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## EVALUATION

# UNITED STATES ASSISTANCE TO BALOCHISTAN BORDER AREAS

## EVALUATION REPORT

January 16, 2012

This publication was produced for review by the United States Agency for International Development (USAID). It was prepared by Management Systems International (MSI) under the Independent Monitoring and Evaluation Contract (IMEC).



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## Acronyms

ADB	Asian Development Bank
ADPB	Area Development Program Balochistan
AO	Assistance Objective
ARI	Agricultural Research Institute
ASF	Agribusiness Support Fund
AZRC	Arid Zone Research Center
CAP	Community Action Plan
CDMF	Community Development and Marketing Facilitator
CMST	Community Management Skill Training
CO	Community Organizations
ECI	Empowerment through Creative Integration
EG	Economic Growth
FAO	Food and Agriculture Organization of the United Nations
FATA	Federal Administrative Tribal Area
FBO	Farmer Base Organization
FFS	Farmer Field School
FMC	Farmer Marketing Collective
GCBT	Group Capacity Building Training
GDP	Gross Domestic Product
GoB	Government of Balochistan
GoP	Government of Pakistan
GVAP	Gross Value of Agricultural Product
HDI	Human Development Index
ICARDA	International Center for Agriculture Research in the Dry Areas
IMC	International Marketing Consultant
IMEC	Independent Monitoring and Evaluation Contract
IMI	Institutional Maturity Index
IPM	Integrated Pest Management
IR	Intermediate Result
ISB	Islamabad
KFP	Key Facilitating Partner
LMST	Leadership Management Skill Training
M&E	Monitoring and Evaluation
MA	Marketing Activist
MBBS	Bachelor of Medicine and Bachelor of Surgery
MCO	Men's Community Organization
MCWH	Micro-Catchment and Water Harvesting
MDG	Millennium Development Goal
MEDA	Mennonite Economic Development Associates
MINFAL	Ministry of Food Agriculture and Livestock
MMO	Mutual Marketing Organization
MO	Marketing Officer
MOU	Memoranda of Understanding
MSI	Management System International
MTDF	Medium Term Development Framework
MTE	Mid-term Evaluation
NGO	Non-Government Organization
NWFP	North West Frontier Province

PACCD	Pakistan Agriculture and Cold Chain Development
PMP	Performance Management Plan
PPAF	Pakistan Poverty Alleviation Fund
PSLM	Pakistan Social and Living Measurement Survey
RSP	Rural Support Program
SA	Sales Agent
SDC	Swiss Agency for Development
SDPI	Sustainable Development Policy Institute
SOW	Statement of Work
SPDC	Social Policy Development Center
TA	Technical Assistance
ToR	Terms of Reference
ToT	Trainings of Trainers
TSS	Technical support Services
UN	United Nations
UNDP	United Nations Development Program
US ABBA	United States Assistance to Balochistan Border Areas
USAID	United States Agency for International Development
USG	United State Government
VDP	Village Development Plan
WCO	Women's Community Organization
WE	Women Entrepreneurs
WEE:B	Women's Economic Empowerment: Balochistan
WEG	Women Entrepreneur Groups
WESS	Water, Environment, and Sanitation Society
WFP	World Food Program
WRM	Water Resource Management

## Executive Summary

Balochistan is the least developed province of Pakistan, with levels of human development that are much below Pakistan's, greater gender disparities, higher poverty, greater food insecurity, and poor infrastructure. Government allocations for development are small in relation to the size of the province and the spread of the population, and non-governmental organizations (NGOs) have a limited presence. Small farmers and the poor are unorganized, which, together with scattered settlements and low population density, makes service delivery much more costly than in other provinces. The poor have meager access to services. The operating environment for development projects has been especially testing in recent years in the presence of an insurgency and frequent targeted killings and kidnappings.

Implemented by the Food and Agriculture Organization (FAO) of the United Nations (UN), the United States Assistance to Balochistan Border Areas (US ABBA) project is working in five districts of Balochistan, namely, Killa Saifullah, Loralai, Mastung, Quetta, and Zhob. The project has been active in the first three of these districts since 2005, and in the other two since 2009. US ABBA aims to mobilize small farmers, promote agricultural development, and address rural poverty. The project portfolio spans social and human capital formation, community infrastructure development, the demonstration and diffusion of agricultural technology, and linkages between producers and markets. With a few exceptions, the activities promoted by the project are not new to the province.

### Overall Assessment

The project overall is rated 5 on a scale of 1 to 6, signifying minor shortcomings in design or implementation, while recognizing the difficulty of the operating environment and the security situation. The main reasons for the project's achievement are institutional, and may be summarized as follows:

- (a) Unlike most other donor-assisted projects, decision-making is vested in the donor and a single implementing partner, while ensuring consultation with the government on strategic issues.
- (b) Unlike many other multi-sector initiatives, the implementing partner is a specialized international agency that has been able to provide superior technical support to the project. One result of this is reflected in the breadth of the capacity development of project staff.
- (c) The participatory approach adopted in the project is similar to the approaches developed by successful programs elsewhere in the country.
- (d) The project is developing a practical and promising approach for linking producers and entrepreneurs to market institutions.

### Conclusions

#### Relevance

- (a) Judging from its objectives, activities, and approach, US ABBA is a prime example of harmonizing growth with poverty alleviation in some of the most deprived rural communities in Pakistan.
- (b) With the exception of an adaptive research component, the project has in place most elements of a strategy that is needed for helping small farmers to develop their land, water resources, and human assets and increase the productivity of their crops and livestock.
- (c) The sequencing of activities represents a participatory and productive approach to mobilizing communities and helping them to articulate their priorities.
- (d) Most of the activities and approaches of the project are highly relevant in relation to the needs and circumstances of the beneficiaries. There are 10 activities, however—most of them of minor significance—that do not fit well with project objectives or the circumstances of the villagers.
- (e) A comprehensive exit strategy is not yet in place.

## Effectiveness

- (a) Project achievements exceeded targets for Objective 1 (capacity of poor men and women to raise incomes through better organization increased) and Objective 5 (prospects for sustainability of project results increased). Achievements were more modest for Objective 2 (crop productivity increased) and Objective 4 (farmers' capacity to effectively engage in markets increased), and were generally short of targets for Objective 3 (livestock productivity increased).
- (b) The main contributors to effectiveness are community organizations (COs), community infrastructure (karezes, pipelines, reservoirs, and drinking water), land leveling, new wheat varieties, the supply of fruit plants and livestock feed, poultry rearing, homestead gardening, and the project's training activities.
- (c) There was frequent and meaningful coordination with the government on strategy and, on a limited scale, operational links with line departments at the local level.
- (d) The project has avoided duplication with other development projects, but there has been little progress in linking up with other US-financed projects.

## Efficiency

- (a) The project's activity-level efficiency is similar to or higher than comparator projects. Community share is higher than in most other projects.
- (b) International technical assistance (in marketing, community development, and monitoring and evaluation) has been highly effective for capacity development of staff and villagers alike, but costs more than in other projects, which do not engage international expertise.
- (c) The utilization of the budget has been slower than expected for reasons beyond control of the project (and having to do with the security situation).
- (d) The project has a comprehensive project monitoring plan designed and implemented with inputs from international experts. Reporting to USAID and FAO has been timely and comprehensive.

## Impact

The project has organized 6,851 men and 4,846 women in 337 men's COs and 224 women's COs (a total of 561 COs). According to project records, 10,000 households with an average of eight individuals per household (an estimated 80,000 people) have been brought into the fold of the COs. However, the actual number of beneficiaries is larger because:

- (a) Entire communities, and not only those within the communities who became members of COs, have benefited from collective decision-making as well as its tangible outcomes, such as karez rehabilitation, pipelines, water storage reservoir, drinking water, the diffusion of new wheat varieties, conflict resolution, and linkages with other projects.
- (b) Institutional change affects many more people than changes resulting from household- and community-level interventions, and the project has been increasingly involved in influencing market institutions to the benefit of small farmers.

The project's impact at the individual and household level is indicated by the following changes in assets and flows:

- (a) Impact on human capital through training (but this has been uneven across activities, depending on how and how much training was imparted);
- (b) Impact on physical assets (mainly land);
- (c) Impressive increases in productivity and incomes;
- (d) Employment generated through community infrastructure development and land leveling; and,
- (e) Reduction in women's time cost, and increase in women's income and food consumption.

The project has also generated impacts at the community level as outlined below:

- (a) Impact on the physical assets of the community, including drinking water and irrigation schemes;
- (b) Positive effect on the conservation of water through water storage reservoirs and pipelines;
- (c) Tremendous confidence and initiative among organized men in the villages (but less so among the women) as a result of social capital formation and community-based local governance;
- (d) Linkages between COs and sources of support from outside the project (on a limited scale); and,
- (e) As an unintended result, exclusion of part of the community from project activities due to an upper limit on CO membership that could lead to disparity and tension within the community.

While the project was not designed to promote institutional change in the public sector, it has been increasingly influencing market institutions to the benefit of small farmers. More specifically:

- (a) Livestock Mandis sponsored by the project have already demonstrated that thousands of livestock sellers and buyers can benefit from this innovative activity.
- (b) The emerging impact of value chains and marketing training indicates the potential for benefiting a large number of specialized producers (for example, of wool and horticultural products).

### **Gender Mainstreaming**

The project's attempts at gender mainstreaming, channeled mainly through activities for women's community organizations (WCOs), have resulted in a significant and sizeable breakthrough in that 42 percent of CO members are women, which is higher than in most similar projects. Impact has been limited, however, due to the project's limited focus on drinking water, poultry rearing, and homestead gardening.

### **Sustainability and Replication**

Not surprisingly, the project faces the same kind of challenges to sustainability that other projects face in the environment where the project is working. Thus, continuation of project activities through government or non-governmental organizations is not likely. However, sustainability of impact at some level is likely in almost all the activities initiated by the project that have created ownership and impact thus far. Specifically:

- (a) The links the project is forging between interest groups and markets are generating benefits that are sustainable and likely to grow.
- (b) Many of the impacts of project activities can be sustained by villagers who can easily afford to do so in view of the benefits generated by these activities.

All the activities initiated by this project are replicable, at a cost similar to or less than that incurred by the project. Indeed, all the activities, with the exception mainly of value chain analyses and training in marketing, are already in vogue among similar projects in the country. The government of Balochistan, as well as the broader development community, understands the value of the project's activities.

### **Communication and Branding**

- (a) The project has communicated well with government officials, NGOs, and donors working in Balochistan through its website, newspaper articles, and calendars.
- (b) The project has been highlighting its success to a broader audience through various means, including print and radio.
- (c) The project has also been regularly reporting its progress to USAID and FAO.
- (d) The project branded all materials—including banners displayed at events, registers used by COs for maintaining their records, bags and packets of seed, grain storage silos, and livestock treatment kits—in accordance with USAID guidelines.

## Main Recommendations

The first recommendation is to *intensify coverage and consolidate the menu* by means such as the following:

- (a) Organize the households that have been left out of COs in communities reached by the project.
- (b) Similarly, increase women's mobilization and the resources allocated to relevant activities.
- (c) Drop inappropriate and low-payoff activities.

The second recommendation is to *fine-tune approaches and enhance relevance, effectiveness, and impact* by considering the following measures:

- (a) Remove the restriction on the number of members (15–25) in each CO.
- (b) Merge group capacity building training (GCBT) with other training activities to the extent that is desirable and feasible.
- (c) Develop a more effective response to livestock disease control through para-veterinarians.
- (d) Develop standard reference documents for imparting training in crop-related activities.
- (e) Integrate appropriate integrated pest management (IPM) concepts in the pest management activity.
- (f) Develop synergy with Pakistan Agriculture and Cold Chain Development (PACCD) and the Agribusiness Support Fund (ASF) project.

The third recommendation is to *develop an exit strategy* along the lines indicated below:

- (a) Identify COs that have “matured” or received a certain amount of funding from the project.
- (b) Propose winding down support to mature COs and increasing the community share.
- (c) Negotiate with the Pakistan Poverty Alleviation Fund (PPAF) and other well-resourced NGOs ways and means for linking them with the COs established by the project.

The fourth recommendation, aimed mainly at USAID, is to *extend and expand the project*, considering the following factors:

- (a) Extend the project for another phase of four-to-five years.
- (b) Include an adaptive research component.
- (c) Expand the project to another two-to-three districts of Balochistan in consultation with the government to promote replication as well as greater buy-in from the government.
- (d) From the early stages of the next phase, ensure the implementation of the exit strategy agreed with local partners and the fine-tuned approaches to activities indicated above.

# INTRODUCTION

Implemented by the Food and Agriculture Organization (FAO) of the United Nations (UN), the United States Assistance to Balochistan Border Areas (US ABBA) project is working in five districts of Balochistan, namely, Killa Saifullah, Loralai, Mastung, Quetta, and Zhob. The project has been active in the first three of these districts since 2005, and in the other two since 2009. Balochistan is the largest of Pakistan's four provinces, covering 44 percent of the country's total land area, but consisting of the smallest population among the provinces—7.1 million people, equivalent to 5.1 percent of the national population.

Balochistan is the most underdeveloped province of Pakistan and contributes less than 5 percent to the national GDP on average.<sup>1</sup> The area is largely arid and remote, and suffers from levels of deprivation and poverty that are well above the national average. In recent years, Balochistan has been a troubled part of the country, and this has affected the operations of US ABBA, particularly since February 2009 when a United States national working for the UN was kidnapped from his office. As a result, development projects were forced to adopt a heightened state of security and their operations were constrained by reduced mobility.

This chapter describes the main features of the province and the prevailing operating environment as these relate to projects such as US ABBA.<sup>2</sup> The following features of the province are of particular relevance:

- (a) The province has levels of human development much below Pakistan's, greater gender disparities, higher poverty, a stagnating rural economy, and poor infrastructure.
- (b) Most of the population lives in small and scattered settlements separated by long distances and subject to a harsh climate and extreme events.
- (c) Small farmers and the poor are unorganized, which, together with the low population density, makes service delivery costlier than in other provinces.
- (d) Allocations for development are small in relation to the size of the province and the distribution of the population. Public services are overflowing with new, untrained staff and little else in terms of resources. The presence of non-governmental organizations (NGOs) is limited and constrained by local opposition. The poor have meager access to services.
- (e) The safety of several groups, including certain ethnic groups and NGO and expatriate staff, is under constant threat, and targeted killings and kidnappings are frequent events.

## Agriculture

Most of the province's population depends on agriculture and livestock for their basic livelihoods. Water is the limiting resource, as only a small part of the province benefits from the Indus river system. A few districts have access to the age-old karez irrigation system, but even here, crop agriculture is limited.<sup>3</sup> Agricultural production in the province is dominated by fruit production, which includes apples, grapes, pomegranates, peaches, and plums. Wheat and rice are the major field crops, while cotton is also grown in irrigated areas. Livestock rearing depends mostly on dry grasslands, which have been severely degraded in recent decades.

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<sup>1</sup> Bengali and Sadaqat, 2000, p. 44.

<sup>2</sup> This is, in part, a response to a request from USAID to provide a more comprehensive description of the project than that offered in the Scope of Work.

<sup>3</sup> Karez is an indigenous method of irrigation wherein groundwater is tapped by a tunnel: a gentle, sloping tunnel carries water from below the water table to the ground surface by gravity. No mechanical pump or lift is used.

The Balochistan Millennium Development Goals Report of 2011 (draft) observes that wages and salaries accounted for 54 percent of rural household income, crop production for 22 percent, and other sources—including livestock, non-agricultural activities, gifts, pensions, and remittances—account for 24 percent. Using a broader definition of agricultural and livestock incomes, the 2006 and 2010 baseline surveys conducted by US ABBA estimated that income from agriculture accounted for about 54 percent of household income, with livestock accounting for about 13 percent and non-farm sources about 33 percent. The 2010 survey also estimated that women contributed 17 percent of total household income, most of which came from textile-related sources such as embroidery, knitting, and rug making.

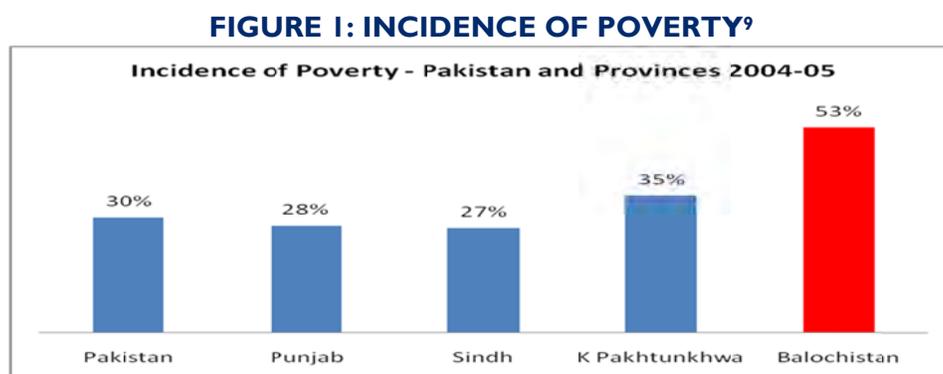
The system of flood irrigation called Sailaba and rain-fed farming called Khushkaba account for around 30 percent of the total irrigated area.<sup>4</sup> For these lands, timely rains are essential to ensure a timely crop. In this regard, the drought from 1998 to 2005 dealt a major blow to Balochistan’s agricultural economy, affecting crops as well as livestock. The pre-drought annual rainfall for 1997 was at 60 billion cubic meters; that figure dropped to less than 25 billion cubic meters in 1998, and remained below 30 billion cubic meters until 2004.<sup>5</sup>

A subsidy exists for tube wells operating in rural areas, whereby a farmer has to pay only PKR 48,000 each year for operating a tube well, while the average cost without subsidy is estimated to be PKR 600,000.<sup>6</sup> This policy has resulted in a proliferation of tube wells in Balochistan; in 2008–09, there were 33,039 tube wells in Balochistan irrigating 35 percent of the overall area.<sup>7</sup>

The resulting over usage of tube wells has led to a massive decline in the water table that has resulted in major reductions in all 18 water basins; the most seriously affected areas are Pishin, Loralai, Nari and Zhob.<sup>8</sup> Another impact of this policy is that it has made Balochistan’s agriculture vulnerable to electricity outages, which can endure for long periods of time in rural Balochistan.

## Poverty and Food Insecurity

The province also stands out in terms of poverty, as shown in [Figure 1](#) below: in 2004–05, Balochistan had the highest incidence of poverty among the four provinces of Pakistan. At the district level, however, there is substantial variation within the province, with Chaghi recording the highest incidence of poverty at 76 percent and Quetta the lowest at 35 percent (Annexes 1 and 2).



<sup>4</sup> Sailaba is a dryland farming system having summer rainfall pattern and precipitation of 350–450 mm; while Khushkaba is a dryland farming system having winter rainfall pattern and precipitation of around 250 mm (Source: PARC).

<sup>5</sup> World Bank, Asian Development Bank, and the Government of Balochistan, May 2008, p. 102.

<sup>6</sup> Interview with Dr. Shahid Ahmad, Member Pakistan Agricultural Research Council (2011).

<sup>7</sup> Agricultural Statistics of Balochistan—Department of Agriculture Balochistan.

<sup>8</sup> Riaz and Babar, 2008, p. 2.

<sup>9</sup> Jamal 2007, p. 10.

Food insecurity is another serious issue facing the province. According to a recent report, 90 percent of Balochistan's districts were found to be food insecure or extremely insecure, while the rest of them were in the borderline secure group.<sup>10</sup> Dera Bugti and Musa Khel in Balochistan were the most food insecure districts in Pakistan. Of US ABBA's target districts, Loralai, Zhob, and Mastung were categorized as extremely food insecure, Killa Saifullah was food insecure, and Quetta was borderline secure.

## Human Development and Gender Disparities

Balochistan's development lags substantially behind the rest of Pakistan. In 2005 (the most recent data available), the province had the lowest Human Development Index (HDI) score of Pakistan's four provinces. At the district level, 29 of Balochistan's 30 districts had HDI values below the average for districts in Punjab.<sup>11</sup> Annex 3 presents a detailed comparison of HDI values at the district level.

### Education and Literacy

- (a) On average, Balochistan ranks much lower than Pakistan in terms of the population that has ever attended school (42 percent compared to 60 percent, respectively), or that has completed the primary level of education. Gender inequality is pronounced, with female primary enrollment and female adult literacy in Balochistan at 35 percent and 15 percent, respectively—figures that are much lower than the averages for Pakistan of 53 percent for net primary enrollment and 42 percent for female adult literacy.
- (b) The gap between Pakistan and Balochistan in terms of the male net primary enrollment is around 11 percent, but the difference is much greater (18 percent) for female net primary enrollment.
- (c) Balochistan's adult literacy rate of 37 percent is considerably below the average for Pakistan as a whole (55 percent).

### Health and Water Indicators

- (a) The percentage of children aged 12–23 months who have been fully immunized was 81 percent for Pakistan, but only 56 percent for Balochistan.
- (b) Balochistan lags significantly in terms of pre-natal consultations (44 percent) in comparison with the average for Pakistan (64 percent).
- (c) Balochistan also lags behind Pakistan in the percentage of pregnant women who have received tetanus toxoid injection: this figure stands at 31 percent in Balochistan, as compared with the national average of 69 percent.

Gender inequality is also more pronounced in Balochistan than in Pakistan as a whole.

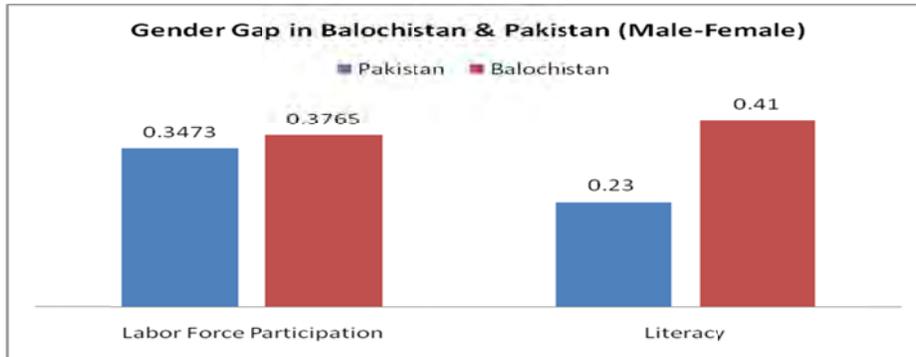
Figure 2 shows the gender gaps in labor force participation and in the literacy rate—gaps that are larger in Balochistan than they are in Pakistan as a whole.

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<sup>10</sup> "Food Insecurity in Pakistan, 2009," prepared by the Sustainable Development Policy Institute, Swiss Agency for Development and Cooperation, and World Food Program; While the province may face shortage in cereal production, over 72 percent of the districts of Balochistan are surplus producers of animal meat (p. 30).

<sup>11</sup> Jamal and Khan, 2007, pp. 91–111; The UNDP integrates three distinct factors for ranking HDI: (i) a long and healthy life measured in terms of life expectancy at birth; (ii) education treated as a combination of adult literacy and school enrollment; and (iii) a decent standard of living construed as GDP per capita.

**FIGURE 2: GENDER GAPS IN LABOR FORCE PARTICIPATION AND LITERACY<sup>12</sup>**

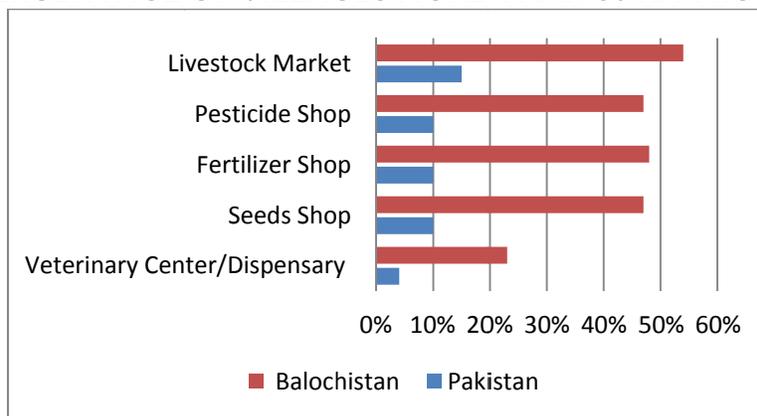


## Infrastructure and Distances

Residents of Balochistan also have much more limited access to infrastructure and services than other Pakistanis. In 2009–10 road density (road length per unit area) was 0.012, compared with 0.016 for Pakistan.<sup>13</sup> In 2006–07, Balochistan’s teledensity (or the number of telephones per 100 people) was 1.6 fixed line connections per 100 people, compared to 3.1 in Pakistan and 3.2 in Punjab. For cellular telecommunications, Balochistan averaged 0.91 connections per 100 people, while Pakistan had 1.19 and Sindh 1.74.<sup>14</sup> In terms of electricity, 58 percent of the villages in Balochistan have no electricity connection, compared with 19 percent for Pakistan as a whole and 7 percent for Punjab.<sup>15</sup>

Rural areas of Balochistan are also much more disconnected from markets and other services than are other parts of Pakistan. Figure 3 and Annex 5 show the percentage of Balochistan households more than 50 km from selected services compared to the percentage of households in Pakistan as a whole.

**FIGURE 3: PERCENTAGE OF VILLAGES MORE THAN 50 KM FROM A FACILITY**



<sup>12</sup> Federal Bureau of Statistics. “Pakistan Labor Force Survey 2008–09” and “Pakistan Social and Living Standards Measurement Survey (PSLM) 2010–11.”

<sup>13</sup> Planning and Development Department, Government of Azad Jammu and Kashmir, 2009–10, p. 209.

<sup>14</sup> Federal Bureau of Statistics, “Pakistan ICT Indicators (2006–07),” pp. 22 and 25.

<sup>15</sup> Federal Bureau of Statistics, 2008.

## THE DEVELOPMENT PROBLEM AND USAID'S RESPONSE

US ABBA aims to mobilize small farmers, promote agricultural development, and address rural poverty. Unlike some other rural development programs, however, it is not designed to invest in medium- and large-scale infrastructure, address human development needs in the social sectors, provide microfinance, or promote institutions in the public sector. The instruments available to the project are community mobilization, capacity development of villagers in a range of skills associated with agriculture and collective management, physical infrastructure for land and water development, agricultural technology, collaboration with government departments, and linkages with markets. Although an adaptive research component was dropped after the pilot phase, the project is designed specifically to address productivity-related problems in agriculture.

The World Bank's 2008 World Development Report concludes that agricultural growth is especially effective in reducing poverty and that agriculture also plays a key role in food security.<sup>16</sup> In Balochistan, however, limited access to government extension services, distances from markets (for inputs and outputs), limited knowledge of or resources to invest in productivity-enhancing technologies and practices, and a lack of strong community organizations that could facilitate access to services all constrain agricultural growth.

USAID's investment in agriculture through US ABBA and its strategy for agricultural development is broadly consistent with two of the three main takeaway messages of the World Development Report:

- (a) Greater and better investment in agriculture; and
- (b) A three-pronged strategy for agricultural development: improve productivity of smallholders, diversify through high-value agriculture, and move beyond the farm (rural jobs, migration, and safety nets).

### USAID's Response

In response to these problems, USAID/Pakistan funded the pilot Food Security/Poverty Alleviation in Arid Agriculture Balochistan project from December 2006 through December 2008 in three Balochistan districts. The current US ABBA project continues most of the pilot project's activities (with the exception of the research component) and extends them to two additional districts. The US ABBA project commenced on January 1, 2009 and was scheduled to run for 36 months to December 31, 2011. USAID granted a no-cost extension from January 1, 2011 through December 2012.

USAID/Pakistan's Office of Agriculture manages the US ABBA project. The project contributes to USAID/Pakistan's Assistance Objective (AO) 2 "Improved conditions for broad-based economic growth" and Intermediate Results (IRs) 1 (Increased income generating opportunities) and 1.1 (Improved competitiveness of target value chains).

The project has a USAID budget of USD 8.9 million, with additional in-kind contributions from the Government of Pakistan (GoP) and cost-share contributions from beneficiary individuals and communities. US ABBA aims to enhance the capacity of poor men and women in the western border regions of Pakistan to sustainably improve their livelihoods. Since agriculture and livestock form the foundation of the region's economy, the project focuses on agricultural and livestock activities. In particular, it seeks to:

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<sup>16</sup> Derek Byerlee, *Presentation on the World Development Report 2008*, Islamabad, May 2008.

- (a) Build the capacity of poor men and women to benefit from increased crop and livestock production and to raise incomes through improved marketing and organization.
- (b) Raise crop and livestock productivity and increase the scale of crop production.
- (c) Build sustainable outcomes through effective impact assessment and strong and durable partnerships with public and private sector actors.

At the goal level, the project aims to increase the incomes of poor rural men and women in the five districts mentioned above, all of which lie within 100 miles of the Afghan border. The objectives of the project are reproduced below, while the complete list of 16 outcomes is outlined in [Table 1](#) under the respective objectives:

- (a) Capacity of poor men and women to raise incomes through better organization increased.
- (b) Crop productivity increased.
- (c) Livestock productivity increased.
- (d) Farmers' capacity to effectively engage in markets increased.
- (e) Prospects for sustainability of project results increased.

The project pursues its objectives by:

- (a) Identifying appropriate technologies, practices, and knowledge to enable households to increase crop and livestock productivity on the one hand and increase market returns on the other;
- (b) Building the capacity of men and women to access this information, make informed choices based on their self-assessed priorities, and use the technologies, practices, and knowledge to raise their productivity and increase their incomes; and,
- (c) Communicating information on successful activities to other households and communities in the project area, key stakeholders in provincial and national government, and to other key partners, most notably, potential international donors as a basis for contributing to the continuing sustainability and widespread replication of successful project outcomes.

Community mobilization for men and women provides the platform for implementing the project in the field. The project supports a wide range of activities for villagers. These field activities are listed in [Table 2](#) (and counted by sector in [Table 3](#)), and have changed over the life of the project as result of changing priorities and learning by doing.<sup>17</sup> About two-thirds of the project activities focus on crop and livestock productivity, which represents a focus on various sources of agricultural development. Sixty percent of project activities are for training related to one of the objectives mentioned above; this represents a substantial focus on developing the human capital of villagers.

Five activities are aimed at developing land and water resources, including three for community physical infrastructure. The activity referred to as value chain analysis in [Table 2](#) is further elaborated in Annex 6, which lists 34 value chain studies conducted by the project for almost all the fruit, vegetable, and livestock that is important to farmers in the project area. Considered as a whole, the project portfolio spans social and human capital formation, physical infrastructure development, the demonstration and diffusion of agricultural technology, and linkages between producers and markets. With a few exceptions (discussed later), the activities promoted by the project are not new: the approach to community mobilization is similar to the one followed by some other projects, including the Area Development

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<sup>17</sup> Field activities support the first four of the project objectives mentioned above; For example, marketing has received substantially greater attention in the present phase, while adaptive research was dropped from the project after the pilot phase.

Program Balochistan (ADPB), supported by the United Nations Development Program (UNDP) and Rural Support Programs (RSPs), and the package of field activities has been tested in similar settings.

**TABLE 1: US ABBA OBJECTIVES AND OUTCOMES**

<b>Objective 1: Capacity of poor men and women to raise incomes through better organization increased</b>
<ul style="list-style-type: none"> <li>• Outcome 1.1: Representation of poor men and women in project-assisted community organizations increased</li> </ul>
<ul style="list-style-type: none"> <li>• Outcome 1.2: Capacity of project-assisted community organizations to identify and address members' needs increased</li> </ul>
<ul style="list-style-type: none"> <li>• Outcome 1.3: Capacities of partners improved</li> </ul>
<ul style="list-style-type: none"> <li>• Outcome 1.4: Access to water for household use improved</li> </ul>
<b>Objective 2: Crop productivity increased</b>
<ul style="list-style-type: none"> <li>• Outcome 2.1: Crop production increased</li> </ul>
<ul style="list-style-type: none"> <li>• Outcome 2.2: Cultivation of high-value crops increased</li> </ul>
<ul style="list-style-type: none"> <li>• Outcome 2.3: Area of irrigated land increased</li> </ul>
<ul style="list-style-type: none"> <li>• Outcome 2.4: Area of land under water harvesting technologies increased</li> </ul>
<b>Objective 3: Livestock productivity increased</b>
<ul style="list-style-type: none"> <li>• Outcome 3.1: Livestock weight increased</li> </ul>
<ul style="list-style-type: none"> <li>• Outcome 3.2: Animal mortality reduced</li> </ul>
<ul style="list-style-type: none"> <li>• Outcome 3.3: New livestock activities established</li> </ul>
<b>Objective 4: Farmers' capacity to effectively engage in markets increased</b>
<ul style="list-style-type: none"> <li>• Outcome 4.1: Market information/knowledge improved</li> </ul>
<ul style="list-style-type: none"> <li>• Outcome 4.2: Marketing opportunities increased</li> </ul>
<ul style="list-style-type: none"> <li>• Outcome 4.3: Marketing skills improved</li> </ul>
<b>Objective 5: Prospects for sustainability of project results increased</b>
<ul style="list-style-type: none"> <li>• Outcome 5.1: Project results communicated effectively</li> </ul>
<ul style="list-style-type: none"> <li>• Outcome 5.2: Partnerships with external parties established</li> </ul>

**TABLE 2: LIST OF THE PROJECT'S FIELD ACTIVITIES**

Distribution and Demonstration Activities	Training Activities Relevant to Objective
<b>Objective 1: Capacity of poor men and women to raise incomes through better organization increased</b>	
1. Community mobilization—Men	21. Community Management Skill Training (CMST)
2. Community mobilization—Women	22. Leadership Management Skill Training (LMST)
3. Drinking water	23. Group Capacity Building Training (GCBT)
	24. Basic Literacy/Numeracy Training
<b>Objective 2: Crop productivity Increased</b>	
<i>Water and land related</i>	
4. Karez rehabilitation	25. Water Resource Management (WRM)
5. Land leveling	26. Improved irrigation practices
6. Micro-catchment and water harvesting (MCWH)	
7. Pipelines	
8. Water storage reservoir	
<i>Crop related</i>	
9. Seed (wheat, barley, alfalfa, peas)	27. Wheat growing (line sowing)
10. Fruit plant trees	28. Fruit nursery management
11. Demonstration plots*	29. Orchard layout and planting
12. Power and knapsack sprayers	30. Integrated Pest Management (IPM)
13. Plastic tunnels*	31. Seed cleaning machine training
14. Silos	32. Crop seed production
	33. Orchard management
	34. Homestead gardening
	35. Farmer Field School (FFS) training—homestead gardening
	36. Food processing
<b>Objective 3: Livestock productivity increased</b>	
15. Feed distribution	37. Poultry raising and management training
16. Poultry bird distribution	38. Demonstration on urea treatment of wheat straw
17. Animal vaccination	39. Community-based animal health workers
18. Incubators*	40. Demonstration training on egg incubator technology
	41. FFS training on livestock
	42. Livestock shows (Mandis)
<b>Objective 4: Farmers' capacity to effectively engage in markets increased</b>	
19. Value chain analysis	43. Basic marketing skill development
20. Formation of cooperatives (planned)	44. Wool shearing and grading
	45. Herbs
	46. Post-harvest management
	47. Market skill development and value chain training
	48. Training of Trainers (ToT) on floriculture
	49. Marketing development missions*
	50. Exposure visits+

\* For demonstration.

+ One exposure visit was under the community development component.

**TABLE 3: NUMBER OF FIELD ACTIVITIES BY OBJECTIVE**

Objective	Total	Training
1. Capacity of poor men and women to raise incomes through better organization increased	7	4
2. Crop productivity increased	23	12
3. Livestock productivity increased	10	6
4. Farmers' capacity to effectively engage in markets increased	10	8
<b>Total</b>	<b>50</b>	<b>30</b>

US ABBA is basically a community-based area development project for rural and agricultural development, similar in many ways to area development initiatives seen in Pakistan in the last three decades, but also different from these in significant ways. The ADPB is a similar project using participatory approaches to address poverty alleviation through a set of activities similar to that of US ABBA. The ADPB is working in four of the US ABBA project districts (Mastung, Loralai, Killa Saifullah, and Quetta). The ADPB and US ABBA avoid overlap by not working in the same communities.

A number of NGOs supported by the Pakistan Poverty Alleviation Fund (PPAF) are also working in the province with participatory approaches for rural development; their focus on agriculture, however, is limited. A project supported by the United States Department of Agriculture, called the Pakistan Agriculture and Cold Chain Development (PACCD) Project, is working in Balochistan with a focus on horticulture, and could be of interest to US ABBA in view of the complementarity between the two projects (PACCD has provisions for cold storage and infrastructure development). USAID support to the Agribusiness Support Fund (ASF), heretofore supported by the Asian Development Bank (ADB), could also provide an opportunity for synergy.

In addition to the activities described above, the project made a USD 1.1 million, 27-month (October 2009 to December 2011) sub-award to the Mennonite Economic Development Associates (MEDA) Pakistan to implement the Women's Economic Empowerment: Balochistan (WEE:B) project. IMEC will conduct a separate evaluation of the WEE:B sub-component in November 2011. The sub-component seeks to integrate 5,000 women into the embellished garments value chain, and, if feasible, into other similar value chains (e.g., wool processing, rugs, and carpets).

### Sequencing of Activities

Engaging and mobilizing communities in Balochistan requires certain steps and confidence building that may not be needed in most of Pakistan: religious leaders in some districts oppose NGOs and associate participatory approaches with NGOs, and villagers need to be reassured that they will not be sanctioned for cooperating with a project such as US ABBA. Thus, the first thing the project does in a community is to explain its aims and objectives to influential members of the community, including religious personalities, and ask for their understanding and support. The lead in this process is taken by district-level (male and female) staff designated as Community Development and Marketing Facilitators (CDMFs).

Thereafter, the process takes shape along the lines depicted in Figure 4. The initial steps revolve around preparing a profile of the community so that community members and project staff prepare an inventory of village resources that are relevant to the project. Through dialogue and discussion with each other and the project, interested households form separate community organizations (COs) for men and women, called men's COs (MCOs) and women's COs (WCOs). These organizations then prepare a Village Development Plan (VDP), which is essentially a needs assessment. Those parts of the VDP with which

the project can assist the community in addressing its priorities, either directly or indirectly, are framed in a Community Action Plan (CAP).

The next step involves capacity building of the MCOs, WCOs, and their elected office-bearers (president and treasurer) through programs that are called Community Management Skill Training (CMST) and Group Capacity Building Training (GCBT). Leadership Management Skill Training (LMST) is imparted when the COs have been in existence for at least six months.<sup>18</sup> After completion of these training activities, the COs are considered ready to initiate various physical interventions supported by the project. Each activity is planned and implemented through a mini project cycle that is appropriate to the activity in question.

At this time, the project is working with an Institutional Maturity Index (IMI) that it expects to lead to an assessment of the maturity of COs and a plan to gradually withdraw project support from mature COs. The IMI is based on a large number of factors, such as the community's understanding of the objectives of community mobilization, accountability of office-bearers, CO meetings, conflict resolution, coverage of households in the community, assessment of development needs, the status and community perceptions of project activities, and linkages established with government departments and NGOs.<sup>19</sup> The thinking in the project (not yet shared with the evaluation team in documented form) is that the project would raise the cost-sharing requirement for mature COs from 25 percent (for WCOs) or 50 percent (for MCOs) to something like 75 percent in the near term, and then stop all financial support but continue with the provision of technical assistance.

### Project Mid-term Evaluation, 2008

An evaluation conducted by Management Systems International (MSI) in March 2008 found that the pilot phase of the project reached or exceeded most of its targets. Table 4 presents selected results from the Mid-Term Evaluation (MTE).

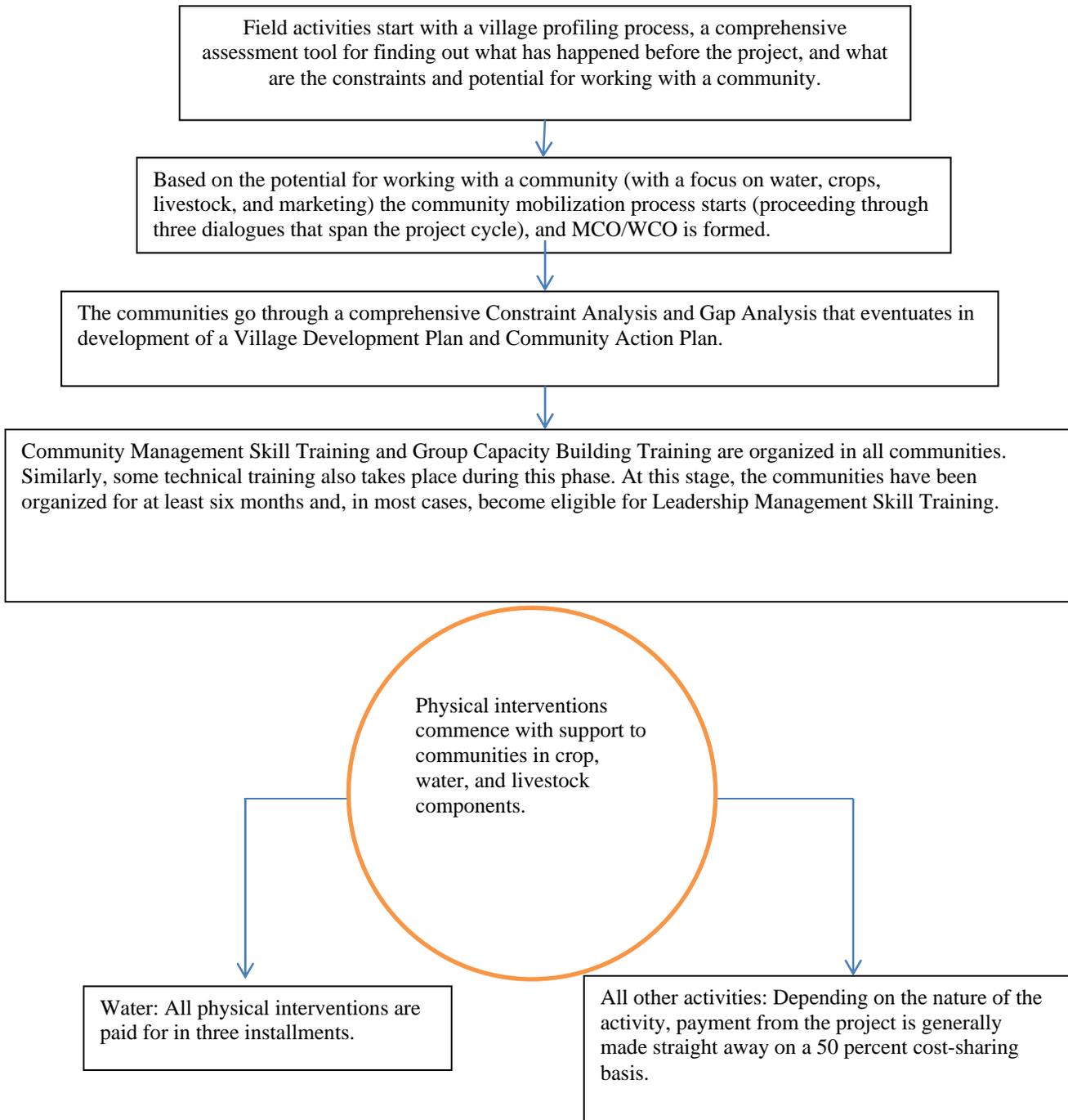
**TABLE 4: PROGRESS REPORTED IN THE MID-TERM EVALUATION**

Indicator	Target	Achieved
Average income growth for participating households	10%	23%
Community organizations (COs) established	200–250	223
Female COs established	20–25	77
Improved cereal yield	10%	35%
Improved livestock weight gain	10%	21%
Direct participants	50,000	30,500

<sup>18</sup> CMST and LMST are also found in other similar projects. GCBT, however, is something new that was introduced by US ABBA.

<sup>19</sup> Evidence on linkages is anecdotal, and the evaluation team has requested from the project a list of the linkages established by MCOs and WCOs with other projects and sources of support.

**FIGURE 4: SEQUENCING OF PROJECT ACTIVITIES**



In addition to the 30,500 direct beneficiaries, the project impacted an estimated 22,500 indirect beneficiaries, according to the evaluation report.<sup>20</sup> At the time of the MTE, the project had not yet reached the target of 50,000 direct beneficiaries, largely because the actual 12–15 households per CO were less than the 25–50 estimated in the project design.

The conclusions of the MTE are reproduced in Annex 7. The evaluation found notable implementation strengths including:

- (a) The project approach is well suited to alleviating poverty in Balochistan.
- (b) Key stakeholders, particularly beneficiaries, were actively involved in project implementation.
- (c) Active engagement of local scientists enhanced local research institutions.
- (d) The project effectively promoted USAID’s involvement, though the project did not incorporate a focused public relations component.

Identified weaknesses included:

- (a) The project needed to substantially improve data collection procedures and analysis capacity to support meaningful impact assessment.
- (b) The project was slow in meeting its targets for establishing community organizations due to a lack of human capacity to manage a large number of communities.
- (c) It proved difficult to engage women directly in agricultural activities and generated few direct measurable monetary impacts for women, though it increased household income substantially.
- (d) While the project maintains close contact with national and provincial government counterparts, it does not coordinate with [provincial] or GoP programs/initiatives.

## **Evolution of the Approach to Marketing**

The project’s approach to marketing has evolved significantly between the pilot phase and the present phase, and the approach that is observed at present needs to be described in some detail.<sup>21</sup> The project in its pilot phase took the innovative step of moving away from traditional Group Organizers who mobilized communities, creating the position of Community Development and Market Facilitator (CDMF). However, the number of individuals with the requisite skill sets was limited, so the project took on the task of training those with community development skills to increase their knowledge of marketing. This was achieved through four international consultant support missions that developed the project’s approach to marketing. Other important activities undertaken in recent years are described below.

In comparison with similar projects that have sought to promote agricultural marketing, the project’s approach differs in the following ways:

- (a) Value chain analysis is viewed not as a report, but as a first step in helping farmers to identify the requirements of the market and adopt changes that pay off.
- (b) Training includes exposing producers to important markets, discussing what could be done differently to increase profits, and learning new marketing techniques.

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<sup>20</sup> The present evaluation takes the view, elaborated later in this report, that all the beneficiaries of the project are the direct beneficiaries of one or another project activity.

<sup>21</sup> This responds, in part, to USAID’s request at the time of elaborating the evaluation scope of work to provide an in-depth assessment of the marketing component.

- (c) The project is clear that COs, while useful in many ways, are not a substitute for interest groups and producer cooperatives, and that the latter have the kind of potential for sustainability which COs evidently do not.

### **Value Chains**

US ABBA defines a value chain as the full range of activities required to bring a product or service from conception through the different phases of production (involving a combination of physical transformation and the input of various producer services), delivery to final customers, and final disposal after use. The project adopted the value chain approach because it provides a framework to analyze the various steps involved in producing and then marketing a product. It is a tool to identify inefficiencies at various steps and recommend modifications based on the findings of the value chain analysis.

After conducting several value chain analyses for various products, the project has reached conclusions about some common practices which, if adopted, will benefit most farmers. These conclusions are summarized as follows:

- (a) There is a need to improve packing, grading, and transportation.
- (b) There is also a need to provide marketing skills and market information.
- (c) Lack of credit for producers has to be addressed.

### **Livestock Mandi**

Livestock form a major part of the farming system, and the annual sacrifice associated with Eid-ul-Azha offers a great opportunity for farmers to get a good price for their animals. Utilizing its experience in agricultural marketing systems, the project has brought the market to the farmer, organizing specific markets called Eid Mandis for livestock sellers in places that are closer to them than the main markets. The events are organized with the approval and assistance of government functionaries, including the civil administration and police. Increasingly, the project is handing over responsibility for organizing these events to a group of livestock producers drawn from several COs.

The strategy adopted by the project is to notify a large number of buyers well in advance and arrange the market over a limited period (i.e., two days, close to Eid) in each district, but with enough time for the traders to transport their purchases to the population centers well in time for sacrifice. The Eid Mandis also create opportunities for small service providers to cater to the large numbers of buyers and sellers that visit during the days of the market event, including livestock feed sellers, kebab sellers, tea sellers, cobblers, barbers, and low-cost clothing traders who set up stalls and generate business.

### **Marketing Training (the “Cascade” Approach)**

The project has used a model based on a “cascade effect” in order to enhance the marketing skills of WCO and MCO members. In this process, the International Marketing Consultant (IMC) trained project Marketing Officers (MOs) and CDMFs in basic marketing concepts, and these staff, in turn, trained key CO members and Marketing Activists (MAs) from the community. The trained MAs and CO members are expected to disseminate and communicate the information to the rest of the community members. The training has helped the CO members adopt new marketing practices such as grading, packing, and proper pricing and loading of goods, which has helped them compete effectively in the market.

### **Marketing Development Mission (Formerly called Exposure Visits)**

The project has arranged market visits for MCO and WCO members to various markets in the country. The visits were initially called exposure visits, but their name was later changed to marketing development missions after adding two steps, the pre-mission and post-mission. The pre-mission takes villagers and others to a market before the start of the season for a particular commodity. The participants

of the mission have included MCO and WCO members, CDMFs, Government officials, and the project's communications unit, national marketing officer, and international marketing specialist. The mission involves the following five basic steps:

- (a) Establishment of mission objectives;
- (b) Identification of activities needed to achieve the objectives;
- (c) Mission preparation;
- (d) Identification of findings and establishment of recommendations for action; and,
- (e) Development of action plans.

### **Wool Shearing and Grading**

Wool is an important byproduct of animal rearing, but is often of low value and is sometimes given away to the shearer in lieu of payment. The project has conducted two value chain analyses of wool shearing, with promising results for the farmers. The first was a study that followed the production aspects and gave details of the cost of production and the process and returns for producers. Prices for the product were disaggregated into a number of categories: (a) colored, white, and stained (yellow), and (b) washed and unwashed. The wool was generally sold without sorting for color (i.e., different colors were mixed in the same bag), and secondly, the farmers were unaware that there was a big difference in price between washed and unwashed wool. The farmers' income after adopting the recommendations of the value chain (i.e., grading by color and anatomy, and pre-washing of sheared wool) would increase by up to 80 percent.

In the second study, it was observed that a producer could increase profits by sending graded wool in large consignments. It was also observed that the producers could reduce transportation costs by compressing wool and packing it in large bags. The project made efforts to arrange reception of consignments (from a group of farmers) directly to a miller. The prices received by farmers were high, and farmer's profits indicated substantial increases.

Traditionally, farmers were using a hand clip for shearing of sheep. It would require four men to shear one sheep and only two sheep could be sheared in one hour, with 30 percent of the wool still left on the sheep. With a new technique and electric shearers operating off a 12-volt car battery, one man could shear one sheep, shearing 10 sheep per hour and leaving only 10 percent wool on the sheep. The use of improved shearing equipment could increase the wool clip by almost 20 percent.

### **Post-Harvest Management**

This activity includes the undertaking of analysis to show the economics of different forms of improved post-harvest handling practices, such as field heat reduction, different packages, and logistics. The major beneficiaries of improved post-harvest handling are the transporters and traders who handle the produce post farm gate.

### **Training on Herbs**

Members of WCOs were given training on the description and uses of medicinal and aromatic plants. This training focused on the cultivation practices of medicinal and aromatic plants, marketing of medicinal and aromatic plants, and value addition processes, as well as the demonstration and preparation methods of herbal products.

## **New Look Marketing Cooperatives**

The new look marketing cooperatives include Farmers Marketing Collectives (FMCs) and Mutual Marketing Organizations (MMO), the former intended to be an informal group that would over time mature and register as an MMO. The new aspect of the proposed cooperatives is a by-law developed by the project: learning from failures experienced by cooperatives in the country, this by-law prohibits members from lending cooperative capital for lending, or borrowing monies from any source.

The project defines the FMC as “an autonomous association of persons united voluntarily to meet their common economic needs and aspirations and solve their economic problems through jointly owned and democratically controlled business enterprise.” After successful operation of FMCs for six-to-twelve months, the members may register and become a body corporate as MMO, registered with the Registrar of Cooperatives in the province. The project has completed preparatory work, obtained support from the Registrar and relevant government officials, and is in the initial stages of setting up FMCs.

## **US ABBA Budget and Expenditure**

Table 5 below shows the budgetary breakdown by project component and the utilization of the budget. The project has spent 76 percent of its budget, and the savings would suffice for one year (2012) beyond the originally planned end of the project in December 2011. The low utilization of funds relative to the budget is attributed to the slow pace of operations resulting from security-related issues.

Capacity building activities, revolving mainly around MCOs, WCOs, and their members, account for 36 percent of the project budget, and production-related activities for 30 percent. Within the line items, the largest budget items are national and international consultants and the sub-contract with MEDA. FAO charges 13 percent of the budget for providing administrative support through international staff and procurement.

## **Implementation Arrangements**

FAO is responsible for overall project execution and the provision of technical assistance (TA). FAO is responsible for the quality of the TA that is provided by the project and for ensuring its timeliness. The TA is provided by FAO technical staff, international and national consultants, and experts from partner organizations and institutions (e.g., government, academic and research institutions, non-governmental organizations, etc.). Technical Support Services (TSS) provided by FAO through international staff and consultants are listed in Annex 8. These have included support in the areas of marketing, community development, irrigation, livestock management, and monitoring and evaluation (M&E).

Until the devolution of powers from the federal to provincial governments in 2010–2011, the project was implemented in cooperation with the Government of Pakistan’s Ministry of Food Agriculture and Livestock (MINFAL). The main project review and policy setting meeting—the annual National Steering Committee—was chaired by the Secretary of MINFAL. It included representatives of the provincial and federal governments, USAID, FAO, and other key partners. The committee regularly engaged with project staff and gave strategic advice and approvals on the annual work plans, changes in scope of activities, staffing issues, international consulting and technical support, as well as regularly monitoring the progress of the project activities and resolving issues at the policy level.

In the scenario that is emerging as a result of the devolution process, it is reported that the project will be anchored at the federal level in the new Ministry of Food Security. At the provincial level, the Secretary, Department of Agriculture and Cooperatives, Government of Balochistan, continues to act as the provincial focal point to ensure effective coordination in the province and effective participation of all provincial line departments in project planning and implementation, and, if appropriate, follow-up.

**TABLE 5: PROJECT BUDGET AND EXPECTED EXPENDITURE, JANUARY 2009–SEPTEMBER 2011 (THOUSANDS \$)**

Line Item	Total Budget	Allocation by Component				Expected		Line Item as % of:	
		Capacity Building	Production	Impact	Management	Expenditure	Balance	Budget	Expenditure
1. Salaries Professional (International)	1,020	173	173	371	305	798	222	11.5	11.8
2. Consultants (National/International)	2,315	757	567	482	509	1,157	1,158	26.0	17.1
3. Sub-Contracts, including MEDA	1,440	1,224	72	144	0	1,173	267	16.2	17.3
4. Locally Contracted Labor	30	8	8	8	8	65	-35	0.3	1.0
5. Travel	200	40	80	20	60	520	-320	2.3	7.7
6. Training	335	134	168	0	34	503	-168	3.8	7.4
7. Expenditure Procurement	960	192	576	96	96	926	34	10.8	13.7
8. Non-expendable Procurement	915	183	549	92	92	229	686	10.3	3.4
9. Technical Support Services	135	27	81	14	14	52	83	1.5	0.8
10. General Operating Expenses	526	210	158	53	105	580	-54	5.9	8.6
11. Support Costs	1,024	256	256	256	256	780	343	11.5	11.5
<b>Total</b>	<b>8,900</b>	<b>3,204</b>	<b>2,688</b>	<b>1,536</b>	<b>1,479</b>	<b>6,783</b>	<b>2,216</b>	<b>100</b>	<b>100</b>
Component as Percentage of Total		36.0	30.2	17.2	16.6				

**Explanation of line items:**

1. This budget line is for the salary plus other entitlements of the long-term international staff.
2. This includes salaries of all national and international (short-term and long-term) experts/consultants.
3. All sub-contracts, mainly the one signed with MEDA.
4. Casual labor hiring in the field.
5. All within-country and international travel is covered under this budget head.
6. All kinds of training.
7. This budget line covers most of the field expenses, e.g., purchase of seed, feed, and other agricultural inputs.
8. It deals with office plus field non-expandable equipment, e.g., computers, power sprays, rabi wheat sowing drills, etc.
9. Backstopping missing by the FAO headquarters.
10. General office supplies including stationary, fuel, and other items for running the office.
11. Support cost charged by FAO headquarters for provision of administrative services, e.g., international procurements, identification and hiring of international staff, etc.

## Monitoring and Evaluation

A comprehensive Performance Management Plan (PMP) has been developed and is being implemented by the M&E Unit of the project. The project PMP identifies baseline performance levels and targets achieved over time, the source and quality of the data, and responsibilities for collection and analysis of data. The PMP comprises of the following elements: performance indicators with baseline and target values; specification of data source and method of collection; data collection and management system; assessment of known data limitations and data quality assessment procedures; and reporting, monitoring, and evaluating progress.

A national M&E expert based in Quetta manages the project's M&E system and field reporting under the direct supervision of the international project manager. An international M&E expert has been providing oversight and technical backstopping during the project duration.

## Communication and Branding

The project has developed a communications strategy with an objective to relay its successes, reporting regularly to USAID and publicizing the project internationally and nationally through various media outlets. The US ABBA communication approach highlights the following elements:

- (a) Introduce appropriate technologies, practices, and knowledge to enable households to increase crop and livestock productivity and increase market returns. By doing so, build the capacity of men and women to access information, make informed choices based on their self-assessed priorities, and use the technologies, practices, and knowledge to raise productivity and increase incomes;
- (b) Improve internal communications within the US ABBA project and FAO by providing field staff with templates and access to a shared database for cataloguing information;
- (c) Maintain contacts with key stakeholders in the provincial and national governments and USAID to ensure the project's longevity; and,
- (d) Use mass-media channels to sustain the interest of the government, USAID, and the public at large.

In addition, there is a branding campaign to emphasize the human face of the assistance from USAID as well as the varied and sustained efforts of FAO. This is intended to ensure that the main objectives of USAID are clearly communicated and retained by the different stakeholders. The campaign is being implemented by the project, wherein the relationship between USAID and FAO is clearly stated.

## PURPOSE OF THE EVALUATION

This evaluation is intended to provide USAID/Pakistan with an independent assessment of the US ABBA project. In line with the SOW approved by USAID/Pakistan (Annex 9), the evaluation focuses on<sup>22</sup>:

- (a) High-level questions related to relevance, effectiveness, efficiency, impact, sustainability, sequencing, and replication (the first five of these terms are standard evaluation criteria);
- (b) Cross-cutting questions pertaining to gender, reporting, public relations, coordination, and management, some of which may be dealt with in terms of the standard evaluation criteria; and,

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<sup>22</sup> USAID does not view this evaluation as an end-of-project or completion evaluation.

- (c) Recommendations, including ideas for strengthening specific interventions, ties with the government, and sustainability.

The evaluation focuses on the period from 2009–2011, while keeping in perspective the pilot phase of the project (2005–2008) for which the 2008 mid-term evaluation provides the basic reference.

## EVALUATION METHODOLOGY

The evaluation took place between mid-September and mid-November 2011 (see Annex 10).

The evaluation process consisted of the following main stages of work:

- (a) Prepare a detailed Statement of Work (SOW) based on the draft SOW provided by USAID.
- (b) Complete a quantitative impact assessment based on a sample survey.
- (c) Exchange information with project staff through an evaluation orientation workshop.
- (d) Conduct an independent evaluation based on the impact assessment and data sources mentioned later in this report.

The survey team was led by an experienced agricultural economist specializing in the design and implementation of rural surveys and the financial and economic analysis of development projects, with extensive experience in Pakistan, including in Balochistan, with similar projects. The survey team included three enumerators and two data entry operators; all the enumerators spoke the local languages, and two of them had relevant experience of more than 15 years each, including experience in Balochistan.

The team leader of the main evaluation team was an experienced evaluator and a specialist in agricultural and rural development, with knowledge of the main components of the project and experience in several countries and most of the districts of Pakistan, including previous evaluation experience in Balochistan.

A second team member was a specialist in agricultural development from Balochistan, with long years of experience in agricultural research and management and comprehensive technical knowledge of crop, land, water, and livestock issues.

The core team also included a marketing specialist with degrees in business administration and related disciplines and a female gender specialist, recruited from Balochistan, with experience in NGO programs and area development projects. Two IMEC staff members also contributed substantively to the evaluation. The internal peer review process was led by a Technical Manager from MSI.

The evaluation is based on the following sources of information:

- (a) The quantitative impact assessment mentioned above, the results of which are reported in the separate impact assessment annex to this report;
- (b) Project reports and other documents listed in the bibliography;
- (c) Secondary data sources identified at appropriate points in the report;
- (d) Meetings with project staff and stakeholders, including government officials (**Error! Reference source not found.**);
- (e) Field visits in Killa Saifullah and Loralai districts, and meetings with project beneficiaries (180 men and 133 women) belonging to nine WCOs and 13 MCOs, as well as a group meeting in Quetta with women beneficiaries from nine WCOs of Quetta and Mastung districts (**Error! Reference source not found.**); and,

- (f) Tables and text prepared by the project at the request of the evaluation team for information on specific aspects of the project.

The team could not visit Zhob and Mastung districts because of the security situation and paucity of time. Zhob is one the two districts added to the project area in the present phase. As such, it is understood (and confirmed by the project) that it has fewer project activities than those observed by the team during its field work.

## Evaluation Questions

The evaluation questions (listed in the SOW in Annex 9) are clustered under five standard evaluation criteria (relevance, effectiveness, efficiency, impact, and sustainability), and overarching criteria such as gender mainstreaming, replication, communications, coordination, and management. The five standard criteria are defined as follows<sup>23</sup>:

- (a) **Relevance:** This evaluation examined the continued relevance of the intervention’s objectives, components/activities, and approaches in light of changing development problems, policies, and priorities. The political, economic, and institutional environments in which a project is designed and implemented tend to change over time. Some of the changes can have major consequences for a project.
- (b) **Effectiveness:** refers to the extent to which an intervention’s objectives are achieved or are likely to be achieved. Evaluations seek to determine whether interventions’ services and products are reaching the targeted populations; whether the intended beneficiaries are using them; whether the coverage of the target population is as planned in the project design; and whether the intervention is likely to achieve its targets.
- (c) **Efficiency:** measures the output of an intervention in relation to its costs. The most widely used method is to undertake cost-benefit analysis to determine the net benefits of an intervention. Such analyses are most appropriate when (a) reliable data are available and (b) realistic assumptions about benefit streams can be made.
- (d) **Impact:** In evaluation parlance, impacts refer to results or effects that are caused by, or are attributable to a project. Impact evaluations usually focus on higher-level effects of a project that occur in the medium or long term. For example, have farmers’ incomes increased as a result of an agricultural development project? Such effects can be intended or unintended, positive, or negative.
- (e) **Sustainability:** refers to the continuation of an intervention’s services and benefits after foreign assistance ends. Three dimensions of sustainability—financial, institutional, and environmental—will be examined in evaluations. Financial sustainability indicates the capacity of an agency or organization assisted by a project or program to be financially self-sufficient, either through revenue-generating activities or through substitution of other public, private, or donor sources of funding. Institutional sustainability refers to the supported organization’s capacity to manage its operations independently. Finally, environmental sustainability refers to the capacity of an intervention’s services and benefits to survive in the changed or changing environment.

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<sup>23</sup> The definitions of relevance, effectiveness, efficiency, impact and sustainability have been taken from “Evaluation Guidelines for Foreign Assistance,” Planning and Performance Management Unit, Office of the Director of U.S. Foreign Assistance (Final Version: March 25, 2009), available at: [http://pdf.usaid.gov/pdf\\_docs/PNAD0818.pdf](http://pdf.usaid.gov/pdf_docs/PNAD0818.pdf). This document notes: “These guidelines, jointly developed by the State Department’s Office of the Director of Foreign Assistance and USAID, are a step in evolving an overarching framework for evaluating foreign assistance that is shared by State and USAID.”

For each of the main evaluation criteria, the evaluation provides ratings on a scale of 1 to 6, as outlined in below in Table 6 below.

**TABLE 6: EVALUATION RATING SCALE**

Satisfactory	Unsatisfactory
6: Highly Satisfactory: no shortcomings	3: Moderately Unsatisfactory: significant shortcomings
5: Satisfactory: minor shortcomings	2: Unsatisfactory: major shortcomings
4: Moderately Satisfactory: moderate shortcomings	1: Highly Unsatisfactory: severe shortcomings

The ratings are based on all the information available to the evaluation team, including project documents, interactions with project staff, meetings with stakeholders, and field visits to and meetings with MCOs and WCOs. The rating process went from the specific to the general, assessing the complete range of project activities listed in Table 3. Each rating represents the consensus of the evaluation team, and the team made realistic comparisons with similar projects before assigning a rating. Factors beyond the control of the project (such as the project budget, disruptions caused by the law and order situation, and misconceived local opposition to the project) were taken into account in considering shortcomings.

The forward-looking part of the evaluation looks, to the extent possible, for innovative ideas to:

- Strengthen existing value chains and develop new ones.
- Further build the capacities of local organizations and potentially link them into umbrella organizations.
- Continue to improve water management.
- Re-incorporate and expand applied research and development.
- Continue to strengthen ties with the government.
- Introduce increased sustainability, including reducing cost-share or privatizing activities, building linkages with extension services and other service providers including NGOs, and graduating community organizations.
- Introduce robust third-party monitoring and verification that also provides continual feedback without hindering project activities.

# FINDINGS AND CONCLUSIONS ON PROJECT PERFORMANCE

## Relevance of Objectives

The five objectives of US ABBA, reproduced in Box 1, are underpinned by the 16 outcomes listed in Table 1 and at least 50 activities identified in Table 2. From the point of view of USAID, the project is intended to be a contributor to broad-based economic growth, as articulated in AO 2, with expectations for income generation and improved competitiveness (Box 1). After adding an emphasis and a number of activities on value chains and marketing (at USAID's request), the project is beginning to meet all these expectations. Each one of its expected outcomes is a tested ingredient of the approaches to rural income generation observed in Pakistan.

### BOX 1. PROJECT OBJECTIVES AND USAID AO

- Capacity of poor men and women to raise incomes through better organization increased.
- Crop productivity increased.
- Livestock productivity increased.
- Farmers' capacity to effectively engage in markets increased.
- Prospects for sustainability of project results increased.

*AO 2: Improved conditions for broad based economic growth.*

IR 1: Increased income generating opportunities.  
IR 1.1: Improved competitiveness of target value chains.

The first objective, aimed at organizing and capacitating the poor, responds to the lack of organization among the poor that inhibits collective endeavors and makes it costly for service providers to reach them. It is fully consistent with the response developed by NGOs, RSPs, the GoP, and many of the donors, at least since the early 1990s, for harnessing the potential of the poor through social mobilization, and it is supported by objectives that focus on appropriate avenues for small farmers to increase their incomes. In relation to the situation prevailing in the province, and given its mandate, the project has in place most elements of a strategy that is needed for helping small farmers develop their land, water resources, and human assets and increase the productivity of their crops and livestock. An adaptive research component that caters to the specific needs of the province, particularly in cereal production, is perhaps the most significant omission from project design.

The relationship between social mobilization and poverty alleviation that is built into the project design recognizes the importance of investing in sources of growth, while avoiding the assumption that the trickle-down effects of growth are adequate for poverty alleviation. Broad-based growth has been central to the aspirations of many in Pakistan, as it is to USAID, but GoP planners in recent years have articulated a more comprehensive poverty reduction strategy that revolves around pro-poor growth, social development, good governance, and the protection of vulnerable groups.<sup>24</sup> US ABBA does not have the mandate and resources for social development, social protection, and high-level governance, but it has a clear focus on fostering social capital and community-based local governance in a province that does not have much to offer in these terms.

The project as a whole illustrates the kind of thinking that was articulated in *Meeting the Challenge*, the 1992 report of the Independent South Asian Commission on Poverty Alleviation, which was adopted by the heads of state and government of the South Asian Association for Regional Cooperation at the Dhaka

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<sup>24</sup> This was first articulated in the GoP's Medium Term Development Framework (MTDF) 2005–2010, which was designed to be fully aligned with Pakistan's MDG targets and subsumed the targets, strategies, policies, and programs of the first Poverty Reduction Strategy Paper (2003–2006).

Summit of 1993.<sup>25</sup> A key prescription of the report is that poverty alleviation programs could be initiated independently of longer-term growth and adjustment strategies, but the two thrusts “would have to be harmonized with each other.” US ABBA is a prime example of harmonizing growth with poverty alleviation in some of the most deprived rural communities in Pakistan.

## Relevance of Activities and Approaches

### *Objective 1: Capacity of poor men and women to raise incomes through better organization increased*

The basic model employed by the project for mobilizing men and women in the villages is a tested one that has also worked well in Balochistan. The decision to have separate COs for men and women is practical in view of the strict segregation practiced in the villages of the project area. It is pertinent that the project involves local opinion leaders, including religious leaders, in explaining the project approach and the benefits of community mobilization. Project staff have gone to great lengths to explain to local religious leaders that FAO is not an NGO but is instead a UN agency in which Pakistan participates as a member state.

The sequence of activities depicted in Figure 4 represent a reasonable and productive approach to mobilizing communities and helping them articulate their priorities. In essence, it is a participatory approach for going through the project cycle at the community level, tailored to the interventions of the project and supported by two-way communication and training, with enough pauses for the communities to reflect and reach collective decisions. In the process, the MCOs and WCOs each elect a president and treasurer, for which the project recommends an election, but most villagers prefer consensus. The village profile, VDP, and CAP are appropriate tools that facilitate the process and are similar to those used in multi-sector participatory programs.

The project has a policy of asking the communities to limit membership in the MCOs and WCOs to 15–25 households in each CO. The rationale for this, as reported by project staff, is to minimize the possibility of conflict and ensure the formation of homogenous interest groups. The upper limit of 25 members has had the effect of excluding some of the interested community members and thereby limiting the benefits of the project. A more inclusive approach, observed in some other programs, is to invite the entire community to organize, allow for two or more COs in a community if distance or other factors so require, and make it clear that the project will cooperate with them only if they can resolve any conflicts that might arise.<sup>26</sup>

Training imparted to MCOs and WCOs in the form of CMST and LMST is well known in similar programs. GCBT, however, is a new and more complex exercise, parts of which overlap with the other training. It depends evidently on a certain level of education that is not found among most in these villages, particularly the women. Moreover, the Urdu version of the manual is sometimes garbled in its translation of key messages and makes for heavy reading. The project has also provided some training to women in basic literacy and numeracy, the rationale for which—i.e., that it is a need—is too broad to be linked meaningfully to the objectives of the project.<sup>27</sup>

The project lists the provision of drinking water under Objective 1, possibly because the project does not have a separate objective or component for community physical infrastructure or social sector interventions. The project favors a design in which drinking water is obtained from a main point in the community, thereby encouraging women and children to interact with each other outside their homes.

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<sup>25</sup> Similar thinking is reflected in a number of important GoP documents, including the Eighth Five-Year Plan (1993–1998), the draft Ninth Five-Year Plan (1998–2003), and the MTFD.

<sup>26</sup> At the same time, interest groups can also be present in a community in view of the diversity of interests (for example, in livestock fattening, poultry rearing, selling wool, and specific horticultural products). This is certainly the case in communities in which the project is working.

<sup>27</sup> Adult literacy is a specialized field, and the project cannot be expected to do it well without access to specialized resources.

This is an interesting variation to an intervention that is highly relevant for all in the community and known particularly for its impact on women.

Table 7 sums up the evaluation team’s assessment of the relevance of these activities in terms of ratings.

**TABLE 7: RATINGS OF RELEVANCE OF ACTIVITIES UNDER OBJECTIVE I**

Distribution and Demonstration Activities		Training Activities Relevant to Objective	
	Rating		Rating
Community mobilization—Men	5	CMST	6
Community mobilization—Women	5	LMST	6
Drinking water	6	GCBT	4
		Basic Literacy/Numeracy Training	2

*Objective 2: Crop productivity increased*

This objective is served by:

- (a) Three activities for developing community infrastructure (karez rehabilitation, pipelines, and water storage reservoir) and two for land development (land leveling and micro-catchment and water harvesting) at the household level. Pipelines and storage reservoirs are sometimes found in the same scheme as karez rehabilitation;
- (b) Demonstration of new crop varieties and plastic tunnels, and the distribution of seed, fruit plants, and power and knapsack sprayers; and,
- (c) A wide range of training activities, revolving around cereal crops, horticulture, pest management, seed treatment, homestead gardening (supported by the supply of vegetable seed), and food processing, the last two of which are for WCOs.

Karez rehabilitation is important in the project area because so much of a community’s agriculture and water needs depend on karezes. As explained in the Activity Profiles prepared as part of this evaluation (**Error! Reference source not found.**), much of the karez system dried up during the drought years of 1997 to 2002. The aquifer began to recharge once the drought was over, and this created a pressing need as well as an opportunity to rehabilitate karezes. It is not surprising that this became a top priority for many of the communities where US ABBA is working.

Where karezes did not need to be rehabilitated, community priorities included reservoirs that store water that was seeping into the ground, or pipelines that convey water more efficiently than earthen channels. Thus, storage reservoirs and pipelines are relevant not only for improving agriculture and incomes but also for conserving water. The project has also promoted land leveling by farmers on a large scale. As explained in the Annex 13, this activity creates new arable land or brings land back into production that has not been in use. It promotes efficient use of water, reduces the farmers’ workload, and increases crop yields. The small-scale activity referred to as micro-catchment and water harvesting (MCWH) is also aimed at efficient use of water, but depends critically on timely and adequate rainfall.

Among the technologies and inputs that are promoted by the project under this objective:

- (a) The demonstration and diffusion of new wheat varieties and supply of good quality fruit plants have the highest relevance and largest potential in the project area, as they address critical gaps in (the quality and quantity of) what is available to the farmers.
- (b) Silos for the storage of grain have great relevance in view of the large storage losses experienced by the farmers, as do power and knapsack sprayers in view of the losses in production due to pests.

- (c) Plastic tunnels may be attractive to some farmers, but a design has not been observed that is affordable and manageable for a significant number of farmers. However, the project believes that an affordable plastic tunnel can be designed, and that it would prove to be a highly water-efficient technology.

Much of the training the project provides for improving crop productivity is highly relevant. It is based on tested solutions and aligns closely with the priorities (problems and opportunities) of the large number of farmers engaged in wheat farming, orchard and fruit nursery management, and water management, as well as a smaller but nevertheless large number of rural women interested in homestead gardening.

However:

- (a) Training in food processing, even if aimed at preserving fruit for domestic consumption, is a time-consuming activity for women and one for which some costly ingredients have to be purchased from the market. It may be attractive for relatively well-to-do households, but is unlikely to be of interest to the large majority of the households that are poor and in which women are overworked.
- (b) The activity referred to as integrated pest management (IPM) is actually focused on the prudent use of chemicals and does not adequately reflect the IPM approach.
- (c) While the project uses experienced specialists, including government officials, wherever possible, it does not have a standard reference document (for example, a trainer’s manual or training notes) for imparting training.

Table 8 sums up the evaluation team’s assessment of the relevance of the above-mentioned activities in terms of ratings.

**TABLE 8: RATINGS OF RELEVANCE OF ACTIVITIES UNDER OBJECTIVE 2**

Distribution and Demonstration Activities		Training Activities Relevant to Objective	
	Rating		Rating
<i>Water and land related activities</i>			
Karez rehabilitation	6	Water Resource Management (WRM)	6
Land leveling	6	Improved irrigation practices	6
Micro-catchment and water harvesting (MCWH)	3		
Pipelines	6		
Water storage reservoir	6		
<i>Crop related activities</i>			
Seed (wheat, barley, alfalfa, peas)	6	Wheat growing (line sowing)	6
Fruit plant trees	6	Fruit nursery management	6
Demonstration plots*	6	Orchard layout and planting	6
Power and knapsack sprayers	6	Integrated Pest Management (IPM)	5
Plastic tunnels*	4	Seed cleaning machine training	6
Silos	6	Crop seed production	6
		Orchard management	6
		Homestead gardening	6
		Farmer Field School (FFS)—homestead gardening	6
		Food processing	2

\* For demonstration.

### *Objective 3: Livestock productivity increased*

Livestock disease control and feed improvement are two of the most pressing needs of livestock owners all over the country, including Balochistan. The project (with one caveat, mentioned below) has adopted the most relevant and proven approaches in this regard. With the aim of fattening small ruminants and increasing milk production, the project has facilitated linkages between livestock owners (mainly through MCOs) and commercial feed producers in the province; this initiative contributes to the incomes and nutrition levels of the beneficiaries. On a small scale, the project has also provided training on urea treatment of wheat straw, which enhances the nutritional value of this important source of fodder.

Attempts to assist farmers with livestock disease control have revolved around the training of animal health workers from the community and linking these persons with the government's veterinary staff in each district. The linkage, in practice, means that the animal health worker in the community is expected to identify and refer problems to government staff, which is then expected to visit the village, use the kit provided by the project, and perform whatever services are required.<sup>28</sup> The project does not allow the community worker to provide the services for which only the government veterinarian is considered to be qualified.

This model is different from the more common para-veterinarian approach found in similar programs in Pakistan. The para-veterinarian is a villager who is given basic training and allowed to offer a wide range of vaccinations and treatments to livestock owners, who pay him a fee that covers the cost of his time and supplies. US ABBA takes the view—which is internationally accepted among specialized agencies—that para-veterinarians do not have the qualifications required to provide the services they offer in Pakistan; this despite the fact that government veterinarians are not accessible to the large majority of livestock owners, and para-veterinarians have proved their skills as valuable alternatives for poor livestock owners in all parts of the country.

For the women, the project is offering two related initiatives in poultry rearing. The first and larger of these is the supplying of Fayoumi birds, which are well known for their egg production, and training women in poultry rearing. The drawback of the Fayoumi is that it is a poor brooder. Thus, the project has been struggling to introduce an egg incubator that could work within the constraints faced by the villagers, particularly the prolonged absence of electricity on a daily basis. This has led the project, after testing two earlier versions of an incubator, to try and develop an affordable solar-powered incubator. The success of this device would complement the highly useful business of working with the Fayoumi. This success, however, cannot be predicted with certainty, as it depends on a process of invention, a process that is often beset by hurdles and failure.

The project's most visible activity in the livestock sector is the Livestock Mandis it has been organizing with the support of the civil administration and a livestock producers' group drawn from several COs that is taking over responsibility from the project. This intervention has not been seen among other rural development programs in the country, but it is needed in Balochistan, where livestock marketing is not as well developed. The idea is to bring buyers and sellers together in locations that are closer to livestock owners than the main livestock markets of Balochistan and neighboring Punjab. The rationale is compelling and its execution is promising, and the evaluation team's interaction with the livestock producers' group further confirmed the value of this innovative initiative in terms of pure profit.

Table 9 sums up the evaluation team's assessment of the relevance of the project's livestock development activities in terms of ratings.

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<sup>28</sup> The kit is very useful because government staff do not have the equipment and supplies they need for providing these services.

**TABLE 9: RATINGS OF RELEVANCE OF ACTIVITIES UNDER OBJECTIVE 3**

Distribution and Demonstration Activities		Training Activities Relevant to Objective	
	Rating		Rating
Feed distribution	6	Poultry raising and management training	6
Poultry bird distribution	6	Demonstration on urea treatment of wheat straw	6
Animal vaccination	3	Community-based animal health workers	4
Incubators*	3	Demonstration on egg incubator technology	3
		FFS training on livestock	6
		Livestock shows (Mandis)	6

\* For demonstration.

*Objective 4: Farmers' capacity to effectively engage in markets increased*

Given the geographic and economic conditions of the project area, as well as the limited opportunities for enhancing incomes through market linkages, the value chain studies conducted by the project—and in particular, their focus on practical outcomes for the farmers of the project area—have been highly relevant activities. They are fully aligned with the interests of specific groups of producers, particularly livestock owners and fruit and vegetable producers, and provide information about the market that the producers can use to enhance their incomes.

Most of the project's training activities for linking farmers to markets in Balochistan and Punjab are highly relevant inasmuch as they are aimed at addressing the lack of market information; grading, packing, transportation, and loading and unloading practices; and skills for dealing with experienced buyers. More specifically:

- (a) The project's skill development and market exposure initiatives have evolved rapidly, engaged relevant international experts, developed staff capacity, and elicited an enthusiastic response from the villagers (men and women) involved in the process. Villagers are learning practical ways of increasing their incomes and are disseminating this information in their communities.
- (b) Training of MCO members in post-harvest management techniques has been a sizeable endeavor and responsive to market requirements.
- (c) Participation by a sizeable number of women in the wool value chain is a step in the direction of their financial empowerment.
- (d) The small-scale training on herbs (for MCOs and WCOs) and floriculture (for WCOs) has limited scope for generating commercial activity and increasing household incomes.

The project's initiative for setting up FMCs and MMOs is closely aligned with the objective of increasing farmers' incomes and capacity to effectively engage in markets on a sustainable basis. The interest-group basis of organization is more robust and potentially more sustainable than the dependence on COs witnessed in most rural development programs. The prohibition on borrowing and lending that is contained in the proposed by-laws of FMCs and MMOs is prudent and perhaps even essential in view of the country's experience with cooperatives.

Table 10 sums up the evaluation team's assessment of the relevance of various marketing activities in terms of ratings.

**TABLE 10: RATINGS OF RELEVANCE OF ACTIVITIES UNDER OBJECTIVE 4**

Distribution and Demonstration Activities		Training Activities Relevant to Objective	
	Rating		Rating
Value chain analysis	6	Market skills, exposure, and related training	6
Formation of cooperatives (planned)	6	Post-harvest management	6
		Wool shearing and grading	6
		Herbs	3
		Training of Trainers (ToT) on floriculture	3

## Effectiveness

### *Overall effectiveness in terms of targets and achievements*

The project’s targets and achievements in terms of the indicators associated with the PMP are given in detail in **Error! Reference source not found.** and achievements at the outcome level are summarized in **Table 11**. The findings given here are based on the following method of analyzing achievements in comparison with targets:

- The project “exceeded targets” means that it achieved 100 percent or more of the targets.
- “Substantially achieved” means that it achieved 66–100 percent of the targets.
- “Modestly achieved” corresponds to achieving 33–66 percent of the targets.
- “Fallen short” means an achievement of less than 33 percent of the targets.

It should be emphasized that activities cannot be treated on par with each other, as some targets are more important for the project or the beneficiaries than others, and some activities consume significantly larger amounts of resources than others. For example, the activity “demonstration of MCWH for low-water-requiring fruit crops” is much less important in terms of project resources and coverage than the activity “market skills training for community activists.”

An analysis of the project’s achievements versus targets leads to the following conclusions:

- Under Objective 1, the project has exceeded targets in achieving outcome 1.1, and has substantially achieved targets in achieving outcomes 1.2, 1.3, and 1.4.
- Under Objective 2, the project has substantially achieved targets in achieving outcomes 2.2 and 2.3, and has modestly achieved targets in achieving outcome 2.1.
- Under Objective 3, the project’s achievement of targets is almost equally spread among the substantially achieved, modestly achieved, and fallen short categories.
- Under Objective 4, the project has exceeded targets in achieving outcomes 4.2 and 4.3, and has modestly achieved targets in achieving outcome 4.1.
- Under Objective 5, the project has exceeded targets in achieving outcome 5.2, and has substantially achieved targets in achieving outcome 5.1.

The findings may be summed up at the level of objectives as follows:

- The project has exceeded or substantially met targets in achieving most of activities related to Objectives 1 and 5.
- It has modestly or substantially achieved targets in activities related to Objectives 2 and 4.

- (c) It has modestly achieved or fallen short on achieving targets in most of the activities under Objective 3 (“livestock productivity increased”).

**TABLE II: ACHIEVEMENT OF PROJECT TARGETS**

	Number of activities	Met or exceeded	Substantially achieved	Modestly achieved	Fallen short
<b>Objective 1: Capacity of poor men and women to raise incomes through better organization increased</b>					
Outcome 1.1: Representation of poor men and women in project-assisted community organizations increased	5	60	20	20	0
Outcome 1.2: Capacity of project-assisted community organizations to identify and address members' needs increased	3	0	67	33	0
Outcome 1.3: Capacities of partners improved	1	0	100	0	0
Outcome 1.4: Access to water for household use improved	5	0	100	0	0
<b>Objective 2: Crop productivity increased</b>					
Outcome 2.1: Crop production increased	5	40	0	60	0
Outcome 2.2: Cultivation of high-value crops increased	10	20	60	20	0
Outcome 2.3: Area of irrigated land increased	5	0	40	20	40
Outcome 2.4: Area of land under water harvesting technologies increased	5	20	40	20	20
<b>Objective 3: Livestock productivity increased</b>					
Outcome 3.1: Livestock weight increased	3	0	33	33	33
Outcome 3.2: Animal mortality reduced	6	17	33	17	33
Outcome 3.3: New livestock activities established	7	14	29	29	29
<b>Objective 4: Farmers' capacity to effectively engage in markets increased</b>					
Outcome 4.1: Market information/knowledge improved	7	29	14	57	0
Outcome 4.2: Marketing opportunities increased	2	100	0	0	0
Outcome 4.3: Marketing skills improved	9	67	22	11	0
<b>Objective 5: Prospects for sustainability of project results increased</b>					
Outcome 5.1: Project results communicated effectively	21	42.9	23.8	14.3	19.0
Outcome 5.2: Partnerships with external parties established	12	75.0	8.3	8.3	8.3

*Objective 1: Capacity of poor men and women to raise incomes through better organization increased*

The project, according to its records, has organized 6,851 men and 4,846 women (a total of 11,697 members) in five districts of Balochistan. By now it has helped establish and developed the capacity of 561 COs, 40 percent of which are WCOs (Table 12). In comparison, the ADPB, working in nine districts over a similar time period, established approximately 900 COs with a total membership of 11,593.<sup>29</sup>

**TABLE 12: NUMBER AND MEMBERSHIP OF COMMUNITY ORGANIZATIONS**

	Pilot Phase	Present Phase	Total
MCOs	153	184	337
WCOs	96	128	224
<b>Total</b>	<b>249</b>	<b>312</b>	<b>561</b>

The achievement reflected above is commensurate with the project budget and the prevailing operating environment in the province. It is supported effectively by the training provided to thousands of men and women (as reported in **Error! Reference source not found.**) by means of CMST and LMST, with a caveat, however, attached to GCBT and literacy/numeracy training as discussed above in the discussion of relevance. Only 167 women have been reached through training in literacy/numeracy, which negates whatever rationale lay behind this intervention.

There is also the issue that villagers are trained to look for linkages with other service providers in the government and NGO sectors without being forewarned that resources for linkages are not universally available and, except in a few cases, expectations will not be met.<sup>30</sup> In addition, the provision of drinking water—potentially a highly beneficial intervention, especially for women—has been extended only to 10 communities (Annex 15); this could be due to lack of demand from the communities given the fact that a number of projects have already provided drinking water facilities in the project area.

Table 13 sums up the evaluation team’s assessment of the effectiveness of the activities falling under Objective 1.

**TABLE 13: RATINGS OF EFFECTIVENESS OF ACTIVITIES UNDER OBJECTIVE 1**

Distribution and Demonstration Activities		Training Activities Relevant to Objective	
	Rating		Rating
Community mobilization—Men	5	CMST	5
Community mobilization—Women	5	LMST	5
Drinking water	3	GCBT	4
		Basic Literacy/Numeracy Training	1

*Objective 2: Crop productivity increased*

While the relevance of most of the activities promoted under this objective is high, effectiveness has been somewhat limited because of the policy adopted by the project of limiting membership in the COs. In addition, there are at least five activities (all rated 1 in Table 14) in which the project has not yet decided whether or not to go to scale, and under what conditions; thus an element of serendipity is evident that undermines effectiveness. **Error! Reference source not found.** contains evidence of the spread of relevant activities among men and women.

<sup>29</sup> Tariq Husain, “Evaluation of the Area Development Program Balochistan,” UNDP Pakistan, May 2010.

<sup>30</sup> All rural development programs in the country follow the same approach to linkages.

**TABLE 14: RATINGS OF EFFECTIVENESS OF ACTIVITIES UNDER OBJECTIVE 2**

Distribution and Demonstration Activities		Training Activities Relevant to Objective	
	Rating		Rating
<i>Water and land related activities</i>			
Karez rehabilitation	5	Water Resource Management (WRM)	4
Land leveling	5	Improved irrigation practices	4
Micro-catchment and water harvesting (MCWH)	1		
Pipelines	5		
Water storage reservoir	5		
<i>Crop related activities</i>			
Seed (wheat, barley, alfalfa, peas)	5	Wheat growing (line sowing)	4
Fruit plant trees	5	Fruit nursery management	4
Demonstration plots*	5	Orchard layout and planting	4
Power and knapsack sprayers	5	Integrated Pest Management (IPM)	4
Plastic tunnels*	1	Seed cleaning machine training	4
Silos	1	Crop seed production	4
		Orchard management	4
		Homestead gardening	4
		Farmer Field School (FFS)—homestead gardening	1
		Food processing	1

\* For demonstration.

### *Objective 3: Livestock productivity increased*

Livestock production has been effectively supported by supplementing feed for increasing weight and milk production, and poultry rearing has been promoted among women. The scale of these activities, however, particularly for poultry, has been small relative to the potential and the number of members of COs. The idea of Livestock Mandis has been adopted by livestock producers and relevant government stakeholders in a way that demonstrates ownership. These are the more promising livestock-related activities rated in Table 15.

Urea straw treatment and FFS training on livestock are reported to be minor activities (Annex 15), with no evidence of uptake beyond the people trained, and contributing little to effectiveness in terms of Objective 3. The ongoing struggle with the incubator remains short of arriving at a result that could meet the project's objective for this technology.

**TABLE 15: RATINGS OF EFFECTIVENESS OF ACTIVITIES UNDER OBJECTIVE 3**

Distribution and Demonstration Activities		Training Activities Relevant to Objective	
	Rating		Rating
Feed distribution	5	Poultry raising and management training	4
Poultry bird distribution	4	Demonstration on urea treatment of wheat straw	3
Animal vaccination	3	Community-based animal health workers	3
Incubators*	2	Demonstration on egg incubator technology	2
		FFS training on livestock	3
		Livestock shows (Mandis)	5

\* For demonstration.

#### *Objective 4: Farmers' capacity to effectively engage in markets increased*

The scale of the marketing initiative has been small relative to that of the more established activities in the project (Annex 15). Most of the marketing activities, with the main exception of value chain analyses, are new relative to the life of the project and call for an assessment of the likelihood that they will contribute to the effectiveness of the project in terms of its objectives for marketing. The assessment is generally positive, not because of the coverage reported in Annex 15, but because of the potential and the relevance assessed above in this chapter.

There is uncertainty, however, in assessing the fortunes of cooperatives, no matter how well-designed, while the very small-scale training activities associated with herbs and floriculture, noted earlier for lack of relevance, qualify only as activities with major shortcomings in Table 16.

**TABLE 16: RATINGS OF EFFECTIVENESS OF ACTIVITIES UNDER OBJECTIVE 4**

Distribution and Demonstration Activities		Training Activities Relevant to Objective	
	Rating		Rating
Value chain analysis	5	Market skills, exposure and related training	5
Formation of cooperatives (planned)	4	Post-harvest management	5
		Wool shearing and grading	5
		Herbs	2
		Training of Trainers (ToT) on floriculture	2

### **Efficiency**

As reflected in Table 5, the project was unable to utilize the funding made available for its initial three-year duration, and this was due to factors beyond the control of the project. For similar reasons, interaction between USAID and the project has been limited, and this is a problem the project has in common with similar donor-assisted projects in the conflict-affected areas of the country. In other ways, however, the project has been either ordinary or exemplary in terms of efficiency:

- (a) The project's head office is located in the same building as a government research facility in Quetta, with efficient sharing of resources and know-how. The facilities are functional in terms of comfort and connectivity, but are not ostentatious by any means. The district offices are basic and no different from the offices of similar programs.
- (b) Staffing levels are just right in relation to the package of interventions pursued by the project, and salaries are just about enough to retain staff with a high degree of motivation. There is, however, constant temptation for staff to move to new projects that offer higher salaries and, in some cases, an alternative outside the troubled province.
- (c) With the use of high-level international expertise, monitoring and reporting systems have been streamlined to an exemplary level as a result of implementing the recommendations of the MTE. The project is unique in regularly producing estimates of impact that show how US assistance is generating economic activity in the project area.
- (d) Most importantly, the project has unity of command in terms of management, meaning that it is managed by a single implementing partner in consultation with the donor and without any co-management by the government. This has prevented the clash of cultures that invariably occurs whenever a donor-assisted project is co-managed by the government. At the same time, the project has regularly consulted with and received the support of the government in strategic matters.

Except for the three activities mentioned below in Table 17, it has not been possible in this evaluation to compare the cost of specific project activities with the costs incurred by other projects. There can be a reasonable presumption, however, that a tested activity carried out by the project is carried out as efficiently as the same activity carried out by a similar project in the province. The value chain analyses, however, may be an exception to this statement, as they have required the assistance of international experts, the likes of which are not normally engaged by projects similar to US ABBA.

Table 17 compares the average cost of three types of infrastructure schemes of ABBA with those of the ADPB. Costs are similar for two of these (drinking water and karez rehabilitation). For the category called “irrigation, storage reservoir, channel,” the project reports higher costs than ADPB. It is significant that beneficiary contributions as a percentage of cost are higher in US ABBA than ADPB, which allows the project, in principle, to spread its resources more evenly across the communities.

**TABLE 17: COST COMPARISON OF THREE INFRASTRUCTURE ACTIVITIES**

Type of scheme	ADPB			US ABBA		
	Average cost (Rs)	CO share (%)	Project cost (Rs)	Average cost (Rs)	CO share (%)	Project cost (Rs)
Drinking water	249,000	30%	174,300	243,757	25%	182,817
Irrigation, storage reservoir, channel	454,000	30%	317,800	834,410	50%	417,205
Karez rehabilitation and improvement	299,000	30%	209,300	364,750	50%	182,375

Sources:

1. US ABBA project records.
2. Tariq Husain, “Evaluation of the Area Development Program Balochistan,” UNDP Pakistan, May 2010.

## FINDINGS AND CONCLUSIONS ON IMPACT AND SUSTAINABILITY

### Quantitative Impact Assessment

The separate Impact Assessment Annex to this report contains the full details of the impact assessment conducted as part of the evaluation. Table 18 summarizes the project’s impact on household incomes. Crop activities produced a large majority (93 percent) of project benefits.

**TABLE 18: PROJECT MONETARY IMPACT**

Type of intervention	Aggregate benefits (Rs. thousand)	Percentage of aggregate benefits (%)	Average benefit per household (Rs.)
Water	15,740	7%	22,503
Crops	208,899	93%	118,663
Livestock	200	<1%	13,314
Total	224,839		

Source: IMEC field survey, 2011.

## Assessment in Terms of Impact Domains

A quantitative impact assessment, though useful in a number of ways, does not adequately capture the benefits the project is generating, especially in terms of human and social capital, the empowerment of women, and changes in institutions. A more complete picture may be obtained by assessing impact in terms of certain impact domains, such as those illustrated in Table 19. Here, impacts are associated with some kind of asset formation, with the theory that any kind of asset (including social capital and institutions) a project creates or improves starts to generate an impact.<sup>31</sup> An estimate of the depth, extent, and sustainability of impact is possible only with time and appropriate measurement, but the very creation or improvement of an asset is sufficient to signal an impact.

**TABLE 19: ILLUSTRATION OF IMPACT DOMAINS**

Impact at <i>individual and household</i> levels		Impact at <i>community</i> level
Assets	<i>Other Examples</i>	□ Physical assets
□ Physical assets	□ Income	□ Natural resource base and its sustainability
□ Financial assets	□ Food security	□ Social capital and empowerment of the poor
□ Human assets	□ Agricultural productivity	
<b>Higher-level</b> impact		<b>Overarching</b> factors
□ —on institutions		□ Poverty
□ —on the regulatory framework		□ Human rights, including gender equality
□ —on policies		□ Replicability
□ Also credit intellectual capital formed		□ Innovation

Considered in these terms (and with reference to Annex 15):

- (a) The most widespread impact of US ABBA has been in the domain of social capital, followed closely by the impact on human capital, a sizeable portion of which (more than 40 percent) is due to the mobilization and training of women. Training in homestead gardening stands out as the most extensive form of investment in women’s empowerment, with benefits in terms of nutrition and income. For men, the project’s extensive training in post-harvest management can be recognized easily.
- (b) The indications are that land leveling and the adoption of new wheat varieties have generated deep impacts in terms of agricultural production and food security that are also widely spread (as reported in Annex 15). Livestock feed distribution has also generated widespread impact, although the depth of impact cannot be generalized from the interviews conducted by the evaluation team during site visits.
- (c) Irrigation infrastructure (as highlighted in the previous section) has deep impacts on crop production, food security, and incomes, as do drinking water schemes on the time savings and other benefits experienced by women.<sup>32</sup> These benefits, however, are not as extensive as those of the activities mentioned above. Drinking water supply stands out, in particular, due to the fact that the project has implemented only 10 such schemes.
- (d) The impact of most of the other activities of the project (such as those that focus on fruit, vegetable, marketing, and poultry) is somewhat limited in its extent.

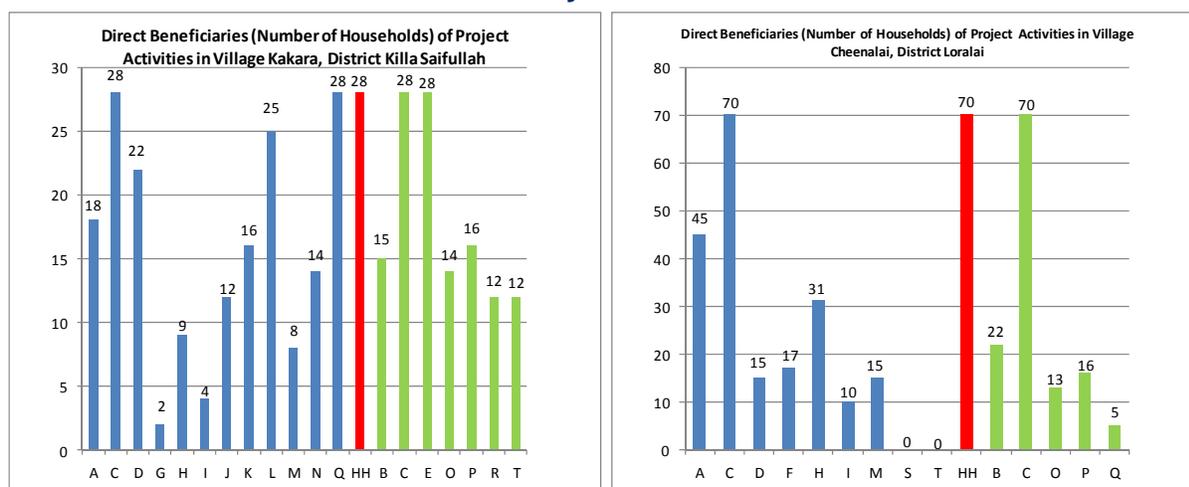
<sup>31</sup> Conversely, it is not possible to envisage an impact if a project does not create an asset.

<sup>32</sup> Some women reported that miscarriages used to occur more frequently when women had to fetch water over long distances in hilly terrain, before the project brought in a drinking water supply scheme.

- (e) Activities that were rated for their low level of relevance to project objectives are mainly small-scale activities with little or no significant impact.
- (f) A project's biggest impact may come through a change in institutions, such as that effected by US ABBA through Livestock Mandis. Unlike other results, institutional change impacts thousands of people. Changes underway in the marketing of fruit, vegetable, and wool are also contributors to this kind of institutional change. The by-laws drafted by the project for emerging FMCs and MMOs are a valuable form of intellectual capital, with the potential for creating institutional change in the cooperatives sector.

The preceding discussion is based on the number of beneficiaries reported by the project in Annex 15. These numbers underestimate the actual number of direct beneficiaries, because the project has been equating direct beneficiaries with membership in COs. This approach is incorrect, because each project activity has its own direct beneficiaries, many of whom are not members of COs. For example, most or all households in a community may be the beneficiaries of social capital, regardless of whether or not they are members of COs, since they may benefit from collective decision-making as well as its tangible outcomes such as karez rehabilitation, drinking water, the diffusion of new wheat varieties, conflict resolution, and linkages with other projects. At the same time, activities aimed at interest groups would benefit a smaller number of households than those represented in the CO. Variations such as these are illustrated in Figure 5, drawn on the basis of information obtained in two very different villages visited by the evaluation team.

**FIGURE 5: BENEFICIARIES OF PROJECT ACTIVITIES IN TWO COMMUNITIES**



Activities through MCOs		Activities through WCOs	
<b>Key</b>			
HH: Total Number of Households		J: Demonstration Plots	
A: MCO Members		K: Wheat Growing/ Sowing Training	
B: WCO Members		L: Integrated Pest Management	
C: Community Mobilization Training <sup>33</sup>		M: Orchard Management Training	
D: Land Leveling		N: Post-Harvest Management Training	
E: Drinking Water Facility		O: Homestead Gardening Training	
F: Karez rehabilitation		P: Food Processing Training	
G: Water Field Days		Q: Livestock Feed	
H: Cereal Seed		R: Community-Based Animal Health Workers Training	
I: Fruit Plant Trees		S: Value chain analysis	
		T: Basic Marketing Skill Development Training	

<sup>33</sup> Includes CMST, LMST, and GCBT.

## Sustainability

Sustainability of impact at some level is likely in almost all the activities initiated by the project that have created ownership and impact thus far. More specifically:

- (a) It is in the interest of beneficiaries to maintain the infrastructure developed with the support of the project, including karezes, reservoirs, pipelines, drinking-water supply schemes, and leveled land. Discussion with the beneficiaries during site visits indicates that arrangements are available in the shape of finances, expertise, and collective management to ensure the operation and maintenance of these assets at a functional level. It is unlikely, however, that most of the schemes will be maintained as designed.
- (b) Agricultural technologies and practices adopted by the farmers and interventions in poultry raising would remain beneficial beyond the life of the project and are therefore likely to generate sustainable impacts, at least as long as they remain useful in specific settings. The benefits of training associated with such changes are also sustainable to the same degree. The benefits of villagers trained as animal health workers are small and limited and are not likely to be sustained.
- (c) The benefits of training imparted in support of community mobilization are greatest as long as COs exist, but diminish rapidly thereafter. Given the experience elsewhere in the country, few COs are likely to be sustainable after the closure of this project. However, future projects and any government departments and NGOs that decide to work through participatory approaches in communities organized by US ABBA would benefit from the investment made by the project in social capital.
- (d) Most of the other project activities (e.g., those that focus on fruit, vegetables, marketing and poultry) benefit a limited number of individuals. However, they may be important activities for the interest groups to whom they apply, e.g., women interested in rearing poultry.

In general, however, sustainability of project activities depends on continuing donor support: financial or institutional sustainability is not possible for this project. Financial support from the government for project activities as they are currently implemented is not possible either. Moreover, the prospect that NGOs will take up existing project activities on a significant scale is remote unless agreements are reached with well-resourced NGOs for specific activities and specific parts of the project area.

At the same time, all the activities initiated by this project are replicable, at a cost similar to or less than that incurred by the project. Indeed, all the activities, with the exception mainly of value chain analyses and training in marketing, are already in vogue among similar projects in the country. The government of Balochistan, as well as many donors and NGOs, understand the value of the project's activities. They would tend to be supportive of replication if resources were available and cooperation fostered through agreement among interested parties.

## FINDINGS AND CONCLUSIONS ON OVERARCHING FACTORS

### Gender Mainstreaming

The project has developed a comprehensive gender strategy to address gender disparities and disadvantages faced by women that are inherent features of the social structure in Balochistan. The gender strategy seeks to maximize economic and social benefits to women from the project within the norms and culture of Balochistan and the sectoral scope of the project. Its objectives are to:

- (a) Enhance the participation of women in each project at the optimum level to produce the greatest impact on the livelihoods of the poor farming communities.
- (b) Increase opportunities for women in income-generating activities, learning, and participation in decision-making processes.
- (c) Increase understanding of the importance of gender dynamics within the community where it works, within the organization itself, and among the wider development community, as evidenced by the inclusion of appropriate gender strategies throughout the project design and implementation.

In practical terms, the project has set the community share of WCOs in project activities at 25 percent of the total cost of an activity, while men have to pay 50 percent of the cost for the same activity. The differential serves as an incentive for women to organize and participate actively in project activities. The project's achievements and limitations in advancing the status of women may be summarized as follows:

- (a) The project has been as good as or better than similar projects in Pakistan in organizing women for collective management and supporting them in this connection with appropriate training. This is a significant achievement in view of the opposition faced by the project from influential villagers, including religious leaders.
- (b) The project has been less than vigorous in delivering drinking water supply schemes to villagers. This would be an opportunity lost, unless resources can be reallocated to invest more in this highly beneficial activity.
- (c) In terms of production and income generation that supports the financial empowerment of rural women, the project has undertaken two promising initiatives, namely, poultry rearing and homestead gardening. The scale of poultry rearing, however, has been limited so far in comparison with homestead gardening, even though it is a low-cost activity compared with most sponsored by the project.
- (d) Women's involvement in marketing activities, particularly for selling wool, has made a promising start and generated enthusiasm among the women involved.

## **Communication and Branding**

The project has developed a fairly exhaustive communication strategy along with a public relations strategy. The progress made under each of its activities is given in Annex 1. The activities include both print and electronic media to disseminate their required information. The project's achievements under communication and branding are listed below.

- (a) There has been a varying degree of success in achieving its stated communications objectives.
- (b) The project has communicated well with the government officials, NGOs, and donors working in Balochistan through its website, newspaper articles, and calendars. On communicating with the beneficiaries, the project has been successfully highlighting its success through various means, including print and radio, to reach segments of society.
- (c) The project has also been regularly reporting its progress to USAID and FAO.
- (d) The project places the USAID logo on almost all kinds of supplies and stationery it delivers to the COs, including registers used by the COs for maintaining their records, bags and packets of seed, grain storage silos, and livestock treatment kits. There is a strong presumption, therefore, that the majority of the beneficiaries know that they are receiving assistance from USAID.

# CONCLUSIONS AND RECOMMENDATIONS

## Conclusions

The project overall is rated 5 on a scale of 1 to 6, signifying minor shortcomings in design or implementation, while recognizing the difficulty of the operating environment and the security situation that has forced the project to curtail and even stop its activities in the recent past. In comparative terms, this project is among the very best multi-sector rural development projects observed in Pakistan in recent decades, reminiscent of—albeit, different from—the first 10 years of the Aga Khan Rural Support Program (1982–1992) and the first three or four years of the Pak-German project in Balochistan (in the 1980s).

The main reasons for the project’s achievements are institutional, and may be summarized as follows:

- (a) Unlike most other donor-assisted projects, decision-making is vested in the donor and a single implementing partner, while ensuring consultation with the government on strategic issues.
- (b) Unlike many other multi-sector initiatives, the implementing partner is a specialized international agency that has been able to provide superior technical support to the project. One result of this is reflected in the breadth of capacity development of project staff.
- (c) The participatory approach adopted in the project is similar to the approaches developed by successful programs elsewhere in the country.
- (d) The project is developing a practical and promising approach for linking producers and entrepreneurs to market institutions.

In terms of its relevance, US ABBA is a prime example of harmonizing growth with poverty alleviation in some of the most deprived rural communities in Pakistan. Project objectives are closely aligned with the USAID Agricultural Sector Strategy and broadly consistent with the priorities of the government. The objective of organizing and capacitating the poor responds to the lack of organization among the poor that inhibits collective endeavor and makes it costly for service providers to reach them. Moreover, with the exception of an adaptive research component, the project has in place most elements of a strategy that is needed for helping small farmers develop their land, water resources, and human assets, and increase the productivity of their crops and livestock.

The sequencing of activities represents a participatory and productive approach to mobilizing communities and helping them articulate their priorities, with specific reference to the interventions of the project. The project is considering how to gradually withdraw support from mature COs, raise the cost-sharing requirement for mature COs, and offer them technical assistance. It is relying on the IMI for assessing the maturity of COs, which may be useful for this purpose but is not a predictor of the sustainability of COs in the absence of project support. Moreover, a comprehensive exit strategy is not yet in place.

Most of the activities and approaches of the project are highly relevant in relation to the needs and circumstances of the beneficiaries. However:

- (a) Limiting COs to 25 members each excludes some of the interested community members from project activities.
- (b) GCBT requires a level of education that is not available to most villagers and overlaps partly with the other training imparted to CO members.

- (c) Training in basic literacy and numeracy, although needed among rural adults, requires specialized expertise that is not available in the project.
- (d) Limited resources have been made available for activities that are evidently highly relevant for women, including drinking water supply and poultry rearing.
- (e) Micro-catchment and water harvesting may be a potentially useful intervention but has not yet been successful.
- (f) Plastic tunnels may be attractive to some farmers, but a design has not been observed that is affordable and manageable for a significant number of farmers. The project believes it can come up with an affordable design.
- (g) Training in food processing may be attractive for well-to-do households but is unlikely to interest the large majority of the households that are poor and in which women are overworked.
- (h) The activity referred to as integrated pest management is actually focused on the prudent use of chemicals and does not adequately reflect the IPM approach.
- (i) The project does not have a standard reference document (for example, a trainer's manual or training notes) for imparting training in crop-related activities.
- (j) Livestock disease control has been made overly dependent on the willingness and capacity of local government functionaries to assist villagers.

In terms of effectiveness:

- (a) Project achievements exceeded targets for Objectives 1 and 5. Achievements were more modest for Objectives 2 and 4, and generally short of targets for Objective 3 (livestock productivity).
- (b) The main contributors to effectiveness are COs, community infrastructure (karezes, pipelines, reservoirs, and drinking water), land leveling, new wheat varieties, the supply of fruit plants and livestock feed, poultry rearing, homestead gardening, and the project's training activities.
- (c) There was frequent and meaningful coordination with the government on strategy and, on a limited scale, operational links with line departments at the local level.
- (d) The project has avoided duplication with other development projects, but there has been little progress in linking up with other US-financed projects.

Assessments of efficiency, though limited by hard evidence, suggest that:

- (a) The project's activity-level efficiency is similar to or higher than comparator projects. Community share is higher than in most other projects.
- (b) International technical assistance (in marketing, community development, and M&E) has been highly effective for capacity development of staff and villagers alike, but costs more than in other projects that do not engage international expertise.
- (c) The utilization of the budget has been slower than expected for reasons beyond the control of project (and having to do with the security situation).
- (d) The project has a comprehensive PMP designed and implemented with inputs from international experts. Reporting to USAID and FAO has been timely and comprehensive.

The project's impact at the individual and household level is indicated by the following changes in assets and flows:

- (a) There has been large-scale impact on human capital through training, but this has been uneven across activities, depending on how and how much training was imparted.
- (b) Impact on physical assets (mainly land) has been substantial in terms of its depth and considerable in scale.
- (c) There have been impressive increases in productivity and incomes (through water, seed, plants, livestock feed, and training).
- (d) The project has generated employment through community infrastructure and land leveling.
- (e) On a limited but significant scale, there has been reduction in women's time cost, and increase in women's income and food consumption.

At the community level:

- (a) Drinking water and irrigation schemes have generated deep impact on the communities where such schemes have been implemented, but impact has been limited by the number of schemes undertaken.
- (b) Water storage reservoirs and pipelines have had a positive effect on the conservation of water.
- (c) Tremendous confidence and initiative is observed among organized men in the villages (but less so among the women) as a result of the project's investment in social capital and community-based local governance.
- (d) Linkages between COs and sources of support from outside the project are evident on a limited scale.
- (e) As an unintended result, exclusion of part of the community from project activities due to an upper limit on CO membership could lead to disparity and tension within the community.

Institutional change affects many more people than changes resulting from household- and community-level interventions, and this is also evident in the work of US ABBA. While the project was not designed to promote institutional change in the public sector, it has been increasingly involved in influencing market institutions to the benefit of small farmers. More specifically:

- (a) Livestock Mandis sponsored by the project have already demonstrated that thousands of livestock sellers and buyers can benefit from this innovative activity.
- (b) The emerging impact of value chain analyses and training in marketing indicates the potential for benefiting a large number of specialized producers (for example, of wool and horticultural products).

The project's attempts at gender mainstreaming, channeled mainly through activities for WCOs, have resulted in a significant and sizeable breakthrough in that 42 percent of CO members are women, which is higher than in most similar projects. Impact has been limited, however, due to the project's limited focus on drinking water, poultry rearing, and homestead gardening.

Not surprisingly, the project faces the same kinds of challenges to sustainability that other projects face in the environment where the project is working. First, activities sponsored by a project come to an end when the project ends, as government resources and outreach are limited, and government seldom takes up activities initiated by a project. Second, NGO engagement in Balochistan is also at a low level, and NGOs cannot be expected to take on the burden of supporting the COs established by the project unless some special arrangements can be made to the satisfaction of all concerned. Third, the COs do not possess adequate means of their own for pooling resources to address their development priorities.

A more promising scenario for sustainability is emerging around the following developments:

- (a) The links the project is forging between interest groups and markets are generating benefits that are sustainable and likely to grow. The project's proposal to institutionalize interest groups in the shape of FMCs and MMOs, if successful, would further enhance the prospects for sustainability, as the interest-group basis of organization is more robust and potentially more sustainable than the COs witnessed in most rural development programs.
- (b) Moreover, many of the impacts of project activities can be sustained by villagers who can easily afford to do so in view of the benefits generated by these activities. For example, land leveling and community infrastructure schemes will continue to generate benefits for several years, and villagers have the financial, human, and social capital required to maintain completed schemes. Livestock Mandis and agricultural technologies and practices adopted by the farmers are also likely to be sustained by the beneficiaries.

## Recommendations

Four main recommendations have emerged from this evaluation, the first three of which are addressed to the project and the fourth to USAID. The first three recommendations have implications for the project's work plan for 2012, assuming that the unutilized part of the budget will be used to extend the project for one year.

The first recommendation is to *intensify coverage and consolidate the menu* by means such as the following:

- (a) Organize as many as possible of the households that have been left out of COs in communities already reached by the project. This refers to communities in which a CO exists, but the demand exists for additional membership or another CO.
- (b) Increase women's mobilization by similar means and increase the resources allocated to relevant activities, particularly drinking water, poultry rearing, and homestead gardening.
- (c) Drop inappropriate and low-payoff activities such as training in basic literacy and numeracy, micro-catchment and water harvesting, plastic tunnels, and training in food processing.

The second recommendation is to *fine-tune approaches and enhance relevance, effectiveness, and impact* by considering the following measures:

- (a) Develop a more inclusive approach to community mobilization by removing the restriction on the number of members (15–25) in each CO.
- (b) Merge GCBT with other training activities to the extent that is desirable and feasible.
- (c) Develop a more effective response to livestock disease control revolving around para-veterinarians.
- (d) Develop standard reference documents (for example, a trainer's manual or training notes) for imparting training in crop-related activities.
- (e) Integrate appropriate IPM concepts in the pest management activity.
- (f) Develop synergy with PACCD, which has provisions for cold storage and infrastructure development, and the ASF project.

The third recommendation is to *develop an exit strategy* along the lines indicated below:

- (a) Identify COs that have already “matured” or received a certain amount of funding from the project.
- (b) Propose how the project will wind down its support to mature COs (increasing the community shares in cost, providing only technical assistance, etc.).
- (c) Negotiate with the PPAF and other well-resourced NGOs ways and means for linking them with the COs established by the project.

The fourth recommendation, aimed mainly at USAID, is to *extend and expand the project*, considering the following factors:

- (a) Extend the project for another phase of four-to-five years.
- (b) Include an adaptive research component to bring in dry-land technologies tested in similar environments (particularly, appropriate wheat varieties and low-water-requiring crops), work closely with farmers to solve their problems, and develop the capacity of collaborating Pakistani institutions and scientists.
- (c) Expand the project to another two-to-three districts of Balochistan in consultation with the government to promote replication as well as greater buy-in from the government.
- (d) From the early stages of the next phase, ensure the implementation of the exit strategy agreed with local partners and the fine-tuned approaches to activities indicated above.

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## ANNEX I: POVERTY IN BALOCHISTAN

**TABLE 20: INCIDENCE OF POVERTY ACROSS DISTRICTS OF BALOCHISTAN<sup>34</sup>**

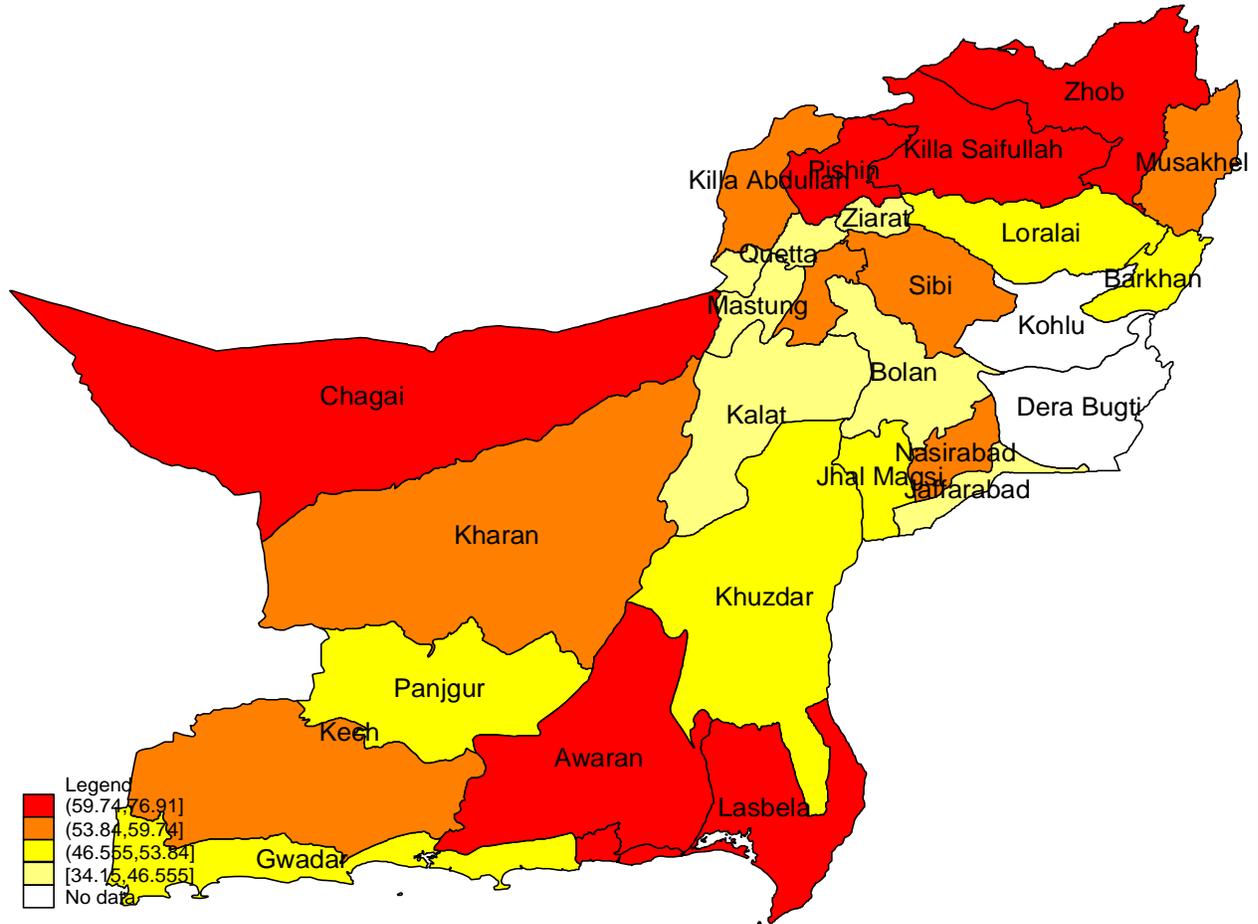
<i>Percentage of Population Below the Poverty Line, by Districts</i>				
Districts	Rank [1 = Highest Incidence] [24 = Lowest Incidence]	Region		
		Overall	Urban areas	Rural areas
Awaran	5	61.54	0	61.54
Barkhan	14	52.84	84.26	49.46
Bolan/Kachhi	19	45.56	67.8	42.41
Chaghi	1	76.91	83.68	75.78
Gwadar	18	47.55	50.14	44.67
Jaffarabad	20	44.14	50.51	42.71
Jhal Magsi	13	53.42	70.07	52.71
Kalat	22	41.89	62.94	38.55
Kech/Turbat	11	54.4	61.06	53.35
Kharan	10	55.52	59.03	55.28
Khuzdar	16	50.96	58.38	48.33
Lasbela	2	66.4	65.75	66.65
Loralai	15	52.1	45.91	52.81
Mastung	21	42.34	36.07	43.57
MausaKhel	12	54.26	0	54.26
Nasirabad	8	57.27	60.66	56.9
Panjgur	17	49.68	25.19	50.87
Pashin	4	62.36	73.17	61.87
Killa Abdullah	7	58.82	33.56	61.34
Killah Saifullah	6	60.66	37.52	61.98
Quetta	24	34.15	26.69	46.24
Sibi	9	55.81	49.04	58.16
Zhob	3	65.99	49.37	67.82
Ziarat	23	41.29	56.31	40.19

Notes: Two districts (Dera Bugti and Kohlu) were not enumerated (partly or fully) due to the law and order situation in the province. Zero in the “urban areas” column denotes these districts do not have urban areas.

<sup>34</sup>Haroon Jamal, “Income Poverty at District Level: An Application of Small Area Estimation Technique,” Research Report No. 70, Social Policy and Development Center (SPDC), 2007.

## ANNEX 2: POVERTY IN BALOCHISTAN

FIGURE 6: MAPPING POVERTY IN BALOCHISTAN<sup>35</sup>



<sup>35</sup>Haroon Jamal, "Income Poverty at District Level: An Application of Small Area Estimation Technique," Research Report No. 70, Social Policy and Development Center (SPDC), 2007.

## ANNEX 3: HUMAN DEVELOPMENT AND FOOD SECURITY

**FIGURE 7: HUMAN DEVELOPMENT AND FOOD SECURITY IN BALOCHISTAN<sup>36</sup>**

District		District HDI below Average HDI of Punjab	Extremely Food Insecure <sup>1</sup>
1.	Dera Bugti	Y*	Y
2.	Musakhel	Y	Y
3.	Sherani	Y*	Y*
4.	Jhal Magsi	Y	N
5.	Gwadar	Y	N
6.	Bolan	Y	Y
7.	Qilla Abdullah	Y	Y
8.	Sibi	Y	N
9.	Harnai	Y*	N
10.	Awaran	Y	Y
<b>11.</b>	<b>Killa Saifullah</b>	<b>Y</b>	<b>N</b>
12.	Khuzdar	Y	Y
<b>13.</b>	<b>Quetta<sup>2</sup></b>	<b>Y</b>	<b>N</b>
<b>14.</b>	<b>Zhob</b>	<b>Y</b>	<b>Y</b>
15.	Kharan	Y	Y
16.	Washuk	Y*	Y*
17.	Kohlu	Y*	Y
18.	Panjgur	Y	Y
19.	Barkhan	Y	Y
20.	Kalat	Y	Y
<b>21.</b>	<b>Loralai</b>	<b>Y</b>	<b>Y</b>
22.	Lasbela	Y	N
23.	Nasirabad	Y	N
24.	Jaffarabad	Y	N
25.	Chagai	Y	Y*
26.	Noshki	Y*	Y
<b>27.</b>	<b>Mastung</b>	<b>Y</b>	<b>Y</b>
28.	Kech	Y	Y
29.	Pishin	Y	N
30.	Ziarat	N	N
<b>Total</b>		<b>29</b>	<b>19</b>

Note: <sup>1</sup> Of the 11 districts that are not considered extremely food insecure, 8 are food insecure, and only Quetta, Nasirabad, and Jaffarabad are better off (borderline, but not food secure).

<sup>36</sup> The following country-wide assessments were consulted to construct this table: Haroon Jamal and Amir Jahan Khan, "Trends in Regional Human Development Indices," Research Report No. 73, Social Policy and Development Center (SPDC), Karachi, July 2007, and "Food Insecurity in Pakistan, 2009," prepared by the Sustainable Development Policy Institute, Swiss Agency for Development and Cooperation, and World Food Program.

## ANNEX 4: INDICATORS OF HUMAN DEVELOPMENT

### Indicators of Human Development: Balochistan and Pakistan Compared<sup>37</sup>

#### POPULATION THAT HAS EVER ATTENDED SCHOOL, 2010–11

	Male	Female	Both	Female/Male
<b>Pakistan</b>	71	47	60	0.66
<b>Balochistan</b>	61	20	42	0.33

#### PERCENTAGE DISTRIBUTION OF POPULATION THAT HAS COMPLETED PRIMARY LEVEL OR HIGHER, 2010–11

	Male	Female	Both	Female/Male
<b>Pakistan</b>	59	39	49	0.66
<b>Balochistan</b>	48	13	32	0.27

#### NET ENROLLMENT RATE (%) AT THE PRIMARY LEVEL (AGE 5–9), EXCLUDING KATCHI CLASS, 2010–11

	Male	Female	Both	Female/Male
<b>Pakistan</b>	60	53	56	0.88
<b>Balochistan</b>	56	35	47	0.63

#### PRIMARY LEVEL ENROLLMENTS IN GOVERNMENT SCHOOLS AS PERCENTAGE OF TOTAL PRIMARY ENROLMENT, 2010–11

	Male	Female	Both	Female/Male
<b>Pakistan</b>	69	68	68	0.99
<b>Balochistan</b>	95	95	95	1.00

<sup>37</sup> "Pakistan Social and Living Standards Measurement Survey (PSLM) 2008–09 & 2010–11," conducted by Federal Bureau of Statistics.

## ADULT LITERACY RATE, POPULATION 15 YEARS AND OLDER, 2010–11

	Male	Female	Both	Female/Male
Pakistan	67	42	55	0.63
Balochistan	56	15	37	0.27

## PERCENTAGE OF CHILDREN AGED 12–23 MONTHS THAT HAVE BEEN FULLY IMMUNIZED

	Male		Female		Both		Female/Male	
	A	B	A	B	A	B	A	B
<b>Pakistan</b>	54	82	52	79	53	81	0.96	0.96
<b>Balochistan</b>	22	55	23	56	22	56	1.05	1.02

A: based on record

B: based on recall and record. According to the PSLM, “Parents often do not have the children’s immunization/health cards with full information on vaccinations received. Immunization rates based only on the information given on immunization cards (record) may therefore underestimate coverage.”

## PRE-NATAL CONSULTATION (%), 2010–11

<b>Pakistan</b>	<b>64</b>
<b>Balochistan</b>	<b>44</b>

## PREGNANT WOMEN THAT HAVE RECEIVED TETANUS TOXOID INJECTION (%)

<b>Pakistan</b>	<b>69</b>
<b>Balochistan</b>	<b>31</b>

## MAIN SOURCE OF DRINKING WATER (%)

	Tap Water	Hand Pump	Motor Pump	Dug Well	Other
Pakistan	32	28	27	4	9
Balochistan	35	10	2	16	37

**PERCENTAGE DISTRIBUTION OF HOUSEHOLDS BY PERCEPTION OF THE ECONOMIC SITUATION OF THE HOUSEHOLDS COMPARED TO THE YEAR BEFORE THE SURVEY (% SAYING “WORSE” AND “MUCH WORSE”)**

	2008–09	2010–11
Pakistan	33	43
Balochistan	27	50

**PERCENTAGE DISTRIBUTION OF HOUSEHOLD SATISFACTION BY FACILITIES AND SERVICES**

		2008–09	2010–11
Basic Health Unit	Pakistan Rural	41.1	37.78
	Balochistan Rural	39.21	42.48
Family Planning	Pakistan Rural	13.77	10.54
	Balochistan Rural	5.52	7.81
School	Pakistan Rural	59.66	57.73
	Balochistan Rural	46	46.87
Veterinary Hospital	Pakistan Rural	21.39	20.9
	Balochistan Rural	13.21	14.65
Agricultural Extension	Pakistan Rural	14.93	13.7
	Balochistan Rural	13.92	10.17
Police	Pakistan Rural	9.78	9.72
	Balochistan Rural	8.62	12.82

## ANNEX 5: ACCESS TO FACILITIES

TABLE 21: PERCENTAGE OF VILLAGES MORE THAN 50 KM FROM A FACILITY<sup>38</sup>

	Pakistan	Balochistan
Hospital/Dispensary	5%	21%
Private Doctor (MBBS)	7%	34%
Midwife Facility	7%	28%
Fixed-Line Telephone	8%	35%
Diesel/Petrol Pump	6%	32%
Commercial Bank	12%	49%

<sup>38</sup> "Pakistan Mouza Census 2008" conducted by the Federal Bureau of Statistics.

## ANNEX 6: VALUE CHAIN STUDIES

**TABLE 22: VALUE CHAIN STUDIES CONDUCTED BY THE PROJECT<sup>39</sup>**

Value Chain	Result
<b>2007/2008</b>	
1. Tomatoes Mastung, Killa Saifullah to Quetta	Cost of marketing addressed
2. Tomatoes in Pakistan	Seasonality, price variation documented
3. Almond Market Chain Loralai to Akbari Market, Lahore	Processing improved, transport improvements
4. Apricots Killa Saifullah to Quetta	Packaging improved
5. Small Ruminants Killa Saifullah and Muslim Bagh Markets	Seasonality price relationships addressed, transport logistics improved
6. Carrots Killa Saifullah to Karachi and Quetta	Seasonality price variation documented
7. Cauliflower Loralai to DG Khan, Quetta, Karachi	Cost of production and marketing documented, Terminal market Karachi least return, highest cost
8. Watermelon Mastung to Quetta	Off-season crop gives best return, farmers advised
9. Okra Mastung, Quetta to Karach, Lahore, and Quetta	Seasonal advantages in each market differ, farmers advised
10. Potatoes in Quetta to Faisalabad, Islamabad, Karachi Lahore	Seasonality, price variation documented
11. Onions in Pakistan, Faisalabad, Karachi, Multan, Lahore, Islamabad, Quetta	Seasonality, price variation documented
12. Chilies (Dandi Cut) Killa Saifullah, Mastung and Loralai to 6 markets in Pakistan	Price variation and best season for each destination analyzed
13. Wool Quetta	Cost of production and market needs documented
14. Grapes Mastung to Karachi	Transport, handling improvements
15. Apples Loralai to Lahore	Packaging and transport deficiencies noted
16. Apricots Loralai to Lahore	Packaging and transport problems noted
17. Apricot Mastung to Lahore	Price and seasonal advantage
18. Wool Quetta to Lahore	Differential returns for different colored wools justify differentiating
19. Dried Apricots Loralai to Lahore	Two methods processing bring different returns
<b>2009/2010</b>	
20. Wool Quetta to Lahore, Multan	Improved prices from better packaging, grading, handling, staple length
21. Fruit and Vegetables Quetta to Karachi	Packaging improvements bring better prices
22. Livestock Loralai to Lahore	Seasonal price factors justify planning
23. Apples Balochistan to Dubai	Market potential observed, documented
24. Mutton Balochistan to Dubai	Butchering and meat cuts deficiencies noted, improvement planned
During these years many VC's were reviewed and improved	
<b>2011</b>	
Presentations at Conference in Lahore, February 2011	
<ul style="list-style-type: none"> <li>• Grapes: value chains in action (Saman)</li> <li>• Apples in Balochistan (Saeed)</li> </ul>	Many of these 18 presentation involved new Value Chain studies; others were further analysis and data collection from new value

<sup>39</sup> This list was compiled by Dr. Rob Erskine-Smith, marketing consultant, from US ABBA project records, October 25, 2011.

<ul style="list-style-type: none"> <li>• Balochistan onion value chains (Nafay)</li> <li>• Value chains and livelihoods in Balochistan (Saman)</li> <li>• Eid Livestock Mandis: taking the market to the people (Ahmed)</li> <li>• Value chains and Balochistan onion producers (Irfan)</li> <li>• Improving apple producers' livelihoods (Saeed)</li> <li>• Better livelihoods for Balochistan grape producers (Nafay)</li> <li>• Wool in Balochistan: a value chain approach (Asima)</li> <li>• Value chains in Balochistan: an overview (Saman)</li> <li>• Wool value chains (Asima)</li> <li>• Eid Livestock Mandis (Ahmed)</li> <li>• Using value chains to improve livelihoods in Balochistan (Saman)</li> <li>• Eid Livestock Mandis: innovative value chains in action (Ahmed)</li> <li>• Improving livelihoods of Balochistan onion producers (Irfan)</li> <li>• Advancing apple producers' livelihoods through value chains (Saeed)</li> <li>• Better livelihoods for Balochistan grape producers (Nafay)</li> <li>• Wool in Balochistan: successful value chain interventions (Asima)</li> </ul>	<p>chain studies and review of existing studies. Estimated new studies at least 10.</p>
<p>Total value chain studies (estimated): 34</p>	
<p>All papers are available and have been used to develop further remedial technologies</p>	

## ANNEX 7: MID-TERM EVALUATION CONCLUSIONS

### Relevance:

- The approach and activities are well suited to alleviating poverty in Balochistan.
- The design process adequately represented stakeholder and beneficiary interests.
- Key stakeholders and beneficiaries are actively involved in project implementation.
- The project works directly with ultimate beneficiaries to address their needs.

### Effectiveness:

- Project research has demonstrated the ability to meet productivity enhancement targets, but its capacity is spread too thin to disseminate results widely to 223 COs.
- The project has enhanced the skills of agricultural researchers at AZRC and ARI.

### Impact:

- The project has worked directly with 3,813 households (30,500 individuals) in a strategically important region of Pakistan, generating monetary impacts for 3,200 households to date. It has indirectly influenced an additional 2,800 households (53,000 individuals).
- It is difficult to engage women, and direct benefits to women are small (about \$6,000).

### Efficiency:

- Based on conservative estimates, the project has generated benefits in excess of costs.
- The project improved incomes by an average of \$850 per year for 3,200 households at an annual per household cost of about \$756.
- The project spent 83 percent of its resources in Pakistan, 36 percent on labor, and 39 percent on outputs.

### Sustainability:

- It is too early to tell whether the project's activities will ultimately be sustainable.
- Many of the COs are too immature to be sustainable without further project support.
- Sustainability of research capacity depends on circumstances beyond project control.

### Replication:

- Project activities and approach are applicable to NWFP and FATA.
- Limited human capacity may be a barrier to substantial expansion.

### Gender:

- The project has generated few direct monetary impacts for women (\$6,000). It has, however, generated substantial improvements in household income, which may benefit the women as members of the households.

- The project exceeded ambitious targets for engaging women as beneficiaries and staff.
- The project has empowered some WCOs and enhanced the capacity of female staff.

Reporting:

- The project has delivered all required reports on time.
- Improved quarterly reporting formats would better serve both FAO and USAID.
- The project branded all material in accordance with guidance from USAID.

Communication and Outreach:

- The project effectively promoted USAID's involvement in the project to beneficiaries.
- The project has not been effective at promoting its successes to a broad audience.
- The project's communications strategy does not address USAID's desires.

Coordination:

- The project has not coordinated well with counterparts outside of GoP and GoB.
- High turnover in provincial government has inhibited coordination.

## ANNEX 8: TECHNICAL SUPPORT AND INTERNATIONAL MISSIONS

**TABLE 23: TECHNICAL SUPPORT SERVICES AND INTERNATIONAL MISSIONS**

Pilot Phase		
1	Dr. Len Reynolds	Project Consultant, Livestock Management, 16 January to 3 May 2006
2	Gamini Keerthisinghe	Technical Officer, Lead Technical Unit AGPC, FAO RAP, Bangkok, August 2006
3	Mr. David Hitchcock	Senior Community Development and Marketing Officer FAO Bangkok (4–14 December 2006)
4	Mr. Hitchcock's second backstopping mission	Senior Community Development and Marketing Officer FAO Bangkok, 12 to 22 March 2007 and 11 to 21 June
5	Mr. Zhijun Chen	Water and Irrigation specialist
Current Phase		
1	Mr. Douglas Krieger	International M&E Consultant (1 <sup>st</sup> Mission), 2 November to 20 December 2009
2	Mr. David Kahan	Marketing Officer, March 2010
3	Mr. Douglas Krieger	International M&E Consultant (2 <sup>nd</sup> Mission), 20 April to 21 May 2010.
4	Mr. Rob Erskine Smith	International Marketing Consultant, August 2010
5	Mr. David Hitchcock	International Community Development Backstopping Mission, August 2010
6	Mr. Grant Vinning	International Marketing Consultant, November–December 2010
7	Mr. Subhash Das Gupta	Technical Officer–December 2010
8	Mr. Rob Erskine Smith	International Marketing Consultant, February 2011
9	Mr. Grant Vinning	International Marketing Consultant, March–April 2011
10	Mr. Grant Vinning	International Marketing Consultant, August 2011

## **ANNEX 9: EVALUATION STATEMENT OF WORK**

The evaluation Statement of Work is included in separate annex to this report.

## ANNEX 10: EVALUATION SCHEDULE

Locations, Activities and Deliverables	Dates
<b>Detailed SOW</b>	
ISB: Share internal draft of Approach Paper with MSI Technical Director	22 Sep
ISB: Submit draft Approach Paper to USAID for review and discussion	23 Sep
Balochistan: Reconnaissance visit by IMEC Evaluation Manager	26–29 Sep
ISB: Discuss draft Approach Paper with USAID	30 Sep
ISB: Finalize Approach Paper	Oct 1
<b>Quantitative Impact Assessment</b>	
ISB: USAID shares templates for Specific Tables with IMEC <sup>40</sup>	Sep 26
ISB: Final discussion between IMEC and Impact Assessment Team Leader	Sep 26
Balochistan: Meeting between project and Impact Assessment Team	Sep 28
Balochistan: Survey	Sep 29–Oct 12
Lahore: Data entry and cleaning	Oct 10–17
Lahore: Asif Khan to submit Specific Tables to IMEC	Oct 17
ISB: Review and revise Specific Tables	Oct 17–18
ISB: Submit Specific Tables to USAID	Oct 18
Lahore: Additional tabulation, analysis and report writing	Oct 18–23
<b>Draft Impact Assessment Report</b>	
Lahore: Survey Team Leader submits Draft Impact Assessment Report to IMEC	Oct 23
ISB: Review/revision by IMEC	
US: Review/revision by MSI Technical Director	
ISB: Final review/revision	
ISB: Submit to USAID	Oct 31
<b>Evaluation Orientation Workshop</b>	
ISB: IMEC shares background documents/handouts with the project	Oct 4
ISB: Evaluation Orientation Workshop	Oct 8
<b>Independent Evaluation</b>	
Home base: Review of documents; meetings with stakeholders in Islamabad	Oct 5–7
ISB: Team Planning Meeting	Oct 10–11
Balochistan: Meetings in Quetta	Oct 12–14
Balochistan: Field work	Oct 15–22
ISB: Draft Evaluation Report and Activity Profiles	Oct 24–Nov 8
ISB: Internal review of Draft Evaluation Report	Nov 8–15
ISB: Submission of Draft Evaluation Report to USAID	Nov 16

<sup>40</sup> This refers to an email from USAID to IMEC dated September 22 saying that USAID will provide specific tables that need to be completed and submitted to USAID by October 18.

## ANNEX II: STAKEHOLDER MEETINGS

Date	Name of officials	Designation
<b>Meetings with Government Officials in Quetta</b>		
Oct. 13	Mr. Aslam Shakir	Secretary Livestock and Dairy Department
	Dr Nisar Ahmed	Director Planning Livestock and Dairy Development Department
	Dr. Tariq Masood	Director Research Livestock and Dairy Development Department
Oct. 25	Saleem Sadiq	Secretary Agriculture and Cooperative Govt. of Balochistan
	Yar Muhammad Pandrani	Director General Extension Department of Agriculture, Govt. of Balochistan
	Masood Ahmed Baloch	Director Marketing and Economics, Govt. of Balochistan
	Niaz Mohammad Nasir	Director of Agriculture Research, Agriculture Research Institute, Quetta
	Mohammad Afzal	Director General Arid Zone Research Institute, Quetta
	Mr. Zafarullah Baloch	Secretary Transport, (Former Secretary Livestock and Dairy Development Department)
	Mr. Abdul Salam Baloch	Chairman Chief Minister Inspection Team, (Former Secretary Agriculture and DG AZRC)
	Mr. Abdul Jalil Bazai	Registrar Cooperative Societies
	Mr. Masood Ahmed Baloch	Director Agriculture Economics and Marketing
Oct. 20	Masood Ahmed Baloch	Director Marketing and Economics, Government of Balochistan
Oct. 14	Mr. Mohammad Afzal	Director General Arid Zone Research Center
Oct. 20	Saleem Sadiq	Secretary Agriculture and Cooperative Government of Balochistan
	Yar Muhammad Pandrani	Director General Extension and Department of Agriculture Government of Balochistan
	Niaz Muhammad Nasir	Director of Agriculture Research, Agriculture Research Institute
<b>Meetings with Project Staff/Marketing Initiative Group</b>		
Oct. 13	Ms. Sanam Bakhtawar	Marketing Officer
	Ms. Asma	Marketing Associate
	Mr. Masood Baloch	Director Agriculture Marketing
	Mr. Abdul Jilal Bazai	Registrar Cooperatives Development
Oct. 13	David Doolan	Project Manager
	Ahmed Essa	Monitoring and Evaluation Expert
<b>Meeting with WESS Staff</b>		
Oct. 14	Mr. Asghar Ali	Project Manager
	Ms. Kausar Parveen	Monitoring and Evaluation Officer
<b>Meetings with Government/NGOs/Stakeholders</b>		
Oct. 20	Muhammad Afzal	Director General Arid Zone Research Institute
<b>Meetings with MCO (Lal Bagh)</b>		
Oct. 19	Mahmood Khan	

	Abdul Zakir	
	Hamza Khan	
	Gul Muhammad	
	Samad Khan	
	Noor Ullah	
	Qadar Khan	
	Rab Nawaz	
	Sarwar Khan	
	Mullah Buksh	
<b>Debriefing Meeting of FAO &amp; USAID</b>		
Oct. 26	Ghani Khan Marwat	AOTR
Oct. 26	David Doolan	Project Manager
	Ahmed J. Essa	Monitoring & Evaluation Expert
	Asad Butt	Program Officer
	Tajammul Hussain	Program Officer
	Waseem Farooq	Program Officer
	Hanna Ejaaz	Human Resource Officer
	Hakeem Shah	National Expert Crop
	Nasir Iqbal	NE Community Development
	Asima Gulistan	Team Leader
	Zabeeh Ahmad	Team Leader
<b>Livestock Farmer Group Meeting, Killa Saifullah</b>		
Oct. 16	Syed Atta Mohammad	Member
	Malak Paio	Member
	Abdul Qayoom	Member
	Muhammad Nawaz	Member
	Basheer Ahmed	Member
	Haji Amir	Chairman
	Ehsanullah	Treasurer
	Haji Anwarudin	Member
	Juma Khan	Member
	Ahmed J. Essa	FAO
	Hakeem Shah	FAO
	Nasir Iqbal	FAO
	Khalid Ahmad	CDMF-FAO
	Ehsanullah	CDMD-FAO
<b>District Coordination Meeting, Loralai</b>		
Oct. 19	Kafeel Ahmed	D.D.O Agriculture Extension Duki
	Humayoon Khan	Veterinary Officer, Small Ruminant Production
	Mula Dad	Research Affair Agriculture
	M. Saleem	Agriculture Extension Loralai
	Atta Muhammad	WESS—AFO
	Mohammad Asghar	Regional Business Coordinator SMEDA
	Kaleem Ullah	Regional Manager RAHA UNDP
	Faqir Muhammad	PCA RAHA UNDP
	Muhammad Ashraf Khan	District Project Officer MSS Loralai
	Abid Saeed	National Expert FAO
	Ahmed J. Essa	FAO
	Lal Muhammad	CDMF FAO
	Dr. Zahid Hafeez	Director Agriculture Research
	Nasir Iqbal	NECD FAO
	Murtaza Jomezai	CDMF FAO

## ANNEX 12: MEETINGS WITH COMMUNITY ORGANIZATION MEMBERS

Date	Name of MCO/WCO	Number of Households	
		Present in meetings	Members of MCO/WCO
Killa Saifullah District			
Oct. 15	1. MCO Yaqoob Karez	11	20
Oct. 15	2. MCO Kach Malazai	12	18
Oct. 15	3. MCO Daiba Saeeda	17	25
Oct. 15	4. WCO Daiba Saeeda	13	15
Oct. 15	5. MCO Kakara	11	18
Oct. 15	6. WCO Kakara	12	15
Oct. 16	7. MCO Kharkaran	5	16
Oct. 16	8. WCO Kharkaran	15	16
Oct. 16	9. MCO Killi Haji Ameer	14	17
Oct. 16	10. MCO Hamaya	10	24
Oct. 16	11. WCO Hamaya	12	15
Loralai District			
Oct. 17	12. MCO Cheenali	22	45
Oct. 17	13. WCO Cheenali	22	45
Oct. 17	14. MCO Murtat Kalan	16	21
Oct. 17	15. WCO Kanobee Nasraan	15	16
Oct. 18	16. MCO Shahbozai	22	22
Oct. 18	17. WCO Shahbozai	10	22
Oct. 18	18. MCO Mara Khurd	23	27
Oct. 18	19. WCO Mara Khurd	16	20
Oct. 18	20. MCO Mara Tangi	7	15
Oct. 18	21. WCO Mara Tangi	18	22
Oct. 19	22. MCO LalBaig Tehsil Dukki	10	26
<b>Total</b>		<b>313</b>	<b>480</b>
<b>Men</b>		<b>180</b>	<b>294</b>
<b>Women</b>		<b>133</b>	<b>186</b>
Quetta and Mastung Districts			
Oct. 20	Meeting with representatives of 9 WCOs from Quetta and Mastung Districts		

## ANNEX 13:ACTIVITY PROFILES

### Karez Rehabilitation

Karez is an indigenous method of irrigation wherein groundwater is tapped by a gentle sloping tunnel that carries water from below the water table to the ground surface by gravity. No mechanical pump or lift is used. It is managed by communities, and its life span, length, discharge, water distribution, and management are important aspects of karez irrigation. The karez systems have been in use in Balochistan since ages. The area irrigated by a karez varies from 5 acres to 40 acres, while the average area is 7.81 acres.

The average rainfall in most parts of Balochistan is less than 10 inches. The system received a major setback due to the continuous dry spell from 1997 to 2002 when most karez systems were dried up. This led to the collapse of the agriculture sector, and particularly horticulture, which was dependent upon the karez system. With the drought over in 2003, the water from the snow and rains ensured the recharge of the water table. This led to a dire need (and potential) for these dried-up karez systems to be revived again, especially in areas where tube wells did not exist. Rehabilitation of the karez systems meant renovating the collapsed walls of the wells, as well as extending and lining the water channels—all of which required investment that the farmers were unable to afford.

US ABBA has completed 16 schemes while work on five schemes is currently ongoing, which, according to the project, will benefit 401 households. The average cost per schemes is PKR 364,750, with 50 percent of the cost is shared by the communities. Based on the information gathered during the Quantitative Impact Assessment Survey 2011, the cropping intensity increased from 122 percent in the 2010 baseline report to 135 percent.<sup>41</sup> With additional water supplies, the farmer's preference is to first concentrate on increasing cropped area, followed by increase in yields.

Beneficiary farmers were observed to opt for higher fruit cultivation, as the area under orchards increased from 22 percent in 2010 to 34 percent in 2011. In comparison, for non-beneficiaries, orchards accounted for only 18 percent. The beneficiaries also achieved higher yields, especially for vegetables and orchards, ranging from 10 percent to 136 percent.

Overall returns calculated using 2011 prices increased from PKR 21,526 to PKR 40,602, an increase of 89 percent. The net returns on wheat crop went down by 35 percent as the farmers preferred growing fruits and vegetables with the extra water from the rehabilitated karez systems. However, the returns on tomatoes grew exponentially by 327 percent, followed by apples (63 percent) and apricots (40 percent).

During a visit to the MCO at Yaqub Karez, Tehsil Muslim Bagh, Killa Saifullah District, the evaluation team was informed that the source of irrigation is karez. Currently, there are 10,000 fruit trees in the community. Since 2008, the water table in the area has improved due to rains, but the karez was damaged and there was no water storage reservoir. The community requested that the project assist in the rehabilitation of karez on a cost-sharing basis. The total estimated rehabilitation cost was PKR 325,000, with the community contributing 50 percent. With the karez now rehabilitated, the fruit trees are once again irrigated, with wastage of water at a minimum. In addition to the fruit farming, potato and maize crops are also cultivated due to efficient use of available water.

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<sup>41</sup>Cropping intensity is a measure of annually cropped area in a season (kharif and Rabi) as percent of cultivated area with counting of perennial crops (orchards) twice. For purposes of this report, the cultivated area is not known and hence, the crop proportion is calculated using total cropped area in place of cultivated area; the presence of a water storage reservoir with a rehabilitated karez was associated with even further increases.

According to one beneficiary, the sale of his orchard was between PKR 5,000 to PKR 20,000 in 2010. During 2011, the same orchard was sold at PKR 150,000. Similarly, another community member recently sold his orchard for PKR 250,000 as against PKR 200,000 in 2010. The community members were unanimous in recognizing their increased income to the rehabilitated karez system.

### **Land Leveling**

Water is one of the more precious commodities across Balochistan. The local farmers have long realized the importance of water for irrigation, although some of the methods used for its economical and efficient utilization are outdated. To better manage water resources, the US ABBA project introduced simple and cost-effective interventions including rehabilitation of karez systems, land leveling, micro-catchment and water harvesting, pipelines, and water storage reservoirs. Leveling of land creates new arable land or brings land back into production that has not been in use. Effective land leveling reduces the work involved in crop establishment and crop management and increases crop yield and quality.

However, the small farmers in the project area lacked initial capital for land leveling, which is now partly financed by the project (50 percent of the cost). The project has successfully completed 88 land-leveling schemes, covering an average of 25 acres per scheme. The average cost is PKR 300,350 per scheme, of which 50 percent of the cost is borne by the communities.

In Killa Saifullah, the water table in certain areas is at a lower depth (approximately 500 feet) compared with over 800 feet in the nearby districts. Once the land was leveled, many farmers installed tube wells to meet water needs and raise high-value crops. The flat lands with accumulated alluvium from adjoining hills added to the fertility of soils with little need for chemical fertilizers. The leveled land is also frequently irrigated by diverting floodwater, for which permanent structures are built on the streams.

According to the Quantitative Impact Assessment Survey 2011, the average returns from leveled land are PKR 20,111 from a cropped acre. The project has supported land leveling of 2,036 acres in various districts, of which 70 percent is planted with wheat with an average yield of 687 kg per acre. Almond, a low-water-requirement plant, is planted over 3 percent of the leveled land. These plants are not at a fruiting stage, but the farmers were expecting a yield of 560 kg per acre on account of good quality plants supplied by the project. Seeing the benefits of crop production from once-neglected lands, other farmers have also started land leveling in the area.

### **Distribution of Wheat Seed Variety**

The use of low-quality seed and poorly selected seed varieties, coupled with poor production practices, has over the years led to reduced agricultural (especially wheat) yields and productivity across Balochistan. Prior to the project interventions, most farmers were growing local seed that was not only susceptible to diseases and pests but was also low-yielding. In addition, the application of fertilizer made the wheat crops grow taller, which in turn made them prone to water logging during rains.

The project highlighted the importance of seed quality as a key factor for increasing productivity and initiated a program to distribute quality wheat seeds to its farmers. These farmers now understand the need to use quality seed that is disease resistant and free from weeds as a prerequisite for obtaining high yields.

The project has trained farmers in seed production techniques while at the same time establishing village-based seed enterprise development. It facilitated the building of linkages from seed producers to local traders.

The project has provided improved wheat seed for 13,514 acres at 50 percent subsidized cost. The project also laid out demonstration plots for wheat and barley to demonstrate the effects of improved seeds and crop husbandry techniques. The project procures wheat seed from Punjab, generally of 'Bhakkar' variety.

The supply of improved seeds has led to increased yields and higher production. According to the Quantitative Impact Assessment Survey 2011, the yield of wheat in the project area increased to 822 kg/acre compared with an average yield of 651 kg/acre for the traditional seed (a 25 percent increase).

Similarly, the yield of peas planted with project seed was much higher over the traditional seed (almost double), which can be attributed to poor quality of local seeds. The interventions made by the project have led to increased employment generation. The increased employment has been in farm-related activities, and particularly the bringing in of new area under crops on leveled lands and harvesting/picking of crops/fruits. The increased generation of employment is 61,600 jobs: 64 percent in leveled lands and 22 percent due to planting of improved wheat seed.

The evaluation team found that the beneficiary farmers were now eager to have good quality wheat seed which was otherwise not available Balochistan. With the introduction of Bhakkar variety, some farmers with better resources and enough land have started growing this seed variety to sell to other farmers. These seeds are certified by the seed certification officer based at Loralai. Also, the seed is graded to remove weed seed and the grader was provided to two farmers at Loralai and Duki by the Federal Seed Certification Department. The 50 kg seed pack is sold at PKR 2,300. This is a major breakthrough in the supply of pure wheat seed in the area. Previously the farmers were procuring the seed from Punjab and Quetta and were unsure of its quality. One of the farmers at Duki reported to have sold certified wheat seed to growers amounting to PKR 1.20 million.

### **Homestead Gardening**

With Balochistan having the highest incidence of poverty among the four provinces of Pakistan, malnutrition, especially among women and children, remains a serious concern. To overcome this problem, the project has introduced homestead gardening for the women community organizations. Homestead gardening is the practice of using small plots of land on the homestead to grow food (mainly vegetables), which plays an important role in reducing food insecurity and malnutrition for resource-poor rural households. Besides providing food for their family, this activity can act as source of supplementary income. The potential for homestead as productive asset is immense among poor rural households.

The project has promoted homestead gardening as an inexpensive source of meeting both calorific and micro-nutrient requirements of the household, and it is considered as an attractive and relevant activity for women's community organization. It has led to an immediate impact on the household nutrition and protection from diseases, as well as to the saving of time and money for women. The project has organized 17 kitchen garden training sessions that were attended by 211 women from different WCOs. It also undertook 34 training programs for its WCO and MCO members on linking market information to production decisions while distributing seed of crops according to need to 29 WCOs on a cost-sharing basis.

In meetings with the WCOs the evaluation team was informed that, through this activity, their families now have a regular supply of fresh vegetables. In addition to the health benefits, the activity has also resulted in ample household savings. About 85 percent of the active WCO members now plant their own vegetable gardens. Based on average consumption and local prices, a household saves at least PKR 13,000 (USD 149) annually if it obtains its vegetables and fruit from a kitchen garden. The WCOs reported that this activity has also enhanced their influence in household decision-making.

## ANNEX 14: PROJECT TARGETS AND ACHIEVEMENTS

TABLE 24: PROJECT TARGETS AND ACHIEVEMENTS, 2006–2011

Activity No.	Activities As Described in the Present Phase	Pilot Phase		Present Phase		Both Phases	
		Target	Achieved	Target	Achieved	Target	Achieved (30 Sep 11)
<b>Objective 1: Capacity of poor men and women to raise incomes through better organization increased</b>							
Outcome 1.1: Representation of poor men and women in project-assisted community organizations increased							
1.1.3.2	Form new COs (with need assessment, VDP, VAP)	250	249	250	312	500	561
	Men's COs		153		184		337
	Women's COs		96		128		224
1.1.3.3	Conduct baseline survey in all 5 project operational districts	1	1	1	1	2	2
1.1.8.2	Conduct monthly calendar meetings with all COs (meetings/month)	9,000	5,329	10,000	8,625	23,400	13,954
1.1.8.7	Form CO clusters	0	0	3	1	5	1
1.1.8.10	Community organization exposure visit	0	0	1	1	1	1
Outcome 1.2: Capacity of project-assisted community organizations to identify and address members' needs increased							
1.1.5.1	Conduct community management skills development training in 167 COs	250	230	200	190	544	420
1.1.5.2	Conduct group capacity building training in 168 COs	250	50	68	39	560	89
1.1.5.3	Conduct leadership management skills training in 148 COs	170	112	110	96	483	208
Outcome 1.3: Capacities of partners improved							
1.1.8.3	Conduct meeting/month/district with government or NGO partners	300	241	350	306	840	547
Outcome 1.4: Access to water for household use improved							
2.1.7.3	Design construction and commissioning of drinking water schemes	12	3	15	10	32	13
2.1.6.3	Training of farmers in improved irrigation practices	0	0	35	25	50	25
2.1.4.2	Transmission losses reduced due to tank construction, piping, and channel lining, etc.	18	20	50	43	68	63

Activity No.	Activities	Pilot Phase		Present Phase		Both Phases	
	As Described in the Present Phase	Target	Achieved	Target	Achieved	Target	Achieved
							(30 Sep 11)
2.1.4.3	Training of farmers in on farm water use efficiency	6	8	30	24	56	32
2.1.6.1	On-farm demonstration of improved and high-efficiency irrigation systems	12	5	40	37	72	42
<b>Objective 2: Crop productivity increased</b>							
Outcome 2.1: Crop production increased							
2.2.1.1	Curriculum development on farmer own seed production	0	0	0	0	1	0
2.2.1.2	Curriculum development on fruit tree nursery raising	0	0	0	0	1	0
2.2.1.3	Curriculum development on low-water-requirement orchard production systems	0	0	0	0	1	0
2.2.1.4	Curriculum development on market vegetable production	0	0	0	0	1	0
2.2.5.1	Farmers trained in seed production techniques	12	2	474	901	1,512	903
2.2.5.2	Village-based seed enterprise development established	0	0	5	2	30	2
2.2.5.3	Linkages established from seed producers to local traders	0	0	5	3	10	3
2.2.6.3	Distribute required quantity of improved varieties seed in COs on cost-share basis on the basis of need assessment	250	172	400	538	650	710
2.2.6.4	Assist COs in accessing improved technologies for increasing productivity (e.g., fertilizer, agrochemicals)	9	4	30	15	309	19
Outcome 2.2: Cultivation of high-value crops increased							
2.2.6.1	Establish 163 plots of local seed varieties for grow-out assessment	0	0	163	122	300	122
2.2.6.2	Expand demonstration program in collaboration with Agriculture Extension	0	0	163	121	200	121
2.2.7.1	Assist farmers in growing fruit plant nurseries on cost sharing	6	9	10	6	24	15

Activity No.	Activities As Described in the Present Phase	Pilot Phase		Present Phase		Both Phases	
		Target	Achieved	Target	Achieved	Target	Achieved
							(30 Sep 11)
2.2.7.2	Conduct 18 trainings in fruit orchard management program involving 20 farmers in each training	0	0	15	10	18	10
2.2.7.5	Distribute plants for establishing fruit orchards on cost-share basis	20,000	25,385	300,000	265,023	320,000	290,408
2.2.8.1	Conduct trainings in kitchen gardening with WCOs involving 375 women	60	144	200	211	260	355
2.2.8.2	Training program for WCOs and MCOs on linking market information to production decisions	0	0	50	34	50	34
2.2.8.3	Distribute seed of crops according to need for 30 WCOs on cost sharing	0	0	30	29	30	29
	(see 1.2.4.8)						
2.2.8.4	Assistance to 30 COs (male and female) on targeted vegetable production	0	0	30	211	100	211
2.2.8.5	Conduct trainings in fruit and vegetable processing with WCOs involving 3000 women	50	41	200	137	250	178
<b>Outcome 2.3: Area of irrigated land increased</b>							
2.1.1.3	Curriculum development on farm water use efficiency	0	0	1	0	1	0
2.1.3.1	Khuskhaba land improved, land leveling and construction of dykes (Hectares)	1,000	853	11,00	1,087	2,500	1,940
2.1.3.2	Sailaba land improvement, construction of improved diversion structures	12	1	5	2	42	3
2.1.4.1	Karez systems rehabilitated	36	23	18	14	56	37
2.1.6.2	Training of trainers in high-efficiency irrigation systems	0	0	5	1	15	1
<b>Outcome 2.4: Area of land under water-harvesting technologies increased</b>							
2.1.1.1	Curriculum development on micro-catchment water harvesting (MCWH)	0	0	1	1	1	1

Activity No.	Activities As Described in the Present Phase	Pilot Phase		Present Phase		Both Phases	
		Target	Achieved	Target	Achieved	Target	Achieved (30 Sep 11)
2.1.1.2	Curriculum development on high-efficiency irrigation systems	0	0	1	0	2	0
2.1.5.2	Demonstration of MCWH for low-water-requiring fruit crops	6	2	10	4	46	6
2.1.5.3	Training of trainers in MCWH	0	0	5	4	15	4
2.1.5.4	Training of farmers in MCWH	6	2	5	4	56	6
<b>Objective 3: Livestock productivity increased</b>							
Outcome 3.1: Livestock weight increased							
2.3.1.1	Establish stall feeding programs in WCOs	75	59	50	49	125	108
2.3.1.2	Develop herd recording system in 115 COs	0	0	115	0	150	0
2.3.1.4	Number of COs receiving supplemental animal feed on cost-share basis	120	54	100	55	453	109
Outcome 3.2: Animal mortality reduced							
2.3.1.3	Train at least 60 men and women in improved breeding and culling strategies for their flocks	50	48	0	0	110	48
2.3.2.7	Conduct 42 trainings of men and women in marketing skills involving at least 420 farmers	0	0	42	0	60	0
2.3.3.1	Develop materials for training community animal health workers	0	0	3	4	3	4
2.3.3.2	Conduct CAHW training at least 77 farmers	6	0	77	77	206	77
2.3.3.3	Number of farmers trained in vaccinating and deworming animals (disaggregated by sex)	0	0	1000	905	1600	905
2.3.3.4	Number of farmers trained in dipping and drenching to control external parasites on animals	50	48	500	80	2000	128
2.3.3.5	Number of animals treated by vaccination or deworming	10,000	7,501	10,900	10,294	20,900	17,795
2.3.3.6	Number of animals treated by dipping or drenching	0	0	5,000	2,685	12,500	2,685
Outcome 3.3: New livestock activities established							

Activity No.	Activities As Described in the Present Phase	Pilot Phase		Present Phase		Both Phases	
		Target	Achieved	Target	Achieved	Target	Achieved (30 Sep 11)
2.3.2.1	Develop appropriate technology egg incubator and brooder	1	1	1	1	2	2
2.3.2.2	Establish demonstrations of appropriate technology egg incubator/brooder in 105 women communities	30	2	25	5	135	7
2.3.2.3	Train at least 94 COs involving at least 1128 men and women in rural poultry production and use of appropriate technology egg incubator/brooder	30	2	55	26	130	28
2.3.2.4	Conduct a feasibility study for extending poultry-rearing activity to women	0	0	1	0	1	0
2.3.2.5	Complete a livestock marketing study that includes recommendations (see 1.2.5.4)	0	0	1	In draft	1	0
2.3.2.6	Organize local livestock marketing events in the five districts (see 1.2.5.5)	6	6	15	7	26	13
2.3.2.9	Number of WCOs receiving poultry on cost-share basis	55	15	40	28	168	43
<b>Objective 4: Farmers' capacity to effectively engage in markets increased</b>							
Outcome 4.1: Market information/knowledge improved							
1.2.3.1	Create 20 product profiles—commodity price data compiled and collated	8	8	10	6	38	14
1.2.4.2	Escorted intra- and inter-provincial market visits/districts	9	7	45	23	69	30
1.2.4.3	Community/individual marketing action plans developed and facilitated	250	249	500	500	750	749
1.2.5.2	Appropriate technology packages identified			6	8	6	8
1.2.5.3	Trial shipments undertaken	0	0	10	6	18	6
1.2.5.4	Complete a livestock marketing study that includes recommendations			1	In draft	1	0

Activity No.	Activities As Described in the Present Phase	Pilot Phase		Present Phase		Both Phases	
		Target	Achieved	Target	Achieved	Target	Achieved (30 Sep 11)
1.2.5.5	Organize at least 20 local livestock marketing events in the five districts	9	9	15	7	29	16
Outcome 4.2: Marketing opportunities increased							
1.2.4.4	Business Development Service document developed	0	0	1	1	1	1
1.2.4.5	Business Development Service Organization developed	0	0	0	0	1	0
1.2.5.1	Suitable supply/value chain partners identified			6	6	6	6
Outcome 4.3: Marketing skills improved							
1.2.4.1	Market skills training for community activists (number of trainings)	0	0	40	33	60	33
1.2.4.6	Training in post-harvest handling of fruit and vegetables			30	30	5	30
1.2.4.7	Training of trainers on herbs	0	0	1	1	1	1
1.2.4.8	Training in herbs for community organization	0	0	30	29	30	29
1.2.4.10	Number of individual trained in livestock marketing skills			10	6	10	6
1.2.4.11	Training in crop marketing skills			10	10	10	10
1.2.4.12	Floriculture training of CDMFs (TOT)	0	0	1	1	1	1
<b>Objective 5. Prospects for sustainability of project results increased</b>							
Outcome 5.1: Project results communicated effectively							
3.1.1.3	Project communication strategy prepared			1	1		
3.1.1.4	Project public relations strategy prepared			1	1		
3.1.2.1	Annual work plan prepared			3	3		
3.1.2.2	Weekly project implementation reports prepared by all CDMFs against assigned targets and updated on the MIS			144	144		
3.1.2.3	Monthly reports compiled for FAO/R			15	9		
3.1.2.4	Quarterly reports prepared for USAID			12	11		

Activity No.	Activities As Described in the Present Phase	Pilot Phase		Present Phase		Both Phases	
		Target	Achieved	Target	Achieved	Target	Achieved (30 Sep 11)
3.1.2.5	Project semiannual reports prepared for FAO			6	4		
3.1.2.6	Project annual report prepared for GoP			3	2		
3.1.2.7	Briefing reports prepared for Steering Committee			3	2		
3.1.2.8	Project terminal report			1	0		
3.1.2.9	Weekly reports compiled for USAID			120	103		
3.1.3.1	Technical field notes on specific topics updated annually			5	0		
3.1.3.2	Project success stories documented and disseminated			18	47		
3.1.3.3	Project discussion papers for in-depth analysis of key project findings			1	0		
3.1.3.4	Development of project brochures and advocacy material			6	21		
3.1.3.5	Preparation of print articles for local distribution			36	120		
3.1.3.6	Disseminate project success stories in local languages			12	0		
3.1.3.7	Hold radio and TV talks on the objective and successes of the project			12	5		
3.1.3.8	Preparation of electronic media items of dissemination (e.g. web material, photo galleries)			6	3		
3.1.3.9	Organize project support for international days (e.g., World Food Day, UN Day, Women's Day, World Water Day)			5	16		
3.1.3.10	Liaise with national/international electronic and print media for coverage of project activities			8	45		
<b>Outcome 5.2: Partnerships with external parties established</b>							
3.2.1.1	Develop list of organizations active in project sphere (geographical and technical)			1	1		

Activity No.	Activities As Described in the Present Phase	Pilot Phase		Present Phase		Both Phases	
		Target	Achieved	Target	Achieved	Target	Achieved (30 Sep 11)
3.2.1.2	Preliminary contact to identify areas of synergy and collaboration			20	24		
3.2.1.3	Develop short list of suitable partnerships			15	12		
3.2.2.1	Exploratory meetings with suitable partners			15	89		
3.2.2.2	Scoping of opportunities for collaboration			10	17		
3.2.2.3	Definition of formal/informal relationships			10	3		
3.2.2.5	Establishment of Steering Committee membership			1	1		
3.2.2.6	Identify potential donors for expansion of the project area			3	1		
3.2.2.7	Meetings with donors, follow-up on the meetings			as needed	13		
3.2.2.8	Meetings with MINFA, P&D, and line departments Balochistan to seek support for the project in terms of donor funding			as needed	124		
3.2.2.9	MOUs/LOAs signed with the external sources for supporting project activities			as needed	5		
3.2.2.10	Linkage building with the UN Agencies, national NGOs and civil society organizations			as needed	179		

## ANNEX 15: PROJECT BENEFICIARIES

TABLE 25: PROJECT BENEFICIARIES BY ACTIVITY

Sector/Activity	Activity Entails: Distribution	Beneficiaries		Training Relevant to Sector	Beneficiaries
		Direct	Indirect		Direct
<b>Community Mobilization</b>					
Community mobilization—Men		6,851		Community Management Skill Training	4,799 M 3,543 F
Community mobilization—Women		4,846		Leadership Management Skill Training	735 M 469 F
				Group Capacity Building Training	3,557 M 2,385 F
<b>Water</b>					
Drinking Water (# of Schemes)	10	216 F HH		Basic Literacy/Numeracy Training	167 F
Karez Rehabilitation (# of Schemes)	21	401 M HH		<b>Water</b>	
Land Leveling (# of Schemes)	177	2,059 M HH		Water Resource Management	344 M
MCWH (# of Schemes)	4	85 M HH	1,150	Improve irrigation practices	390 M
Pipe Lining (# of Schemes)	17	274 M HH			
Water Storage Reservoir (# of Schemes)	11	125 M HH			
<b>Crops</b>					
Cereal Seed (wheat, Alfalfa, Peas) KGs	678,147	2,645 M HH	3,390 M HH	Wheat Growing/Sowing	368 M
Fruit Plant Trees (# of Plants)	244,168	1,414 M HH	586 M HH	Fruit Nursery Management	199 M
Demo Plots*	122	122 M HH	2,196	Orchard Layout and Planting	669 M
Power and Knapsack Sprayers	12	216 M HH		Integrated Pest Management	262 M
Plastic Tunnel*	6	72 M HH	800	Seed Cleaning Machine Training	250 M
Silos	12	12 M HH		Crop Seed production	163 M
				Orchard Management	669 M
				Homestead Gardening	3,583 F
				FFS Training	
				Food Processing	1,498 F
<b>Livestock</b>					
Feed Distribution (KG)	2,627	2,536 M HH		<b>Livestock</b>	
Poultry Birds Distribution (# of Poultry)	3,969	616 F HH		Poultry raising and Management Training	1314 F
Community-Based Animal Health Workers		72		Demonstration on urea treatment of wheat straw	125 M
Incubators*	4	4 F HH		Community-based animal health workers	73 M
				Demonstration training on Egg incubator Technology	34 F

Sector/Activity	Activity Entails: Distribution	Beneficiaries		Training Relevant to Sector	Beneficiaries
		Direct	Indirect		Direct
Animal Vaccination		186 M 398 F		FFS Training	
				Livestock Shows (# of Shows)	7
<b>Marketing</b>				<b>Marketing</b>	
Value Chain Analysis*	8	50 M		Basic Marketing Skill Development	289 F 85 M
Marketing Development missions*	6	26 M		Wool Shearing and grading	868 F
Exposure Visits*	6	29 F 23 M		Herbs	293 F 262 M
				Post-Harvest Management	1550 M
				Market Skill Development & Value Chain Training	25 M 10 F
				TOT on Floriculture	45

\*Demonstration

## ANNEX 16: PROJECT COMMUNICATIONS

FIGURE 8: PROJECT COMMUNICATION ACTIVITY SHEET

Activity/ Project (reference No.)	Activity name	Number of activities	Status	
			Comp leted	In progress
3.1.1.3	Communications strategy	1	1	
3.1.1.4	Public relations strategy	1	1	
3.1.3.7	Radio programs	5	5	
3.1.3.5	Newspaper articles	109	109	
3.1.3.4	Brochure	5	4	1
	Year planner	1	1	
	Calendars	3	3	
	Diaries	3	3	
	Eid cards	6	6	
	Season's Greetings cards	3	3	
	File covers	4	4	
	CD covers	2	2	
	Compact discs	1	1	
	Box file titles	1	1	
	Flyers	3	3	
	Banners	14	14	
	Posters	15	9	8
3.1.3.9	Number of activities (e.g., events, press releases) organized in conjunction with international days	16	16	
	Project website	1	1	
	Photo album	1		1
	District maps (GIS)	5		5
<b>Reports</b>				
3.1.2.1	Number of annual work plans prepared	3	3	
3.1.2.3	Number of monthly newsletters compiled for FAO/R	9	9	
3.1.2.4	Number of quarterly reports prepared for USAID	11	11	
3.1.2.5	Number of semiannual reports prepared for FAO	4	4	
3.1.2.6	Number of project annual reports prepared for GoP	3	3	
3.1.2.7	Number of briefing reports prepared for the steering committee	2	2	
3.1.2.8	Project terminal report prepared	1	1	
3.1.2.9	Number of weekly reports prepared for USAID	91	91	
3.1.3.2	Number of project success stories prepared and disseminated	47		