Provider
Abdus Salam		Additional Director Planning and Development		
Muhammad Fayaz Ahmad	Hamza Halal Foods	Managing Director	Peshawar	IMAP participant; Meat Cuts and Standardization Training
Siaf ur Rehman	Individual farmer		Peshawar	HV/OSV individual grant
7/7/15				
Mr. Muhammad Ishaq	MFEDO		Peshawar	BDSP training provider
Naseem Akthar				
Azam Farooq	HRDC	Coordinator	Peshawar	BDSP training provider
Suleman Amin	Individual farmer		Peshawar	HV/OSV individual grant
Kastkar	FEG		Charsadda	HV/OSV FEG
Rohana Kissan	FEG		Charsadda	HV/OSV FEG
Sher Bahdar Kalay	FEG		Charsadda	HV/OSV FEG
Gulistan	FEG		Charsadda	HV/OSV FEG
7/8/15				
Muhammad Fayyaz Khan	Hashoo Foundation	Project Manager	Islamabad	Implementing partner
Fouzia Sakhi		MEAL Manager		
Bushra Usman		Assistant Manager – Donor Liaison		
Col. Muhammad Sidiq		Project Director		
Anum Mughal	ECI Pvt	Director of Client Relations	Islamabad	Business Service Provider

Individual	Organization	Position	Location	Role in TAP/evaluation
Asfandiyar Khan	Islamabad	Manager Projects		
Falah	FEG		Manshera	HV/OSV FEG
Alfalah Group	FEG		Manshera	HV/OSV FEG
Itehad Welfare Group	FEG		Manshera	HV/OSV FEG
Jagger Sabza Group	FEG		Ghizer	HV/OSV FEG
7/9/15				
Saeed Iqbal	ASF	Regional Coordinator, VCL/VC Team	Gilgit	Implementer
7/10/15				
Randy Chester	USAID/Tanzania	Office Director, Economic Growth Office	Phone	Office Director, Agriculture Office in USAID/Pakistan
Bilal Ahmed	Individual farmer		Gilgit	Apricot individual grant recipient
Malik Miskeen	Individual farmer		Gilgit	Apricot individual grant recipient
Mehdiabad Group	FEG		Gilgit-Niltar	Seed potato FEG
Faizabad Nomal	FEG		Gilgit	Apricot FEG
Bulbul Shah	Individual farmer		Gilgit	Seed potato individual grant recipient
7/11/15				
Akthar Hussain	Organo Botanica	Manager Operations	Gilgit	Grant Recipient
7/12/15				
White Apricot Group	FEG		Ghizer	Apricot FEG
Friends Business Group	FEG		Ghizer	Apricot FEG
Local Apricot Growers Golodas	FEG		Ghizer	Apricot FEG
Dry Apricot Producers Golodas	FEG		Ghizer	Apricot FEG
Naeem Khan	Individual Grant recipient		Ghizer	Apricot individual grant recipient
Taighoon Wali Khan	Individual Grant recipient		Ghizer	Apricot individual grant recipient
7/13/15				
Itifaq Group	FEG		Ghizer	Seed potato FEG
Sahibabad Sandi Bala	FEG		Ghizer	Seed potato FEG
Burndass Shah Group	FEG		Ghizer	Seed potato FEG
Fertile Group	FEG		Ghizer	Seed potato FEG
Saeed-ur-Rehman	ASF	Value Chain Lead, Grapes	Islamabad	Implementer
Kifayat Zaman	ASF	Engineering Specialist	Islamabad	Implementer
Mehboob Wali Khan	Individual farmer	Owner	Phander, Gizar	Seed potato individual grant recipient
Faryad Hussain	Individual farmer	Owner	Phander, Gizar	Seed potato individual grant recipient
7/14/15				
Brosha Group B	FEG		Hunza-Nager	Seed Potato FEG
Bercha Group Holshal	FEG		Hunza-Nager	Seed Potato FEG
Muhammad Ali	Individual farmer		Hunza-Nager	Apricot individual grant recipient
Musa Ali	Individual farmer		Hunza-Nager	Seed potato individual grant recipient
Abdullah	Individual farmer		Hunza-Nager	Seed potato individual grant recipient
Muhammad Iqbal	Shah Associates		Hunza-Nager	Apricot individual grant recipient
7/15/15				

Individual	Organization	Position	Location	Role in TAP/evaluation
Amjad Wali	AKRSP		Gilgit	Implementing partner
Inam Ullah	Mountain Fruits Pvt. Ltd.	Managing Director	Gilgit	IMAP participant
Gulmit Goze Women Group	FEG		Hunza-Nagar	Apricot FEG
Fotan Dar Women Group	FEG		Hunza-Nagar	Apricot FEG
7/24/15				
Farhan Rabbani	Al Mahmood Establishment	Owner	Karachi	IMAP participant
7/25/15				
Abdul Karim	Organic Meat Company (Pvt) Ltd.	Exports Manager	Karachi	IMAP participant
Ali Hussain		Director		
Saeed Khan	Saeed Khan Enterprises	Owner	Karachi	IMAP participant
7/27/15				
Wajahat Hussain Khan	Seven Star International	GM Operations	Karachi	IMAP participant
Bilal Shahid Tata	Tata Best Foods	COO	Karachi	IMAP participant
Muhammad Zaman Anas	Anus Tropical	Owner	Karachi	IMAP participant

Annex 8: Sampling

The team selected samples of FEGs, individual grant recipients, IMAP participants, and meat training participants randomly from among those within reach of central locations the team selected for site visits. Sites were selected based on the number of beneficiaries and participants within reach of the central location, coverage of major activities, and security. Based on these criteria, the team organized interviews in the areas in and around Islamabad, Lahore, Peshawar, and Gilgit with side trips to Chakwal, Attock, Charsadda, Manshera, Ghizer, and Hunza. One team member also traveled to Karachi to interview IMAP participants. Table 14 shows the location of project-supported FEGs, individual grant recipients, IMAP participants, and meat training participants by location, beneficiary type, and value chain. The shaded rows indicate the districts selected for site visits.

The “# in sample districts” row at the bottom of Table 14 indicates the number of beneficiaries in the districts selected for site visits. The “% coverage” row shows the percentage of all beneficiaries that fell within the sampling frame. The sampling frame based on the selected districts encompassed between 39 percent and 100 percent of beneficiaries, depending on value chain and beneficiary type. The “% by beneficiary type” row indicates the percentage of a particular type of beneficiary (e.g., FEG, individual grant recipient) within each value chain and provides a point of reference for distributing the sample across value chains.

Table 15 shows the distribution of the sample across location, type of beneficiary, and value chain. The “% by beneficiary type” row at the bottom of the table indicates the percentage of the sample of a particular beneficiary type allocated to each value chain and indicates the proportional representation of each beneficiary type/value chain set relative to the shares of all beneficiaries shown in Table 14.

In addition to the interviews documented in Table 15, the team interviewed:

- 13 TAP staff members;
- 5 (of 7) local implementing partners (AKRSP, Hashoo Foundation SRDP, RCDS, and NRSP);
- 7 (of 35) technical assistance partners and BDSPs (NARC, UVAS, New Shan Enterprises, Modern Family & Enterprise Development Organization, NWFP Agriculture University, HRDC, ECI Pvt Islamabad);
- 2 USAID (Muhammad Ghani Khan, Randy Chester);
- 2 (of 7) challenge grant recipients (Fresh Pak, Green Revolution); and
- 4 (of 44) AI trainees.

Except for TAP staff members USAID personnel which were selected purposively, the rest of these beneficiaries and participants were selected because they were located in or near the central locations the team visited, i.e., they represent convenience samples.

TABLE 14: LIST OF BENEFICIARIES BY LOCATION, TYPE, AND VALUE CHAIN

Province	District	FEGs				Individual Grant Recipients				IMAP	Meat Training
		Apricot	Grape	HV/OSV	Potato	Apricot	Grape	HV/OSV	Potato		
AJK	Kotli							1			
FATA	Bajaur Agency							8			
	Khyber Agency							2			
GB	Chitral				10						
	Diamer			53	42			1			
	Ghanche	17				2		13			
	Ghizer	14			50	6			4		
	Gilgit	14			11	11		1		1	
	Hunza	35			21	1		1	7		
KP	Abbottabad							11			
	Charsadda			23				29			
	D.I. Khan							8			
	Haripur							26			
	Lower Dir			25							
	Malakand			1				10			
	Mansehra			40	40			14			
	Mardan							7			
	Nowshera			26				6			
	Peshawar			33				22		7	29
	Swabi			30				24			
	Swat			44				6			
Punjab	Attock		12				45	29			

Province	District	FEGs				Individual Grant Recipients				IMAP	Meat Training
		Apricot	Grape	HV/OSV	Potato	Apricot	Grape	HV/OSV	Potato		
Punjab	Chakwal		3				17	11			
	Chiniot							1			
	Faisalabad							3			
	ICT/Rawalpindi		2				6	3		4	
	Kasur							10			
	Khanewal							1			
	Khushab							1			
	Lahore			16				14		14	86
	Multan									6	
	Muridke							1			
	Nankana Sahib			19				12			
	Rawalpindi						11	11			
	Sargodha									3	
	Sharaqpur							1			
	Sheikhupura			25				26			
Sindh	Malir							1			
	Karachi									19	116
	Kharipur									1	
Number of beneficiaries		80	17	335	174	20	79	315	11	55	231
# in sample districts		63	15	131	122	18	62	133	11	41	231
% coverage		79%	88%	39%	70%	90%	78%	43%	100%	75%	100%
% by beneficiary type		13%	3%	55%	29%	5%	19%	74%	3%	100%	100%

Source: TAP M&E system data provided by ASF.

TABLE 15: NUMBER OF INTERVIEWS BY LOCATION, TYPE, AND VALUE CHAIN

Province	District	FEGs				Individual Grant Recipients				IMAP	Meat Training
		Apricot	Grape	HV/OSV	Potato	Apricot	Grape	HV/OSV	Potato		
GB	Ghizer	4		1	4	2			2		
	Gilgit	1			1	2			1	1	
	Hunza	2			2	2			2		
KP	Charsadda			4							
	Mansehra			3							
	Peshawar			5				2		3	4
Punjab	Attock		4								
	Chakwal		2				1				
	ICT/Rawalpindi						8			1	
	Lahore			6				3		5	5
	Nankana Sahib							4			
Sindh	Karachi									6	
Total interviews		7	7	19	6	6	9	9	5	16	9
% by beneficiary type		18%	15%	49%	15%	21%	31%	31%	17%	100%	100%

Note: the number of interviews does not match the number of documents used in the quantitative analysis in some cases because some individual interviews with grant recipients turned into small group interviews. This table includes them as individual interviews because they covered separate businesses. However, the notes are in one document which is the unit of analysis for the qualitative analysis.

Annex 9: Qualitative Analysis Results

TABLE 16: SUPPORT RECEIVED FROM TAP (APRICOT AND POTATO)

Support	Value Chain and Value Chain Actor					
	Apricot			Potato		
	FEG	Individual grant recipients	Processors/ exporters	FEG	Individual grant recipients	Processors/ exporters
Seeds/plants	-	4	-	3	-	-
Certifications	-	1	-	-	-	-
New varieties	-	3	-	-	-	-
Training	7	5	-	6	3	-
Tools/equipment	-	4	-	6	3	-
Infrastructure	7	5	-	-	5	-
Exposure visits	1	1	-	-	-	-
Marketing events	1	-	-	1	1	-
# of documents	7	6	0	6	5	0

TABLE 17: SUPPORT RECEIVED FROM TAP (HV/OSV AND GRAPE)

Support	Value Chain and Value Chain Actor					
	HV/OSV			Grape		
	FEG	Individual grant recipients	Processors/ exporters	FEG	Individual grant recipients	Processors/ exporters
Seeds/plants	16	1	-	1	3	-
Certifications	-	-	-	-	-	-
New varieties	1	-	-	-	-	-
Training	18	7	-	4	4	-
Tools/equipment	13	1	-	3	-	-
Infrastructure	10	3	-	4	3	-
Exposure visits	3	3	-	2	2	-
Marketing events	2	2	-	-	-	-
# of documents	18	7	1	7	5	-

TABLE 18: SUPPORT RECEIVED FROM TAP (IMAP, MEAT, AND TOTAL)

Support	Value Chain and Value Chain Actor				
	All Value Chains			IMAP	Meat
	FEG	Individual grant recipients	Processors/exporters		
Seeds/plants	21	8	-	-	-
Certifications	-	1	-	3	-
New varieties	1	3	-	-	-
Training	35	19	-	4	5
Tools/equipment	22	8	-	-	1
Infrastructure	21	16	-	-	-
Exposure visits	7	7	1	-	1
Marketing events	2	3	2	2	-
# of documents	38	22	1	13	6

TABLE 19: TAP'S CONTRIBUTION TO VALUE CHAIN DEVELOPMENT

Value Chain	Value Chain Actor			
	FEGs	Grant recipients	Processors/exporters/IMAP	Challenge grant recipients
Apricot	N=7	N=6	N=	N=
Lacked financial capacity	3	4	-	-
Lacked knowledge/awareness/comfort	2	2	-	-
Potato	N=6	N=5	N=	N=
Lacked financial capacity	-	3	-	-
Lacked knowledge/awareness/comfort	4	1	-	-
HV/OSV	N=18	N=7	N=1	N=
Lacked financial capacity	1	2	-	-
Lacked knowledge/awareness/comfort	9	5	-	-
Grape	N=7	N=4	N=	N=
Lacked financial capacity	1	-	-	-
Lacked knowledge/awareness/comfort	5	3	-	-
Meat	N=0	N=0	N=	N=
Lacked financial capacity	n.a.	n.a.	-	-
Lacked knowledge/awareness/comfort	n.a.	n.a.	-	-

Value Chain	Value Chain Actor			
	FEGs	Grant recipients	Processors/ exporters/IMAP	Challenge grant recipients
All value chains	N=38	N=22	N=1	N=
Lacked financial capacity	5	9	-	-
Lacked knowledge/awareness/comfort	20	11	-	-
IMAP	N=	N=	N=13	N=
Lacked financial capacity	-	-	1	-
Lacked knowledge/awareness/comfort	-	-	3	-

TABLE 20: CHANGE IN TECHNOLOGIES AND PRACTICES (FEGS)

Technologies and Practices	Apricot	Potato	HV/OSV	Grape	All Value Chains
New practice	-	-	-	-	-
No change	-	-	2	-	2
Post-harvest practices	-	1	3	-	4
Management practices	-	-	1	-	1
New crops	-	-	3	5	8
New varieties	-	1	5	-	6
Cropping patterns	-	1	4	-	5
Storage	1	1	-	-	2
Harvesting	3	1	1	-	5
Processing	7	-	1	-	8
Production	-	6	14	1	21
Marketing	3	-	4	-	7
# of documents	7	6	18	7	38

TABLE 21: CHANGE IN TECHNOLOGIES AND PRACTICES (INDIVIDUAL GRANT RECIPIENTS AND PROCESSORS/EXPORTERS)

Technologies and Practices	Individual Grant Recipients					Processors/Exporters	
	Apricot	Potato	HV/OSV	Grape	All Valve Chains	IMAP	Meat
New practice	-	-	-	-	-	-	-
No change	-	-	-	-	-	-	1
Post-harvest practices	-	-	-		-	-	-
Management practices	-	-	-	1	1	-	-
New crops	-	-	-	-	-	-	-
New varieties	-	-	-	-	-	-	-
Cropping patterns	1	-	1	-	2	-	-
Storage	-	2	-	-	2	-	-
Harvesting	-	-	-	-	-	-	-
Processing	-	-	-	-	-	1	1
Production	2	-	1	-	3	-	-
Marketing	-	-	1	1	2	-	-
# of documents	6	5	7	5	22	13	6

TABLE 22: REASONS FOR INCREASING QUANTITY PRODUCED (APRICOT, POTATO, AND HV/OSV)

Quantity Produced	Value Chain and Value Chain Actor								
	Apricot			Potato			HV/OSV		
	FEG	Grant recipients	Processors/ exporters	FEG	Grant recipients	Processors/ exporters	FEG	Grant recipients	Processors/ exporters
N.A.	-	-	-	-	-	-	2	-	-
Increased	6	-	-	4	4	-	14	5	-
Reduced wastage	6	-	-	2	4	-	12	1	-
Increased yield	-	-	-	1	-	-	11	2	-
Increased area	-	-	-	2	-	-	1	-	-
Commercial mindset	-	-	-	-	-	-	1	-	-
Technology and practices (post-harvest)	6	-	-	-	1	-	-	-	-
Technology and practices (harvest)	-	-	-	-	-	-	-	-	-
Technology and practices (pre-harvest)	-	-	-	-	-	-	7	1	-
Improved varieties	-	-	-	-	-	-	2	1	-
# of documents	7	6	-	6	5	-	18	7	1

TABLE 23: REASONS FOR INCREASING QUANTITY PRODUCED (GRAPE, TOTAL, AND MEAT)

Quantity Produced	Value Chain and Value Chain Actor						
	Grape			All Value Chains			Meat
	FEG	Grant recipients	Processors/ exporters	FEG	Grant recipients	Processors/ exporters	Processors/ exporters
N.A.	1	-	-	3	-	-	-
Increased	2	1	-	26	10	-	-
Reduced wastage	-	-	-	20	5	-	-
Increased yield	2	-	-	14	2	-	-
Increased area	-	-	-	3	-	-	-
Commercial mindset	-	1	-	1	1	-	-
Technology and practices (post-harvest)	-	-	-	6	1	-	-
Technology and practices (harvest)	-	-	-	-	-	-	-
Technology and practices (pre-harvest)	-	-	-	7	1	-	-
Improved varieties	-	-	-	2	1	-	-
# of documents	7	4	-	38	22	1	6

TABLE 24: CHANGE IN VALUE OF SALES (APRICOT, POTATO, AND HV/OSV)

Quantity Produced	Value Chain and Value Chain Actor								
	Apricot			Potato			HV/OSV		
	FEG	Grant recipients	Processors/ exporters	FEG	Grant recipients	Processors/ exporters	FEG	Grant recipients	Processors/ exporters
Yes	-	-	-	1	3	-	10	6	
No	1	5	-	1	1	-	-	2	-
N.A. – no production yet	1	5	-	-	-	-	-	1	-
# of documents	7	6	0	6	5	0	18	7	1

TABLE 25: CHANGE IN VALUE OF SALES (GRAPE, MEAT, TOTAL, IMAP)

Quantity Produced	Value Chain and Value Chain Actor							
	Grape			Meat	All Value Chains			IMAP
	FEG	Grant recipients	Processors/ exporters	Processors/ exporters	FEG	Grant recipients	Processors/ exporters	
Yes	-	1	-	2	11	10	-	2
No	-	3	-	-	2	11	-	2
N.A. – no production yet	-	3	-	-	1	9	-	-
# of documents	7	4	0	6	38	22	1	13

TABLE 26: CHANGE IN VALUE OF EXPORTS (APRICOT, POTATO, AND HV/OSV)

Quantity Produced	Value Chain and Value Chain Actor								
	Apricot			Potato			HV/OSV		
	FEG	Grant recipients	Processors/ exporters	FEG	Grant recipients	Processors/ exporters	FEG	Grant recipients	Processors/ exporters
Yes	-	-	-	-	-	-	-	-	-
No	-	-	-	-	-	-	-	-	-
N.A. – no production yet	-	-	-	-	-	-	-	-	1
# of documents	7	6	0	6	5	0	18	7	1

TABLE 27: CHANGE IN VALUE OF EXPORTS (GRAPE, MEAT, TOTAL, IMAP)

Quantity Produced	Value Chain and Value Chain Actor							
	Grape			Meat	All value chains			IMAP
	FEG	Grant recipients	Processors/ exporters	Processors/ exporters	FEG	Grant recipients	Processors/ exporters	
Yes	-	-	-	-	-	-	-	7
No	-	-	-	-	-	-	-	2
N.A. – no production yet	-	-	-	2	-	-	3	3
# of documents	7	5	0	6	38	22	1	13

TABLE 28: CHANGE IN EMPLOYMENT (APRICOT, POTATO, AND HV/OSV)

Quantity produced	Value chain and value chain actor								
	Apricot			Potato			HV/OSV		
	FEG	Grant recipients	Processors/ exporters	FEG	Grant recipients	Processors/ exporters	FEG	Grant recipients	Processors/ exporters
Increase	-	5	-	1	-	-	8	6	-
No change	3	-	-	3	3	-	10	-	1
# of documents	7	6	0	6	5	0	18	7	1

TABLE 29: CHANGE IN EMPLOYMENT (GRAPE, MEAT, TOTAL, IMAP)

Quantity Produced	Value Chain and Value Chain Actor							
	Grape			All Value Chains			IMAP	Meat
	FEG	Grant recipients	Processors/ exporters	FEG	Grant recipients	Processors/ exporters	Processors/ exporters	Processors/ exporters
Increase	3	1	-	11	12	-	2	-
No change	3	2	-	20	5	5	5	4
# of documents	7	4	-	38	22	7	13	6

TABLE 30: PROSPECTS FOR SUSTAINABLE RESULTS (APRICOT, POTATO, AND HV/OSV)

Quantity Produced	Value Chain and Value Chain Actor								
	Apricot			Potato			HV/OSV		
	FEG	Grant recipients	Processors/ exporters	FEG	Grant recipients	Processors/ exporters	FEG	Grant recipients	Processors/ exporters
Yes	6	4	-	2	5	-	11	2	-
No	3	1	-	2	-	-	2	-	-
Financial constraints	2	1	-	1	-	-	2	-	-
# of documents	7	6	0	6	5	0	18	7	1

TABLE 31: PROSPECTS FOR SUSTAINABLE RESULTS (GRAPE, MEAT, TOTAL, IMAP)

Quantity Produced	Value Chain and Value Chain Actor								
	Grape			Meat		All Value Chains			IMAP
	FEG	Grant recipients	Processors /exporters	Service providers	Processors /exporters	FEG	Grant recipients	Processors /exporters	Processors /exporters
Yes	5	3	-	2	1	24	15	1	3
No	-	-	-	2	2	7	1	2	1
Financial constraints	-	-	-	1	-	5	1	-	1
# of documents	7	4	0	4	6	38	22	1	13

TABLE 32: SATISFACTION WITH IMPLEMENTATION - APRICOT

Dimensions of Implementation	Value Chain Actor					
	FEGs		Grant Recipients		Total	
	Positive	Negative	Positive	Negative	Positive	Negative
Activities						
Exposure visits	-	-	-	-	-	-
Marketing	-	-	-	-	-	-
Inputs (seeds/plants)	-	-	-	-	-	-
Tools/equipment	-	2	-	-	-	2
Infrastructure quality	-	7	-	-	-	7
Infrastructure design	1	6	-	-	1	6
Training	-	3	-	1	-	4
Management						
Timing	-	6	-	1	-	7
Sequencing	-	-	-	-	-	-
Infrastructure process	-	2	-	-	-	2
Grant process	-	1	-	1	-	2
ASF/partner expertise	-	-	-	-	-	-
ASF responsiveness	-	-	-	-	-	-
Other	1	-	2	-	3	-
# of documents	7		6		13	

TABLE 33: SATISFACTION WITH IMPLEMENTATION – SEED POTATO

Dimensions of Implementation	Value Chain Actor					
	FEGs		Grant Recipients		Total	
	Positive	Negative	Positive	Negative	Positive	Negative
Activities						
Exposure visits	-	-	-	-	-	-
Marketing	-	2	-	-	-	2
Inputs (seeds/plants)	-	4	-	1	-	5
Tools/equipment	1	3	1	-	2	3
Infrastructure quality	-	-	-	1	-	1
Infrastructure design	-	-	-	1	-	1
Training	3	2	-	4	1	6
Management						
Timing	-	4	-	-	1	4
Sequencing	-	2	-	-	-	2
Infrastructure process	-	-	1	-	1	-
Grant process	-	-	3	1	1	1
ASF/partner expertise	-	-	-	-	-	-
ASF responsiveness	1	-	-	-	1	1
Other	1	3	-	1	1	4
# of documents	6		5		22	

TABLE 34: SATISFACTION WITH IMPLEMENTATION – HV/OSV

Dimensions of Implementation	Value Chain Actor					
	FEGs		Grant Recipients		Total	
	Positive	Negative	Positive	Negative	Positive	Negative
Activities						
Exposure visits	-	-	-	-	-	-
Marketing	-	4	-	1	-	5
Inputs (seeds/plants)	8	4	1	1	9	5
Tools/equipment	1	3	-	-	1	3
Infrastructure quality	-	-	-	-	-	-
Infrastructure design	-	8	-	4	-	12
Training	5	6	2	3	6	9
Management						
Timing	-	10	2	3	2	13
Sequencing	1	3	-	-	1	3
Infrastructure process	-	1	4	2	4	3
Grant process	-	-	5	1	5	1
ASF/partner expertise	-	1	1	-	1	1
ASF responsiveness	-	3	1	-	1	3
Other	1	5	-	-	1	5
# of documents	18		7		25	

TABLE 35: SATISFACTION WITH IMPLEMENTATION – GRAPE

Dimensions of Implementation	Value Chain Actor					
	FEGs		Grant Recipients		Total	
	Positive	Negative	Positive	Negative	Positive	Negative
Activities						
Exposure visits	-	-	-	-	-	-
Marketing	-	3	-	1	-	4
Inputs (seeds/plants)	1	1	-	-	1	1
Tools/equipment	1	5	-	-	1	5
Infrastructure quality	-	3	-	-	-	3
Infrastructure design	1	5	-	-	1	5
Training	-	5	-	2	-	7
Management						
Timing	-	4	-	1	-	5
Sequencing	-	1	-	-	-	1
Infrastructure process	-	-	-	1	-	1
Grant process	-	-	3	1	3	1
ASF/partner expertise	1	-	1	1	2	1
ASF responsiveness	-	1	-	1	-	2
Other	-	3	-	-	-	3
# of documents	7		4		11	

TABLE 36: SATISFACTION WITH IMPLEMENTATION – MEAT

Dimensions of Implementation	Value Chain Actor					
	Meat Cut Training		Feedlot Training		AITs	
	Positive	Negative	Positive	Negative	Positive	Negative
Activities						
Exposure visits	-	-	-	-	-	-
Marketing	-	1	-	-	-	-
Inputs (seeds/plants)	-	-	-	-	-	-
Tools/equipment	-	-	-	-	-	1
Infrastructure quality	-	-	-	-	-	-
Infrastructure design	-	-	-	-	-	-
Training	4	6	2	-	4	1
Management						
Timing	-	-	-	-	-	-
Sequencing	-	-	-	-	-	-
Infrastructure process	-	-	-	-	-	-
Grant process	-	-	-	-	-	-
ASF/partner expertise	-	-	-	-	-	-
ASF responsiveness	-	-	-	-	-	-
Other	-	-	-	-	-	-
# of documents	6		3		4	

TABLE 37: SATISFACTION WITH IMPLEMENTATION – ALL VALUE CHAINS

Dimensions of Implementation	Value Chain Actor					
	FEGs		Grant Recipients		Total	
	Positive	Negative	Positive	Negative	Positive	Negative
Activities						
Exposure visits	-	-	-	-	-	-
Marketing	-	9	-	2	-	11
Inputs (seeds/plants)	9	9	1	2	10	11
Tools/equipment	3	13	-	-	3	13
Infrastructure quality	-	10	-	1	-	11
Infrastructure design	2	19	-	5	2	24
Training	7	17	2	10	9	27
Management						
Timing	-	24	2	5	2	29
Sequencing	1	6	-	-	1	6
Infrastructure process	-	3	5	3	5	6
Grant process	-	1	11	4	11	5
ASF/partner expertise	1	1	2	1	3	2
ASF responsiveness	1	4	1	1	2	5
Other	2	8	2	4	4	12
# of documents	38		22		60	

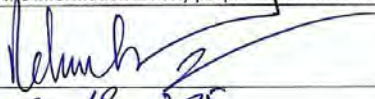
TABLE 38: SATISFACTION WITH IMPLEMENTATION – IMAP

Dimensions of Implementation	Positive	Negative
Activities		
Exposure visits	5	3
Marketing	6	8
Inputs (seeds/plants)	1	-
Tools/equipment	-	-
Infrastructure quality	-	-
Infrastructure design	-	1
Training	1	2
Management		
Timing	-	-
Sequencing	-	-
Infrastructure process	-	-
Grant process	-	1
ASF/partner expertise	-	1
ASF responsiveness	-	-
Other	-	1
# of documents	13	

Annex 10: Conflict of Interest Disclosures

Name	Hina Tabassum
Title	Field researcher
Organization	Management Systems International (MSI)
Evaluation Position?	☐ Team Leader ☒ Team member
Evaluation Award Number (contract or other instrument)	
USAID Project(s) Evaluated (Include project name(s), implementer name(s) and award number(s), if applicable)	The Agriculture Project (TAP) final evaluation
I have real or potential conflicts of interest to disclose.	☐ Yes ☒ No
If yes answered above, I disclose the following facts: <i>Real or potential conflicts of interest may include, but are not limited to:</i> 43. Close family member who is an employee of the USAID operating unit managing the project(s) being evaluated or the implementing organization(s) whose project(s) are being evaluated. 44. Financial interest that is direct, or is significant though indirect, in the implementing organization(s) whose projects are being evaluated or in the outcome of the evaluation. 45. Current or previous direct or significant though indirect experience with the project(s) being evaluated, including involvement in the project design or previous iterations of the project. 46. Current or previous work experience or seeking employment with the USAID operating unit managing the evaluation or the implementing organization(s) whose project(s) are being evaluated. 47. Current or previous work experience with an organization that may be seen as an industry competitor with the implementing organization(s) whose project(s) are being evaluated. 48. Preconceived ideas toward individuals, groups, organizations, or objectives of the particular projects and organizations being evaluated that could bias the evaluation.	
I certify (1) that I have completed this disclosure form fully and to the best of my ability and (2) that I will update this disclosure form promptly if relevant circumstances change. If I gain access to proprietary information of other companies, then I agree to protect their information from unauthorized use or disclosure for as long as it remains proprietary and refrain from using the information for any purpose other than that for which it was furnished.	
Signature	HINA TABASSUM.
Date	25-08-2015

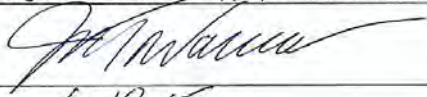
Name	Shehla Said
Title	Field researcher
Organization	Management Systems International (MSI)
Evaluation Position?	☐ Team Leader ☒ Team member
Evaluation Award Number (contract or other instrument)	
USAID Project(s) Evaluated (Include project name(s), implementer name(s) and award number(s), if applicable)	The Agriculture Project (TAP) final evaluation
I have real or potential conflicts of interest to disclose.	☐ Yes ☒ No
If yes answered above, I disclose the following facts: <i>Real or potential conflicts of interest may include, but are not limited to:</i> 37. Close family member who is an employee of the USAID operating unit managing the project(s) being evaluated or the implementing organization(s) whose project(s) are being evaluated. 38. Financial interest that is direct, or is significant though indirect, in the implementing organization(s) whose projects are being evaluated or in the outcome of the evaluation. 39. Current or previous direct or significant though indirect experience with the project(s) being evaluated, including involvement in the project design or previous iterations of the project. 40. Current or previous work experience or seeking employment with the USAID operating unit managing the evaluation or the implementing organization(s) whose project(s) are being evaluated. 41. Current or previous work experience with an organization that may be seen as an industry competitor with the implementing organization(s) whose project(s) are being evaluated. 42. Preconceived ideas toward individuals, groups, organizations, or objectives of the particular projects and organizations being evaluated that could bias the evaluation.	
I certify (1) that I have completed this disclosure form fully and to the best of my ability and (2) that I will update this disclosure form promptly if relevant circumstances change. If I gain access to proprietary information of other companies, then I agree to protect their information from unauthorized use or disclosure for as long as it remains proprietary and refrain from using the information for any purpose other than that for which it was furnished.	
Signature	
Date	25-06-2015

Name	Zia ur Rehman
Title	Field researcher
Organization	Management Systems International (MSI)
Evaluation Position?	☐ Team Leader ☒ Team member
Evaluation Award Number (contract or other instrument)	
USAID Project(s) Evaluated (Include project name(s), implementer name(s) and award number(s), if applicable)	The Agriculture Project (TAP) final evaluation
I have real or potential conflicts of interest to disclose.	☐ Yes ☒ No
If yes answered above, I disclose the following facts: <i>Real or potential conflicts of interest may include, but are not limited to:</i> 31. Close family member who is an employee of the USAID operating unit managing the project(s) being evaluated or the implementing organization(s) whose project(s) are being evaluated. 32. Financial interest that is direct, or is significant though indirect, in the implementing organization(s) whose projects are being evaluated or in the outcome of the evaluation. 33. Current or previous direct or significant though indirect experience with the project(s) being evaluated, including involvement in the project design or previous iterations of the project. 34. Current or previous work experience or seeking employment with the USAID operating unit managing the evaluation or the implementing organization(s) whose project(s) are being evaluated. 35. Current or previous work experience with an organization that may be seen as an industry competitor with the implementing organization(s) whose project(s) are being evaluated. 36. Preconceived ideas toward individuals, groups, organizations, or objectives of the particular projects and organizations being evaluated that could bias the evaluation.	
I certify (1) that I have completed this disclosure form fully and to the best of my ability and (2) that I will update this disclosure form promptly if relevant circumstances change. If I gain access to proprietary information of other companies, then I agree to protect their information from unauthorized use or disclosure for as long as it remains proprietary and refrain from using the information for any purpose other than that for which it was furnished.	
Signature	
Date	June 18, 2015

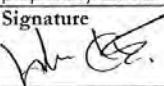
Name	Uzair Ahmed Khan
Title	Field researcher
Organization	Management Systems International (MSI)
Evaluation Position?	☐ Team Leader ☒ Team member
Evaluation Award Number (contract or other instrument)	
USAID Project(s) Evaluated (Include project name(s), implementer name(s) and award number(s), if applicable)	The Agriculture Project (TAP) final evaluation
I have real or potential conflicts of interest to disclose.	☐ Yes ☒ No
If yes answered above, I disclose the following facts: <i>Real or potential conflicts of interest may include, but are not limited to:</i> 25. <i>Close family member who is an employee of the USAID operating unit managing the project(s) being evaluated or the implementing organization(s) whose project(s) are being evaluated.</i> 26. <i>Financial interest that is direct, or is significant though indirect, in the implementing organization(s) whose projects are being evaluated or in the outcome of the evaluation.</i> 27. <i>Current or previous direct or significant though indirect experience with the project(s) being evaluated, including involvement in the project design or previous iterations of the project.</i> 28. <i>Current or previous work experience or seeking employment with the USAID operating unit managing the evaluation or the implementing organization(s) whose project(s) are being evaluated.</i> 29. <i>Current or previous work experience with an organization that may be seen as an industry competitor with the implementing organization(s) whose project(s) are being evaluated.</i> 30. <i>Preconceived ideas toward individuals, groups, organizations, or objectives of the particular projects and organizations being evaluated that could bias the evaluation.</i>	
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Signature	
Date	18/06/15

Name	Syed Noman Ali Shah
Title	Agriculture and value chain sector specialist
Organization	Management Systems International (MSI)
Evaluation Position?	☐ Team Leader ☒ Team member
Evaluation Award Number (contract or other instrument)	
USAID Project(s) Evaluated (Include project name(s), implementer name(s) and award number(s), if applicable)	The Agriculture Project (TAP) final evaluation
I have real or potential conflicts of interest to disclose.	☐ Yes ☒ No
If yes answered above, I disclose the following facts: <i>Real or potential conflicts of interest may include, but are not limited to:</i> 19. <i>Close family member who is an employee of the USAID operating unit managing the project(s) being evaluated or the implementing organization(s) whose project(s) are being evaluated.</i> 20. <i>Financial interest that is direct, or is significant though indirect, in the implementing organization(s) whose projects are being evaluated or in the outcome of the evaluation.</i> 21. <i>Current or previous direct or significant though indirect experience with the project(s) being evaluated, including involvement in the project design or previous iterations of the project.</i> 22. <i>Current or previous work experience or seeking employment with the USAID operating unit managing the evaluation or the implementing organization(s) whose project(s) are being evaluated.</i> 23. <i>Current or previous work experience with an organization that may be seen as an industry competitor with the implementing organization(s) whose project(s) are being evaluated.</i> 24. <i>Preconceived ideas toward individuals, groups, organizations, or objectives of the particular projects and organizations being evaluated that could bias the evaluation.</i>	
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Signature	
Date	June 18, 2015

Name	Himatullah
Title	Evaluation Manager/Field Researcher
Organization	Management Systems International (MSI)
Evaluation Position?	☐ Team Leader ☒ Team member
Evaluation Award Number (contract or other instrument)	
USAID Project(s) Evaluated (Include project name(s), implementer name(s) and award number(s), if applicable)	The Agriculture Project (TAP) final evaluation
I have real or potential conflicts of interest to disclose.	☐ Yes ☒ No
If yes answered above, I disclose the following facts: <i>Real or potential conflicts of interest may include, but are not limited to:</i> 49. <i>Close family member who is an employee of the USAID operating unit managing the project(s) being evaluated or the implementing organization(s) whose project(s) are being evaluated.</i> 50. <i>Financial interest that is direct, or is significant though indirect, in the implementing organization(s) whose projects are being evaluated or in the outcome of the evaluation.</i> 51. <i>Current or previous direct or significant though indirect experience with the project(s) being evaluated, including involvement in the project design or previous iterations of the project.</i> 52. <i>Current or previous work experience or seeking employment with the USAID operating unit managing the evaluation or the implementing organization(s) whose project(s) are being evaluated.</i> 53. <i>Current or previous work experience with an organization that may be seen as an industry competitor with the implementing organization(s) whose project(s) are being evaluated.</i> 54. <i>Preconceived ideas toward individuals, groups, organizations, or objectives of the particular projects and organizations being evaluated that could bias the evaluation.</i>	
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Signature	
Date	17/06/2015

Name	Jill Tirnauer
Title	Technical Director
Organization	Management Systems International (MSI)
Evaluation Position?	☐ Team Leader ☒ Team member
Evaluation Award Number (contract or other instrument)	
USAID Project(s) Evaluated (Include project name(s), implementer name(s) and award number(s), if applicable)	The Agriculture Project (TAP) final evaluation
I have real or potential conflicts of interest to disclose.	☐ Yes ☒ No
If yes answered above, I disclose the following facts: <i>Real or potential conflicts of interest may include, but are not limited to:</i> 7. Close family member who is an employee of the USAID operating unit managing the project(s) being evaluated or the implementing organization(s) whose project(s) are being evaluated. 8. Financial interest that is direct, or is significant though indirect, in the implementing organization(s) whose projects are being evaluated or in the outcome of the evaluation. 9. Current or previous direct or significant though indirect experience with the project(s) being evaluated, including involvement in the project design or previous iterations of the project. 10. Current or previous work experience or seeking employment with the USAID operating unit managing the evaluation or the implementing organization(s) whose project(s) are being evaluated. 11. Current or previous work experience with an organization that may be seen as an industry competitor with the implementing organization(s) whose project(s) are being evaluated. 12. Preconceived ideas toward individuals, groups, organizations, or objectives of the particular projects and organizations being evaluated that could bias the evaluation.	
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Signature	
Date	6.18.15

Name	Douglas Krieger
Title	Technical Director
Organization	Management Systems International (MSI)
Evaluation Position?	☒ Team Leader ☐ Team member
Evaluation Award Number (contract or other instrument)	
USAID Project(s) Evaluated (Include project name(s), implementer name(s) and award number(s), if applicable)	The Agriculture Project (TAP) final evaluation
I have real or potential conflicts of interest to disclose.	☐ Yes ☒ No
If yes answered above, I disclose the following facts: <i>Real or potential conflicts of interest may include, but are not limited to:</i> 1. Close family member who is an employee of the USAID operating unit managing the project(s) being evaluated or the implementing organization(s) whose project(s) are being evaluated. 2. Financial interest that is direct, or is significant though indirect, in the implementing organization(s) whose projects are being evaluated or in the outcome of the evaluation. 3. Current or previous direct or significant though indirect experience with the project(s) being evaluated, including involvement in the project design or previous iterations of the project. 4. Current or previous work experience or seeking employment with the USAID operating unit managing the evaluation or the implementing organization(s) whose project(s) are being evaluated. 5. Current or previous work experience with an organization that may be seen as an industry competitor with the implementing organization(s) whose project(s) are being evaluated. 6. Preconceived ideas toward individuals, groups, organizations, or objectives of the particular projects and organizations being evaluated that could bias the evaluation.	
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Signature	
Date	6/18/15

Name	Zohra Khanum
Title	Agriculture and value chain sector specialist
Organization	Management Systems International (MSI)
Evaluation Position?	☐ Team Leader ☒ Team member
Evaluation Award Number (contract or other instrument)	
USAID Project(s) Evaluated (Include project name(s), implementer name(s) and award number(s), if applicable)	The Agriculture Project (TAP) final evaluation
I have real or potential conflicts of interest to disclose.	☐ Yes ☒ No
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Signature	
Date	

U.S. Agency for International Development
1300 Pennsylvania Avenue, NW
Washington, DC 20523