منظمة الأغذية والزراعة للأم المتحدة 联合国 粮食及 农业组织 Food and Agriculture Organization of the

United Nations



Organisation des Nations Unies pour I'alimentation et I'agriculture

Продовольственная и r сельскохозяйственная организация Объединенных Наций Organización de las Naciones Unidas para la Agricultura y la Alimentación

FAO/ GOVERNMENT CO-OPERATIVE PROGRAMME

PROJECT PROPOSAL

Country:

Project Title:

Project Symbol:

Donor:

Executing Agency:

Government/ Partner Agency:

Duration:

Starting Date:

Donor Contribution:

Pakistan

Australian Assistance to Agricultural Development in Balochistan Border Areas

GCP/PAK/XXX/AUS

Australian Agency for International Development

Food and Agricultural Organization of the United Nations

Ministry of Food Security and Research

48 months

31st May 2012

AUD 12,880,000

Executive Summary

Introduction

Between 2004 and 2012, the Food and Agriculture Organization of the United Nations (FAO) has implemented the United States Agency for International Development (USAID)-funded "Food Security and Poverty Alleviation in Arid Agriculture Balochistan – Pilot Project Phase" and "United States Assistance to Agricultural Development in Balochistan Border Areas (USABBA) Project" in the north-eastern districts of Killa Saifullah, Loralai, Mastung, Quetta and Zhob. FAO, USAID and the Provincial Government of Balochistan are currently preparing a successor to the USABBA Project (i.e. the "Balochistan Agriculture Project (BAP)"), which includes three new districts (Musakhel, Pishin and Sherani), has a timeframe of four years (2012 to 2015) and give more emphasis to produce marketing and value chain development. It should be noted that the aforementioned eight districts are predominantly part of the semi-arid "Western Dry Mountains" agro-ecological zone and predominantly Pashtoon in ethnicity.

This project proposal, to be funded by the Australian Agency for International Development (AusAID) represents a replication and further extension of the USABBA "model" of community development/technology transfer and value chain development amongst the predominantly Baloch ethnic groups of western Balochistan Province. The Provincial Government of Balochistan has agreed that the project operate in the districts of **Chagai**, **Kech**, **Kharan**, **Nushki**, **Panjgur and Washuk**. It should be noted that these six districts are totally part of the arid "Dry Western Plateau" agro-ecological zone. The title of the proposed four-year FAO-implemented project is "Australian Assistance to Agricultural Development in Balochistan Border Areas (AUSABBA) Project".

Background

Balochistan is the largest of Pakistan's four provinces, covering 44 percent of the country's total land area, but has the smallest population (i.e. 7.1 million people, equivalent to 5.1 percent of the total national population) and is considered the least developed. Poverty is high, increasing from 1.5 million in 1998 to 2.1 million in 2005 – mainly because of the long drought, 1999 to 2004. The World Bank estimated the rural poverty headcount rate in Balochistan in 2005 to be 34.6 percent.

Over three-quarters of western Balochistan's population lives in rural areas and agriculture accounts for over two-thirds of the gross domestic product and employs nearly two-third of the labour force. Crops contribute around 60 percent of the gross farm income and livestock about 35 percent. Subsistence agriculture and livestock rearing, poor quality rural roads and tracks and inadequate access to public services, safe drinking water, health and education are all common in rural areas. In western Balochistan Province, rural communities are small, scattered and isolated, and there are few major urban centres, and poverty is widely and evenly distributed and well entrenched. The rugged terrain, lack of water, poor access and communications, fragile ecosystems and lack of skills limit agricultural productivity. Absence of efficient extension services and marketing networks and the strong presence of "middle-men" results in low returns and little incentive for productivity improvements. However,

In 2008, the World Bank concluded that, while Balochistan Province offers some of the best assets for development, its economy has not done well. Balochistan is well endowed with natural and locational resources. Its valley bottoms are characterised with fertile soils, which with efficient use of irrigation water could become highly productive, and its hillsides provide vast rangelands for goats, sheep, camels and cattle. As a frontier and coastal province, it is ideally situated for trade with commercial centres in Punjab and Sindh Provinces and the states of Iran, Afghanistan, Central Asia and the Persian Gulf. Yet, Balochistan has the weakest long-term growth performance of all provinces in Pakistan, workers productivity in the province is low, school attendance and literacy rates are low, only 70,000 people practice crafts and related trades, less than 20 percent of workers hold a regular salaried job, and the private sector provides just one in four jobs.

Agricultural problems faced by marginal and smallholder farmers in western Balochistan Province can be summarised as: (i) low crop and livestock productivity levels are generally low and partial or complete crop failures are common; (ii) limited access to water supplies, inefficient use of the water that is available, and low levels of on-farm water management; (iii) poorly managed, over-grazed and degraded rangelands resulting in low levels of livestock production, increasing soil erosion and reduced water storage; (iv) weak research and extension systems with very limited outreach capacity; (v) high post-harvest losses and weak and underdeveloped value chains; (vi) off-farm employment opportunities in rural areas are limited and seasonal migration, particularly of male household members, is common; (vii) most poor rural households are food deficit, and devote as much as 80 percent of household expenditure on food items (but at the same time, there is considerable scope to increase household incomes by raising agricultural production); and (vii) continuing increases in food prices to unprecedented levels create both risks and opportunities for resource poor marginal and smallholder farmers.

Goal and Objectives

The goal of the AUSABBA Project is to make a significant contribution to the reduction of poverty and economic inequalities for some 175,000 impoverished people from the western border districts of Chagai, Kech, Kharan, Nushki, Panjgur and Washuk through sustainable agriculture development.

The Project would contribute to the Federal Government's "Pakistan: New Framework for Economic Growth" and "National Zero Hunger Action Plan" by, amongst others, increasing agricultural productivity and reforming agriculture and rural markets. The Project would also contribute to AusAID's Strategic Approach to Aid in Pakistan, the objective of which is "to work with the Government of Pakistan towards a stable, secure, democratic country through broad-based social and economic development and poverty reduction".

The Project would represent key elements of the agriculture, rural development and poverty reduction thematic/priority areas of the One UN Programme-I (2008 to 2012) and the inclusive economic growth, food and nutrition security, strengthening governance, and ensuring gender equality priority areas of the proposed successor One UN Programme-II (2013 to 2017). Moreover, the Project would represent a model for demonstrating two of FAO's four priority action areas of its Country Programme Framework (2012 to 2017), i.e. "sustainable agricultural economic growth" and "capacity development for agriculture sector management" – while "empowerment of women and ensuring gender equality" would be treated as a cross-cutting action for all outputs and activities.

The outcomes of the AUSABBA Project are shared with those of BAP (with exception of the geographical location of the projects) viz: a significant improvement in food and nutrition security and a significant increase in income generation of some 30,600 poor households from 340 rural communities targeted in the project districts. It is anticipated that the Project's target households would reduce their food insecurity by 25 percent and increase their annual incomes by 20 percent within two years of project completion.

Expected Outputs and Key Activities

The outputs of the AUSABBA Project are also shared with those of BAP (with exception of the project area), viz:

- i. Improved enabling environment for the development of provincial agricultural policies and regulatory frameworks, market-led and community-driven investments, strategies and processes, and women's empowerment in agricultural development.
- ii. Increased crop and livestock productivity and value of agricultural products produced in the project districts, through improved technological innovation and management practices and improved community-based water management practices in project-assisted communities and their value chains.
- iii. Small local agri-business enterprises established and market linkages strengthened for target poor communities of the project districts to increase sales of their surplus produce and improve competitiveness and sustainability of their value chains.

Women's empowerment and gender sensitisation would be treated as cross-cutting interventions to all three outputs listed below, e.g. the expansion of women community organisations (COs) and farmer field schools (FFSs) and women-oriented value chain development (e.g. women farmers' marketing collectives (FMCs) for vegetables, poultry, dairy and wool products).

The **outputs** and **key targets** of the AUSABBA Project are listed below.

- i. Improved enabling environment for the development of provincial agricultural policies and regulatory frameworks, market-led and community-driven investments, strategies and processes, and women's empowerment in agricultural development:
 - provincial agricultural policies and regulatory frameworks prepared;
 - provincial policy makers trained to reform agricultural policies;
 - linkages developed/strengthened between provincial, national and international research centres;
 - government and public sector service providers practising new and improved agricultural development approaches (including some 50 subject matter specialists trained);
 - 204 men and 136 women COs established and functioning;
 - Between six and 20 self-sustaining CO alumni associations/FFS networks established and functioning; and
 - minimum of 4,100 rural women empowered through project interventions.
 - ii. Increased crop and livestock productivity and value of agricultural products produced through improved technological innovation and management practices in project-assisted communities:
 - significant increase in crop yields and livestock production of COs supported through new or improved water harvesting, water management, shallow drinking water wells, cereal seeds, fruit tree seedlings, medicinal herbs, homestead gardening, poultry production, milk goats, animal feed and vaccination and post-harvest management packages provided on a cost-sharing basis (directly benefitting some 6,800 farm families);
 - 25 master trainers and 100 FFS Facilitators trained, and 204 men and 136 women FFSs implemented with 8,500 marginal and smallholder farmers learning new or improved crop and livestock production technologies and practices;
 - 68 community animal health services functioning, with 68 community animal health workers (CAHWs) trained and equipped;
 - 1,100 men and women farmers trained in specific topics through short courses; and
 - 12 new and improved crop and livestock production technologies researched and developed.
- iii. Small local agri-business enterprises established and market linkages strengthened for targeted poor communities to increase sales of their surplus produce and improve competitiveness and sustainability of their value chains:
 - significant increase in sales of agricultural produce by project beneficiaries and new contracts issued between buyers and small producers;
 - 18 small sustainable agri-business enterprises operational;
 - 25 value chain studies completed for selected commodities and followed up;
 - 25 informal FMCs established and operational (i.e. 15 men and 10 women);
 - 25 commodity value chains developed by FMCs and MMOs and market linkages improved through public-private partnerships (e.g. wheat, black beans, cumin, dates, figs, grapes, mangoes, onions, other vegetables, pomegranates, water melon, animal fodder, camel milk, live sheep and goats and poultry);
 - Eight formal mutual marketing organisations (MMOs) established, registered and operational;
 - Eight market information systems developed and operational;
 - Six self-sustaining district Eid livestock *maundis* operational;
 - Six business support service providers strengthened and supporting CO alumni associations/FFS networks, small agri-business enterprises, FMCs and MMOs; and
 - Eight new and improved post-harvest management marketing packages/linkages researched and developed.

Project Budget

The total cost of the AUSABBA Project is estimated at AUD 12.88 million, broken down as follows:

Project Output/Component	Cost (AUD)
Output 1. Policy Development and Capacity Building	1,336,800
Output 2. Community development and Technology Transfer	4,164,800
Output 3. Produce marketing and Value Chain Development	1,881,200
Project Management, Monitoring, Evaluation and Reporting	4,015,430
FAO Support Costs (13 percent)	1,481,770
Total	12,880,000

Project Budget - by Outputs and O	Components
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Cost Category	Cost (AUD)
Personnel	3,193,000
Contracts	1,345,800
Travel	752,000
Training	1,635,700
Expendable Procurement	2,999,800
Non-expendable Equipment	258,600
Technical Support Services	196,400
General Operating Expenses	1,016,930
Sub-total	11,398,230
Other Direct Costs	1,481,770
TOTAL	12,880,000

Project	Budget -	by Cost	Category
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Implementation Arrangements

The implementation process of the AUSABBA Project would be structured, participatory and consultative, while always emphasising the development of marginal and small-scale producers of western Balochistan Province, as well as food processors, traders and exporters of the Province as a whole. The Project would fully engage with the Provincial Government of Balochistan's Planning and Development, Agriculture and Co-operatives, Livestock and Dairy Development, and Forestry and Wildlife Departments and their district, tehsil and divisional-level extension systems, and national and provincial-level policy and development departments and research centres, while maintaining focus on community development, post-harvest management and marketing, and stakeholder capacity building through the management support and technical assistance of FAO.

The Project would be implemented in the field through locally accepted best development practices in community-led development, adaptive research, participatory extension and value chain development which have been tested and validated under the FSPAB Pilot Project Phase and USABBA Project. To enhance local ownership, COs, FMCs and MMOs would be guided by locally recruited men and women District Team Leaders/Marketing Associates, Community Development and Marketing Facilitators, FFS Facilitators and CAHWs. Associates and Facilitators would be trained by the Project (using existing Associates and Facilitators from the USABBA Project as master trainers) and closely monitored by community development, crops, livestock, water management and marketing specialists employed by the Project and assisted by Provincial Government subject matter specialists and district, tehsil and divisional-level extension workers.

The Project's **research and development activities** would be closely linked to relevant on-going national and provincial programmes of the National Agricultural Research Centre, Arid Zone Research Centre (AZRC) and the Agricultural Research Directorate of the Balochistan Provincial Government's Agriculture and Co-operatives Department. These activities would be enforced through the sharing of knowledge with relevant agricultural research and development work in similar agro-ecological zones outside of Pakistan through letters of agreement or memoranda of understanding with the Australian Centre for International Agricultural Research, United States Department of Agriculture and Consortium of International Agricultural Research centres present in Pakistan.

The main project review and policy setting mechanism would be semi-annual **Project Steering Committee** (PSC) meetings chaired by the Secretary of the Federal Government of Pakistan's Ministry of Food Security and Research and comprising representatives of the National Planning Commission, Provincial Government of Balochistan's Planning and Development, Agriculture and Co-operatives, Livestock and Dairy Development, and Forestry and Wildlife Departments, and AusAID and FAO Representations in Pakistan, as well as appropriate representatives from the project area and other key stakeholders.

The PSC would be supported by a provincial **Technical Working Group (TWG)** chaired by the Chief of Foreign Aid, Provincial Government of Balochistan's Planning and Development Department. The TWG would meet on a quarterly basis to harmonise donor and government-funded interventions in the agriculture sector, support the Government of Balochistan in the reform of agricultural policies, and guide PCU for the AUSABBA Project and BAP and project management units of other agricultural development projects in a co-ordinated approach to agricultural development. Membership of TWG would comprise representatives of the Government of Balochistan's Planning and Development, Agriculture and Co-operatives, Livestock and Dairy Development and Forestry and Wildlife Departments, AusAID, FAO, IFAD, USAID and the World Bank, and the respective programme coordination and project management units.

The implementation arrangements for the AUSABBA Project would be linked to those of the USABBA Project through the establishment of a joint "FAO in Balochistan" Programme Coordination Unit (PCU). The AUSABBA Project would assist FAO to expand and continue maintaining PCU, originally established by the USABBA Project, and six (newly created) district field offices for the overall co-ordination, supervision, management and reporting of project activities and evaluation of project interventions – using development evaluation methods which encourage the adoptions of lessons learned over time. The PCU would continue to be located at AZRC in Quetta.

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Acronyms and Abbreviations

ACIAR	-	Australian Centre for Agricultural Research					
ASLP	-	Agricultural Sector Linkages Programme					
AUD	-	Australian Dollar					
AUSABBA	-	Australian Assistance to Agricultural Development in Balochistan Border Areas Project					
AusAID	-	Australian Agency for International Development					
AZRC	-	Arid Zone Research Centre					
BAP	-	Balochistan Agriculture Project					
BISP	-	Benazir Income Support Programme					
CAHW	-	Community Animal Health Worker					
CBO	-	community-based organisation					
CDM	-	Community Development and Marketing (Facilitator)					
CFP	-	Country Programming Framework (of FAO Pakistan)					
CGIAR	-	Consultative Group on International Agricultural Research					
CIMMYT	-	International Maize and Wheat Improvement Centre					
CO	-	community organisation					
DAO	-	District Agriculture Office					
DLO	-	District Livestock Office					
DFO	-	Divisional Forest Office					
FAO	-	Food and Agriculture Organization of the United Nations					
FBS	-	farmer business school					
FFS	-	farmer field school					
FMC	-	farmers' marketing collective					
FSPAB	-	Food Security and Poverty Alleviation in Arid Agriculture Balochistan - Pilot Project Phase					
GDP	-	gross domestic product					
На	-	Hectare					
HDI	-	human development index					
ICARDA	-	International Centre for Agricultural Research in Dry Areas					
IFAD	-	International Fund for Agricultural Development					
IFPI	-	International Food Policy Institute					
IMD	-	index of multiple deprivation					
IMF	-	International Monetary Fund					
IWMI	-	International Water Management Institute					
k/cal	-	kilo/calorie					
Kg	-	kilogramme					
LTU	-	Lead Technical Unit (of FAO)					
M&E	-	monitoring and evaluation					
MDF	-	Market Development Facility (of AusAID)					
MDG		Millennium Development Goal					
MINFA	-	Ministry of Food and Agriculture					
MINFSR	-	Ministry of Food Security and Research					
MINLDD	-	Ministry of Livestock and Dairy Development					
MMO	-	mutual marketing organisation					
NARC	-	National Agricultural Research Centre					
NGO	-	non-government organisation					
PACCD	-	Pakistan Agriculture and Cold Chain Development Project					
PARC	-	Pakistan Agricultural Research Council					
PCU	-	(ABBA) Programme Co-ordination Unit					
Pⅅ	-	Planning and Development Department (of the Government of Balochistan)					
PKR	-	Pakistan Rupee					
PSC	-	Project Steering Committee					
RAP	-	Regional Office for Asia and the Pacific (of FAO)					

TWG (provincial agriculture) Technical Working Group (of P&DD) UN United Nations UNDP United Nations Development Programme _ United Nations Department for Safety and Security UNDSS -United States Assistance to Agricultural Development in Balochistan Border Areas Project USABBA -USAID United States Agency for International Development _ USD United States Dollar _ United States Department for Agriculture USDA _ World Food Programme WFP _

1. BACKGROUND

1.1. Introduction

Between 2004 and 2008, FAO implemented the United States Agency for International Development (USAID)-funded "Food Security and Poverty Alleviation in Arid Agriculture Balochistan (FSPAB) – Pilot Project Phase" in three districts of north-eastern Balochistan Province (i.e. Killa Saifullah, Loralai and Mastung). This Pilot Project Phase was followed by a four-year development response of tested and validated approaches in the same three districts, with the addition of the neighbouring districts of Quetta and Zhob, under the "United States Assistance to Agricultural Development in Balochistan Border Areas (USABBA) Project" (2009 to 2012). USAID and FAO are now preparing a successor to the USABBA Project (i.e. the "Balochistan Agriculture Project (BAP)"), which includes three new districts (i.e. Musakhel, Pishin and Sherani) and a timeframe of four years (2012 to 2015). It should be noted that the aforementioned eight districts are predominantly part of the semi-arid "Western Dry Mountains" agro-ecological zone and predominantly Pashtoon in ethnicity.

The Australian Agency for International Development (AusAID) has agreed with the Government of Pakistan to focus on, amongst others, agriculture and rural development in Balochistan Province and replicate the USABBA "model" of community and value chain development amongst the predominantly Baloch ethnic groups of western Balochistan. The Provincial Government of Balochistan has further agreed that such a project operate in the districts of **Chagai, Kech, Kharan, Nushki, Panjgur and Washuk**. It should be noted that these six districts are totally part of the arid "Dry Western Plateau" agro-ecological zone. The title of the proposed four-year FAO-implemented project is "**Australian Assistance to Agricultural Development in Balochistan Border Areas (AUSABBA) Project**".

1.2. General Context

1.2.1. Socio-economic and Livelihood Characteristics

With a population of over 184 million, nearly two-thirds of Pakistan's population lives in rural areas as does the majority of the country's poor. Poverty is widespread in Pakistan but predominantly a rural phenomenon -80 percent of the country's poor live in rural areas. According to the Government of Pakistan's Poverty Reduction Strategy Paper, about ten percent of the population is chronically poor, 30 percent are poor, and approximately one-third is vulnerable and likely to fall into poverty with any adverse social, climatic or economic shock. Rural poverty is characterised by uneconomic holdings, landlessness, poor skills base, illiteracy, poor access to social and economic services and political disempowerment.

Due to the rural poor's direct and indirect dependence on agriculture, any progression or regression in the agriculture sector has a pronounced impact on poverty. For example, after a decade of moderate growth, the agricultural sector registered considerable growth between 2001 and 2005, resulting in marked improvements in rural incomes, rural poverty and social indicators. According to 2007 World Bank figures, at the national level, agriculture (crops, livestock and farm labour) accounts for less than 35 percent of income amongst the poorest 20 percent of rural households. Among poor agriculture households, over 42 percent of total income was derived from non-agricultural sources.

Balochistan is the largest of Pakistan's four provinces, covering 44 percent of the country's total land area, but has the smallest population (i.e. 7.1 million people, equivalent to 5.1 percent of the total national population) and is considered the least developed. Poverty is high, increasing from 1.5 million in 1998 to 2.1 million in 2005 – mainly because of a long drought between 1999 and 2004. The World Bank estimated the rural poverty headcount rate in

Balochistan in 2005 to be 34.6 percent, higher than the national average of 32.9 percent and below only that of Khyber Pakhtunkhwa Province. Literacy rates are very low, especially for rural women (i.e. eight percent compared to the national average of 20 percent). However, Balochistan is a province of immense mineral, agriculture (particularly livestock and horticulture) and marine riches with huge development potential.

The total land area of the six project districts is 138,000 km², with an estimated total population of 1.1 million people (40 percent of whom live in Kech District). The population density is below five persons per square kilometre for the northern districts of Chagai, Kharan, Nushki and Washuk and between 10 and 20 persons per square kilometre for the south-western districts of Kech and Panjgur. This compares to a provincial average of 20 persons per square kilometre and between 25 and 60 persons per square kilometre for the north-eastern districts covered by the USABBA Project. It is further estimated that 85 percent of the total population of western Balochistan live in rural areas (i.e. 905,000 people). Chagai is ranked as having the highest incidence of poverty of the 31 districts in Balochistan Province¹. Kech, Kharan, Nushki and Washuk are ranked in the twelve most poverty-stricken districts and Panjgur is the nineteenth. All six aforementioned districts are considered as "extremely food insecure"².

Over three-quarters of Balochistan's population lives in rural areas and agriculture accounts for over 65 percent of the provincial gross domestic product (GDP) and employs nearly twothirds of the labour force. Crops contribute around 60 percent of the gross farm income and livestock about 35 percent. Subsistence agriculture and livestock rearing, poor quality rural roads and tracks and inadequate access to public services, safe drinking water, health and education are all common in rural areas throughout the province. In Balochistan Province, rural communities are small, scattered and isolated, and there are few major urban centres, and poverty is widely and evenly distributed and well entrenched. The rugged terrain, poor access and communications, fragile ecosystems and lack of skills limit agricultural productivity. Absence of efficient marketing networks and services and the strong presence of "middle-men" results in low returns and little incentive for productivity improvements.

Rural poverty in Pakistan has a pronounced gender dimension. Despite improvements over the past decade, gender inequalities are still widespread, in particular in rural areas of all provinces. Patriarchal tendencies limit women's rights to inheritance, assets, services and job markets. Illiteracy is high among women and girls. In rural areas, only 22 percent of girls above ten years of age have completed primary schooling compared to 47 percent of boys. Yet women have an important role in the household economy and caring for their families. Their burden of labour increases significantly when poor agricultural productivity forces men to migrate to find work in cities and neighbouring industrial areas. There is also a strong gender dimension in the livestock sub-sector, as rural women also play a major role in the care of animals. As a result, there is a higher likelihood that livestock-related project interventions, including small ruminants and poultry, will reach women compared to cropbased activities.

The United Nations Development Programme's (UNDP's) global "Human Development Report, 2011" categorises Pakistan as a "low human development" country – ranked at 145 of 183 countries in the world, but only four places below a "medium human development" country and on par with Bangladesh, Kenya, Sao Tome and Principe, Solomon Islands and Timor-Leste.

¹ Social Policy and Development Centre; Research Report No. 70, "Income Poverty at the District Level: an Application of Small Area Estimation Techniques"; 2007

² Social Policy and Development Centre; Research Report No. 72, "Trends in Regional Human Development Indices; 2007 and Social Policy and Development Centre, Swiss Agency for Development and Co-operation and World Food Programme; "Food Insecurity in Pakistan"; 2009

In 2010, UNDP Pakistan undertook a "human development and multiple deprivations indices" study³ of Balochistan Province. The human development index (HDI) is a composite statistic of education, health and income indices (in particular child survival, adult literacy, combined enrolment rates and per capita income proxy). On the other hand, the index of multiple deprivation (IMD) is a composite of 16 deprivation indicators chosen to cover a range of social, housing and economic concerns (and focusing on education, health, housing quality and services, unemployment and household wealth). Key results of the study are as follows:

- On the whole, Balochistan Province was classified as "low-level of human development", although the magnitude of income was relatively high as compared to education and health. Between 2004 and 2010, there was a seven percent improvement in HDI, i.e. eight percent and two percent improvement for education and heath respectively, and a one percent decline in income. In comparison, both Khyber Pakhtunkhwa and Punjab Provinces were classified as medium-level of human development".
- Overall, 56 percent of Balochistan Province's population was classified as "deprived" or "multidimensionally poor" in terms of IMD. Highest deprivation is estimated in housing sector where about 66 percent of the population is deprived in terms of housing facilities (inadequate house structure, no toilet facilities, housing congestion, inadequate drinking water and sanitation facilities). The deprived population in health (child mortality rate, lack of immunization, maternal and newborn health care) and education (illiteracy and out-of-school children) sectors is estimated at 58 percent. The relatively lowest (33 percent) deprivation is observed in terms of unemployment and below average wealth score⁴. About 61 percent of the rural population is deprived as compared with 40 percent of the urban population. Highest regional differences are observed in the housing sector, where 72 percent rural population is deprived as against 44 percent in urban areas.
- The six project districts ranked as follows in terms of HDI (from lowest to highest of 31 districts): Washuk = 27; Kharan = 26; Nushki = 13; Chagai = 6; Kech = 3; and Panjgur = 1) in the overall context of a "low-level of human development". In terms of IMD: Washuk District was classified as high-level of deprivation and multi-dimensionally poor; Kharan, Chagai and Nushki Districts as medium-level; and Kech and Panjgur Districts as low-level in the overall context of a "deprived" or "multi-dimensionally poor" region.

Further details on the socio-economic characteristics of the six project districts are provided in Table 1.

1.2.2. Economic Performance

The Pakistan economy has faced significant challenges over the past two years due to global economic crisis, food price increases, political and security uncertainties and the economy's structural weakness. The economic slowdown and erosion of purchasing power caused by inflation suggests that the gains in poverty reduction between 2001 and 2008 may have been partly reversed⁵. Further food and non-food prices rose by 23.7 and 18.4 percent, respectively, between 2007 and 2009, resulting in a 21 percent reduction in purchasing power. Over the past two years, it is estimated that more than 20 million people, most in rural areas, have fallen below the poverty line. This is in addition to the 60 million previously considered food insecure.

³ UNDP Strengthening PRS Monitoring Project and Balochistan Provincial Government Planning and Development Department; Welfare Indices for Districts of Balochistan – using Multiple Indicator Cluster Surveys Data, 2004 and 2010; November 2011

⁴ It is worth to note here that below average asset score does not reflect absolute level of deprivation. It indicates relatively poverty or deprivation. Thus the lower magnitude show low level of inequality in terms of assets.

⁵ Pakistan saw a significant decline in poverty with the share of the population living in poverty dropping from 34.5 percent in 2002 to 17.2 percent in 2008

MDG Indicators District				Balochistan			
and Socio-economic Data	Chagai	Kech	Kharan	Nushki	Panjur	Washuk]
Area	45,444 km ²	22,540 km ²	11,215 km ²	5,940 km ²	16,891 km ²	n/a	347,200 km ²
Population (1998)	105,000	413,000	117,000	98,000	234,000	91,000	6,566,000
Population (2010 projected)	148,000	439,000	168,000	144,000	305,000	130,000	
- rural population (2010 projected)	89%	83%	76%	76%	91%	100%	76%
- urban population (2010 projected)	11%	17%	24%	24%	9%	0	24%
Population Density (persons/km ²) (1998)	2	18	8	17	14	3	19%
Number of households (1998)	12,000	82,000	36,000	13,400	36,000	20,000	771,000
Average Household Size (1998)	6.8	5	6	7	6.2	5.3	8.5
Population Using Improved Water Sources	67%	89%	88%	89%	74%	82%	74%
Population Using Improved Sanitation Facilities	60%	91%	58%	57%	83%	67%	61%
Child Mortality Rate (<5 years) (2010)	71/1,000	55/1,000	112/1,000	71/1,000	55/1,000	71/1,000	89/1,000
Infant Mortality Rate (<1 year) (2010)	59/1,000	47,1,000	88/1,000	59/1,000	47/1,000	59/1,000	72/1,000
Children Moderately or Severely Malnourished (<5 years)	31%	42%	39%	31%	58%	39%	43%
Primary School Completion (2010)	34%	39%	28%	77%	67%	40%	56%
Literacy Rate (>10 years) (2009)	43%	52%	33%	47%	49%	35%	37%
Gender Parity Index for Primary Education	0.71	0.97	0.97	0.79	0.99	0.74	0.83
Potential Area for Cultivation	447,000 ha	117,000 ha	828,000 ha	n/a	78,000 ha	n/a	5,990,000 ha
Arable Area	65,000 ha	61,000 ha	69,000 ha	n/a	34,000 ha	n/a	2,060,000 ha
Livestock (2006):							
- buffaloes	<1,000	<1,000	<1,000	n/a	<1,000	n/a	320,000
- camels	18,000	6,000	81,000	n/a	8,000	n/a	380,000
- cattle	7,000	43,000	19,000	n/a	23,000	n/a	2,254,000
- goats	299,000	455,000	705,000	n/a	139,000	n/a	11,785,000
- poultry	93,000	209,000	224,000	n/a	64,000	n/a	5,911,000
- sheep	206,000	65,000	715,000	n/a	92,000	n/a	12,804,000
Forested Area	382,000 ha	n/a	127,000	75,395	n/a	n/a	1,360,000 ha
Length of metalled roads	436 km	284 km	534 km	n/a	204 km	n/a	
Length of shingle roads	1,161 km	1,515 km	1,295 km	n/a	1,491 km	n/a	
Tehsils	2	4	2	1	2	3	
Union Councils	10	37	7	10	16	9	

Table 1. Socio-economic Data of the Project Districts

In 2008, the World Bank prepared an economic report for Balochistan Province⁶. The report concluded that, while Balochistan offers some of the best assets for development, its economy has not done well. Balochistan is well endowed with natural and locational resources. It possesses the largest land area in Pakistan, its southern border makes up two-thirds of the national coastline, giving access to a large pool of fisheries resources, and it provides vast rangelands for goats, sheep, camels and cattle. As a frontier province, it is ideally situated for trade with Iran, Afghanistan, Central Asia and the Persian Gulf states. Balochistan also provides natural gas to Pakistan's economic centres, supporting the country's industrialisation, and possesses large deposits of coal, copper, lead, gold and other minerals.

However, the Province has Pakistan's most anaemic economic growth record, worst infrastructure, worst water crisis and weakest fiscal base. The poor economic performance has lead to poor living standards highlighted in Section 1.2.1. In turn, Balochistan has the highest poverty, lowest social indicators and, in parts, the weakest state institutions. Last but not least, internal conflicts are common in this frontier province. All of this has earned Balochistan a reputation of being a backward region, far distant from Pakistan's economic hubs, with a life burdened by the toils on the farms and rangelands and tribal disputes rather than a hub of economic activity surrounding quality mining exploitations, modern trade links, sustainable agriculture and empowered communities.

Balochistan has the weakest long-term growth performance of all provinces in Pakistan. From 1972 to 2005, the economy expanded 2.7 times in Balochistan Province, compared to 3.6 times in Khyber Pakhtunkhwa and Sindh Provinces, and four times in Punjab Province. Balochistan's per capita income of USD 400 in 2004 was only two-thirds of the national level. Workers productivity in the province is low; they produce one-quarter less than workers in Khyber Pakhtunkhwa and Punjab Provinces and over one-third less than workers in Sindh Province. Among the 2.3 million workers in Balochistan Province, some 1.4 million have no schooling and only 70,000 practice crafts and related trades. Less than 20 percent of workers hold a regular salaried job and the private sector provides just one in four jobs. Workers in Balochistan Province also tend to migrate less than workers elsewhere in Pakistan. It is anticipated that the labour force in Balochistan Province will rise from 4.1 million in 2005 to 7.2 million in 2025. Gainful absorption of this additional workforce will require the creation of 160,000 jobs annually which would require an economic growth of at least 6.5 percent per annum.

1.2.3. The Rural Economy

Bringing prosperity to Balochistan's rural areas is both essential and difficult. It is essential because three-quarters of the population resides in villages, their living standards lag behind those of urban areas and crop production and livestock rearing are two important sub-sectors of Balochistan's economy. It is difficult because Balochistan stands out as the most water-scarce province in a water-stressed country. The World Bank concluded that building rural livelihoods means foremost raising the efficiency of water use.

The rural economy is still recovering from the impact of a drought lasting from 1998 until 2005, where annual rainfall was some 56 percent below the pre-drought level. Household consumption on 2004/2005 was still some 14 percent below the level in 1998/1999. The drought has also affected the composition of agriculture. Since the early 2000s, the contribution of minor crops to agricultural GDP increased, while the contribution of livestock declined as the animal herds were rebuilt after the drought. In 2004/2005, the leading subsector was minor crops (40 percent), including horticulture, followed by livestock (33

⁶ The World Bank; Pakistan: Balochistan Economic Report – from Periphery to Core; May 2008

percent), major crops (23 percent), such as wheat, rice and cotton, and fisheries and forestry (four percent).

In 2007, 2010 and 2011 the effects of the long drought were compounded when Balochistan Province suffered devastating floods, which caused further significant losses and damage to the agriculture sector. In 2007, Cyclone Yemyin tracked along the Balochistan coastline with associated heavy rainfall for the entire province in this normally extremely dry month. The resulting flash floods were particularly devastating in western Balochistan and at the drainage outfalls/torrents of the eastern plains. In addition to the loss of a harvested *rabi* crop, which was still on outdoor threshing floors, substantial destruction was caused to water harvesting and irrigation infrastructure (e.g. bunds, dykes, tube-wells and water courses). Compared to the subsequent countrywide floods, there was little or no emergency or reconstruction response by neither the Government of Pakistan nor the international donor community for western Balochistan Province.

In 2010, Pakistan suffered massive floods with one-fifth of the country affected. And, in 2011, eastern parts of Balochistan and all of Sindh Province suffered similar floods. The International Monetary Fund's (IMF's) preliminary assessment is that, as a result of the floods, real national GDP growth is unlikely to exceed two percent in 2010/2011, mainly due to lower agricultural output growth. Average annual inflation is projected to rise to 13.5 percent in 2010/2011 compared to 11.7 percent in 2009/2010. High inflation and loss of assets due to floods have subsequently pushed a considerable number of people back into poverty over the past two years. Before the floods, growth was improving, but inflation was high and persistent. Provisional IMF estimates indicate real GDP growth of four percent in 2009/2010 – led by large-scale manufacturing.

The overall impact will depend on how the floods affect agricultural output (*for example, a ten percent decline in agricultural output would reduce GDP by over two percent*). The agriculture sector was hit particularly hard by the floods with significant damage to industrial crops (e.g. cotton and sugarcane), wheat, fruit and vegetables, as well as livestock. In Balochistan Province, some 132,000 hectares of crops were destroyed but, more significant, was the loss of more than one million sheep and goats and damage to water harvesting structures and irrigation facilities. Disruption of supply chains and the agricultural damage has started to push up prices, especially for food items, while additional demands for building materials, medicine and social services will also contribute to price pressures. While cereal crop and horticultural production and livestock rearing remain the major occupations in the province, over one-third of Balochistan's rural population, as well as the rural poor, and particularly the men, migrate and rely on activities outside of the farms and rangelands as their main source of income – so increasing the burden of food production on the women.

1.3. Sectoral Context

1.3.1. The Agriculture Sector

1.3.1.1. Agricultural Growth

Approximately 21 percent of national GDP and 45 percent of total national employment in 2007 was generated in the agriculture sector. The agricultural GDP has declined from 25 percent in 1990. The livestock sub-sector, which is critical for rural livelihoods, is also the fastest growing sub-sector: total livestock production accounts for 52 percent of agricultural GDP and eleven percent of total GDP. The majority (57 percent) of the rural poor are from non-farm livelihoods with the poorest 40 percent of rural households deriving only 30 percent of their income from agriculture. Livestock is vital for poverty alleviation because most smallholders and landless rely on livestock rearing as an additional means of income.

1.3.1.2. Agro-ecological Zones and Environmental Degradation

Pakistan has been divided into twelve agro-ecological zones based on physiography, climate, land use and water availability. Four of these agro-ecological zones are found in Balochistan Province, viz: (i) the ten southern and western districts are classified as arid "Dry Western Plateau"; (ii) 12 north-eastern districts are classified as semi-arid "Western Dry Mountains" (iii) parts or all of seven eastern and central districts are classified as arid "Sulaiman Piedmont"; and (iv) two eastern districts are classified as arid "Southern Irrigated Plain of the Lower Indus". Chagai, Kech, Kharan, Nushki, Panjgur and Washuk Districts are part of the arid "Dry Western Plateau" agro-ecological zone, which is characterised by hot and dry summers, an annual rainfall of between 150 and 200 mm, and a barren mountainous terrain which is mainly used for grazing, with high populations of sheep, goats and camels. Melons, fruit crops, vegetables and wheat are grown where water is available. Kech District is more sub-tropical, given its proximity to the coastal belt, and the influence of sea breezes and produces dates and mangoes.

Despite low population densities all six districts suffer from a wide range of environmental resource degradation problems. The main areas of concern are: (a) deforestation of watersheds; (b) depletion of aquifers; (c) de-vegetation of rangelands, sand dune movement and desertification; (d) salinisation and water-logging of irrigated areas; (e) destruction of wildlife habitats and depletion of wild flora and fauna; (f) destructive mining practices; (g) water pollution; (h) un-planned urban growth; and (i) un-managed urban solid wastes.

1.3.1.3. Land Utilisation

While the land area of Balochistan Province is large (34.7 million hectares), only about 13 percent (4.5 million hectares) is cultivable and only six percent (2.3 million hectares) is cultivated. Of the cultivable land, only about 600,000 hectares are planted to irrigated crops and orchards with, on average, 370,000 hectares sown annually to cereal (primarily wheat, but also barley and maize) and fodder crops. About 160,000 hectares are rainfed crops and the remainder is fallow. Yields are low on rainfed land, achieving about 1,000 kgs per hectare in average rainfall years (but can be considerably less in dry years), compared to 3,000 kgs per hectare with improved varieties and supplementary irrigation.

Smallholder farmers dominate the agriculture production systems but have limited access to assets. In Pakistan, about 60 percent of farmers have access to only 16 percent of land and have farms of less than two hectares. However, in Balochistan Province landholdings tend to be larger, with only a quarter of farms below two hectares in size, and a further 55 percent between two and ten hectares, however access to land is not the key constraint as due to the aridity of the climate the key production factor is the availability or not of irrigation. Forty-five percent of farmland in Balochistan is irrigated from different sources. More than 60 percent of farmers of the USABBA project areas are owner-operators, while 20 percent are tenant farmers and less than ten percent are sharecroppers. There is a tendency for owners of larger farms to rent or sharecrop their "rainfed" lands while cropping their "irrigated" lands for themselves.

1.3.1.4. Water Resources

Water supply is a critical and unreliable input in the agricultural systems of Balochistan Province. Much of the rural population depends on irrigation, either surface or groundwater, to engage in crop production, which has led to a rapid decline in the groundwater table in recent years. Rainfed cropping is prone to exceptionally high risk, particularly given the drought conditions that prevailed in the province from 1999 to 2004, with rainfall 50 to 60 percent below the average annual level of only 250 millimetres. Consistently low rainfall has reduced the water flow in seasonal rivers used for spate irrigation, affected rainfed

agriculture, and exacerbated the decline in the groundwater table. Moreover, the effect of droughts in recent times has been compounded by unsustainable abstraction from the deep aquifers of north-eastern Balochistan (i.e. the Pishin-Lora, Zhob and Nari river basins) and to a lesser extent, the shallow aquifers of western Balochistan (in particular, the large "Kharan closed desert basin" of Kharan District, northern parts of Washuk District and central parts of Chagai District) and often inefficient use of the water that is available, inefficient agricultural practices and depletion of forest and other natural resources in the watersheds.

In western Balochistan Province, the traditional water harvesting systems are: (i) *karezes* (i.e. underground tunnels dug into hillsides in a gentle upslope direction until reaching the water table, where the water is captured and used for gravity-fed flood irrigation); (ii) the *khuskaba* system, whereby earthen bunds are constructed on the contour across farmers' fields to capture rainfall and run-off water, which then infiltrates into the soil; and (iii) the *sailaba* system, whereby much longer earthen bunds are constructed across the slopes to intercept the flood waters of torrents as they emerge from the hillsides and deliver the captured water to the farmers' fields located at the foot of mountains and alluvial fans. In Kech District, *kaurjo* canals deliver irrigation water to farmers' fields from the more permanent rivers of the Kech River basin. However, all of these systems are inefficient and inequitable in their water delivery and distribution and, given the recent droughts, there is a need for their rehabilitation, including the realignment and re-shaping of bunds, the re-shaping and lining of critical sections of farmer-managed water courses, and the land-levelling of farmers' fields.

In more recent times, electric and diesel-powered tube-wells have been introduced and expanded across all districts of western Balochistan Province leading to the unsustainable extraction of groundwater resources. The subsequent lowering of water tables has meant that many traditional *karezs* can no longer function and farmers have been forced to tunnel deeper into hillsides or find alternative means of harvesting irrigation water. Given the high potential for groundwater supplies, there is a need for research and development in low energy groundwater extraction (e.g. solar or wind-powered) and the introduction of efficient water use such as trickle and drip irrigation systems. Many tube-wells have fallen into disrepair because of a lack of maintenance and a lack of local capacity for repair. There is also a need for these tube-wells to be repaired and their users trained in operation and maintenance as well as efficient on-farm water management systems.

In Kech District, the Federal Government has just completed construction of the Mirani Dam with a potential irrigated command area of 13,200 hectares. The Department of Agriculture and Co-operatives is now developing the on-farm water management systems and promoting the production of cotton, pulses, fodder crops, *rabi* wheat and vegetables (particularly tomatoes) on this scheme.

The International Union for Conservation of Nature⁷ and the World Bank⁸ has further recommend that all investments in irrigation development in Balochistan Province should be combined with: (i) the construction of check or delayed action dams for the recharging of local groundwater tables and groundwater dams for storing water underground; and (ii) the implementation of integrated and collaborative watershed management practices to recharge groundwater aquifers, rehabilitating rangelands, controlling flash floods, and enhancing fuel-wood production.

⁷ International Union for Conservation of Nature, Pakistan Water Gateway; "Water Potential for Balochistan"

⁸ World Bank; Project Appraisal Document for the Balochistan Small-scale Irrigation Project; 2008 (Section 2.4.3)

1.3.1.5. Rangelands and Livestock Production

Some two-thirds of rural households in western Balochistan engage at least part-time in animal husbandry as large parts of the province are arid and unsuited for arable agriculture. Higher living standards and urbanisation, not only in Pakistan, but neighbouring countries and regions, have boosted the commercial potential of Balochistan's meat, milk, wool, etc. Yet, the bulk of production systems remain subsistence-oriented. For centuries, transhumance and common property grazing developed as response against seasonal rains and localised droughts. But the impact of the prolonged drought (1998 to 2005), growing human and livestock populations (and over-grazing), influxes of refugees and changes in land-use patterns due to urbanisation have reduced the common property resource across the rangelands.

Ninety-three percent of Balochistan's land area (32.3 million hectares) is classified as rangeland of which 20.9 million hectares are used for grazing. However, only about three million hectares are classified as "good to excellent" grazing (i.e. yielding 250 to 280 kg of dry matter per hectare) and about six million hectares as "medium" grazing, and are found mostly in highland Balochistan. About 11.7 hectares are classified as "poor" grazing (i.e. yielding 30 to 50 kgs of dry matter per hectare) and are found are found generally in the southern region. It is estimated that between 85 and 95 percent of all feed for Balochistan's small ruminants come from the rangelands. Most rangelands are tribally controlled but rangeland management is generally not practised. There is severe overgrazing and deforestation because of pressure from sheep and goats and from increased household fuel-wood use.

Sheep and goats are the major livestock in Balochistan Province. Of all provinces in Pakistan, Balochistan has the largest number of sheep (12.8 million) and camels (380,000) and third largest number of goats (11.8 million), i.e. 48, 41 and 22 percent of the total populations respectively. As a general rule in Pakistan, over 60 percent of the sheep and goat populations are kept in herds of less than 30 animals. However, in Balochistan Province there are often large herds of goats and sheep that are grazed on the arid and semi-arid rangelands.

More than ten percent of the sheep and goats and nearly 15 percent of the camels are found in the districts of Chagai, Kech, Kharan, Nushki, Panjgur and Washuk. The populations of sheep and goats are fairly uniform across Chagai, Nushki and Panjgur Districts but high for sheep in Kharan, Nushki, Panjgur and Washuk Districts and high for goats in Kech, Kharan and Washuk Districts. However, sheep populations are low in Kech District. Camel populations are also uniform across western Balochistan with the exception of Panjgur District, where the mountainous terrain means that number of camels are approximately one-third of the other five districts. Kech District has a high population of cattle and draught animals (including horses, mules and donkeys), which is reflected in significantly higher areas of fodder production.

Overall, there are three key obstacles to improving the conditions of the rangelands, viz: (i) low land productivity, which is a consequence of both natural and man-made factors; (ii) poor integration into national and global markets; and (iii) inadequate veterinary, extension and other support services. Importantly, livestock are more evenly spread across rural households than agricultural land resources. This means that productivity gains in livestock are more likely to be pro-poor (and have a stronger gender dimension) than productivity gains of major crops.

Ownership of the rangelands is vested in the State and as such, the legal entitlement over range management. Most rangelands are tribally controlled but rangeland management is generally not practised. Hence, the livestock herders and forest users feel that they have customary rights to graze their animals on the rangelands, but this is not vested in law. There is severe overgrazing and deforestation because of pressure from sheep and goats and from increased household fuel-wood use – a tragic example of the "tragedy of the commons".

The policy environment where title rests in the State but traditionally rural communities (or others, if deemed appropriate) can gain security of access for long-term use of the natural resources is critical area that needs to be addressed by policy makers. In 2002, the Provincial Government of North West Frontier Province (now Khyber Pakhtunkhwa Province) promulgated the Forest Ordinance 2002 which passed into law, amongst others: (i) the integration of resource management, whereby the different land use types (i.e. forests, watershed areas, rangelands, bio-diversity areas, etc) and vegetation and other resource types (i.e. trees, shrubs, grasses, wild animals and fisheries) will be managed in an integrated way as part of the overall ecological system; and (ii) participation of the local communities and other stakeholders in the planning, implementation, monitoring and evolution of natural resource management activities (including the leasing of rangelands to community organisations on a long-term basis – on condition of sustained protection and productivity). No other province in Pakistan has legalised this linkage between livestock production and the rehabilitation and protection of degraded rangelands. In 2011, the Provincial Government of Balochistan requested FAO to assist its Forestry and Wildlife Department in the development of such a forest policy.

1.3.1.6. Crop Production

The prolonged drought had a seriously detrimental effect on Balochistan's cereal crop and horticultural production. Production volumes declined by about seven percent annually between 1998/1999 and 2004/2005. The production of major crops is still below that of pre-drought levels. The fluctuating availability of water, inefficient use of water, lack of rural infrastructure, lack of certified and pure seeds, and the slow adoption of new and improved technologies all contribute to low yields compared to other provinces of Pakistan. These factors have lead to a small agricultural enterprise sector – in 2002/2003, out of Pakistan's 46,378 agricultural companies, only 305 resided in Balochistan, and only 80 in rural parts of the province.

<u>Wheat</u> is the main cereal crop and staple food crop grown in Balochistan Province. The area planted to wheat has increased from an average of 351,600 hectares per annum between 1990 and 1995 to 381,200 hectares between 2000 and 2005. With regard to western Balochistan, Chagai and Nushki Districts grow significant areas of wheat in comparison to Kech, Kharan, Panjgur and Washuk Districts. However, wheat production has decreased from an average of 782,600 tonnes per annum between 1990 and 1995 to 759,000 tonnes between 2000 and 2005. Similarly, yields have decreased from 2,226 kg/ha to 1,991 kg/ha over the same period. In the 1990s the average area of wheat production under irrigation per annum ranged from 71 to 85 percent, while, in the 2000s, this has risen to between 86 and 92 percent per annum. Average annual wheat yields per annum for irrigated areas: in the 1990s was 2,600 kg/ha; between 2005 and 2010, it had fallen to 2,200 kg/ha; but, in the drought years of 1993 and 2010 has been 1,100 kg/ha, except for drought years, when it has ranged from zero to 300 kg/ha.

Balochistan Province is known as the "fruit basket of Pakistan". The province provides 90 percent of the grapes, cherries and almonds, 70 percent of the dates, 60 percent of peaches, pomegranates and apricots, and 34 percent of the apples produced annually in the country, viz:

• In 2009, Balochistan produced 75,000 tonnes of <u>grapes</u> from 15,000 hectares of land – an increase from 40,000 tonnes off 8,700 hectares in 1995.

- The coverage of <u>almonds</u> has remained static with 10,000 hectares harvested per annum; however, production has decreased by half, from an average of 46,000 tonnes per annum in the late 1990s to 23,000 tonnes per annum in the late 2000s.
- The coverage of <u>date</u> plantation has increased over the past seven years, from 43,000 hectares in 2004 to 51,000 hectares in 2010; however, date production has fallen from an average of 400,000 tonnes per annum in the late 1990s to 230,000 tonnes per annum in the late 2000s.
- While the coverage of <u>peach</u> production has increased considerably over the past two decades, from 2,100 hectares of orchards in 1993 to 9,500 hectares in 2009, production has decreased from a peak of 34,000 tonnes in 1999 to 25,000 tonnes in 2009, with significant troughs in the drought-affected years of 2000 to 2007.
- <u>Pomegranate</u> production shows a similar trend to peaches: an increase of orchards from 3,800 in 1995 to 11,000 hectares in 2009, but a decrease in average annual production from 80,000 tonnes in the late 1990s to 35,000 tonnes in the late 2000s.
- <u>Apricot</u> production has increased constantly over the past two decades, from 160,000 tonnes off 9,500 hectares of orchard in 1995 to an annual average of 190,000 tonnes off 27,800 hectares in the late 2000s.

The general trend has been one of an overall increase in the area of orchards and plantations since the end of the long drought in 2005 but a decrease in the overall production of fruits. This is probably because mature orchards were lost during the drought and have been replanted and are now going through a juvenile/non-bearing phase and are not expected to reach full production for up to ten years (given the recurrent dry periods and floods and inefficient irrigation systems). Moreover, orchards have been replanted with poor quality tree seedlings and lower levels of orchard management have been witnessed since the drought. With regard to western Balochistan, Kech and Panjgur Districts grow significant areas of fruits (especially dates).

<u>Vegetable</u> production in Balochistan Province over the past two decades has mirrored that of the weather patterns over that time. Vegetable production peaked in 1995 with 35,000 hectares producing 522,700 tonnes; slumped in the early 2000s – 2000 was the worst year with 18,400 hectares producing 173,100 tonnes; and a gradual resurgence until 2009 when 40,000 hectares produced 495,000 tonnes. With regard to western Balochistan: Chagai and Nushki Districts grow significant areas of melon; Chagai, Kharan, Nushki and and Wahuk Districts grow significant areas of onion; and Kech District grows significant areas of vegetables, condiments and spices.

More than a third of this high-value horticultural produce never reaches prime markets because of high on-farm and off-farm post-harvest losses and underdeveloped input and output markets and value chains, which include a lack of cleaning and grading, inappropriate storage, packaging and transportation, poor or absent infrastructure (e.g. cold chains) and an overall lack of market information.

1.3.1.7. Food Security

A recent WFP/FAO study⁹ estimated that the number of undernourished people in Pakistan (as per the Government's calorie consumption threshold of 2,350 kcal/adult/day) increased from 78 million in 2005 to 96 million in 2010. This increase of 18 million people is attributed to price inflation (13 million) and the massive flood disaster in 2010 (five million). On

⁹ WFP; Pakistan – Impact of Shocks on Household Income and Food Consumption Simulation Modelling, 2011

average, the undernourished population is about 603 kcal per day below the minimum requirement and about six million tons of food per annum (wheat equivalent) is necessary to meet their requirements. The 2011 Annual Report of the Federal Government of Pakistan's Planning and Development Division (Nutrition Section) states that the cost of a minimum food basket which provides a minimum average energy of 2,150 calories, has increased from PKR 960 for 2007/2008 to PKR 1,750 for 2010/2011 – with the most significant increases (of PKR 300 to 400) taking place in 2008 and 2010.

Of the 31 districts in Balochistan Province, only three are categorised as "borderline food secure", eight as "food insecure", and the remaining 20 as "extremely food insecure" (including the six districts of western Balochistan).

Low productivity and limited access to land and markets mean that smallholder farmers in Balochistan Province are unable to benefit from increased food commodity prices. Indeed, almost all poor households in the Balochistan Province are net-food importing. Increased factor input prices – most notably fertilisers – and increased transportation costs to market, coupled with increasing food prices has meant that poor farming households are particularly vulnerable to food price crises. The socio-economic baseline survey for the FSPAB Pilot Project Phase (2006) indicated that household expenditures on food items are higher than the national average, accounting for 70 percent of total expenditure in Mastung District, 71 percent in Loralai District and 82 percent in Killa Saifullah District – notwithstanding the fact that almost all of these households are primarily involved in agricultural-based livelihoods.

Whilst the current situation means that these households are particularly vulnerable to the food price crisis, it is also true that there is considerable scope for these households to benefit significantly from productivity improvements, in particular with regard to staple food items such as wheat, barley and maize. FAO reported that the FSPAB Pilot Project Phase resulted in an average 35 percent increase in wheat and barley productivity amongst project beneficiaries, and had led to 70 percent increases on the adaptive research and demonstration plots in the project area.

1.3.1.8. Gender Dimension

Women in rural Pakistan have been described as being the most socially excluded. Rural women are the most deprived in terms of access to basic social services, livelihood opportunities and vulnerability to violence, e.g. 65 percent of the women in urban areas are literate in contrast to 30 percent in rural areas. Gender disparities are also pronounced in rural areas: men's literacy rate (60 percent) is twice as high as that of women (30 percent). Women in rural areas have heavy workloads and carry out a wide range of tasks in water and firewood collection, crop production, livestock rearing, food processing and off-farm activities. Studies show that a rural woman in Pakistan works 15.50 hours a day, spending 5.50 hours in caring for livestock, but can provide only 50 minutes for the care of her own children. Despite their hard work, women do not get the commensurate return because of the exploitative and gender biased arrangements which determine their share in crop and livestock production.

Studies have shown that rural women contribute less than five percent to the incomes of the households. This is mainly because only directly earned income is considered and also because the women from poor households, due to asymmetries in market access, get very low wages. They are also unable to work much of the time due to social exclusion and frequent illness. The share of rural women in household income of the poor and the extremely poor is higher than their contribution in the non-poor segment of the population.

Section 1.2.1 has already highlighted the high gender disparity in primary education of the six project districts, with the southern districts of Kech, Kharan and Panjgur Districts better off than their northern neighbours of Chagai, Nushki and Washuk (Table 1). On the other hand,

the disparity between literate boys/men and girls/women over ten years of age ranges from 20 to 25 percent in Washuk, Chagai and Kharan Districts, to 35 percent in Panjgur and Kech Districts, and to 50 percent in Nushki District. One other significant fact is that mortality rates for girls of western Balochistan Province is 107 per thousand compared to boys at 74 per thousand, with the highest differential in Kharan District and the least in Kech and Panjgur Districts.

Attempts by outsiders from the international development community to focus on female gender balance and empowerment issues have in many cases not recognised the reality of Balochistan's culture; consequently, alienation of the males that control the society has occurred. Empowering males out of these roles dictated by the traditional culture of project areas could be an important component of a gender approach that would help both women and men. A change of strategy and focus is warranted, since the forceful insistence on the imposition of global gender policy on the fundamentally male-dominated community of Balochistan Province may not only hinder progress but will also add to security risks. These very real issues will be fully taken account of in the project approach to gender as they could adversely affect achievement of the project's ambitious goals for active women's involvement.

Many parts of western Balochistan are characterised by strongly conservative traditions and customs regarding the role and position of women within society. This may significantly restrict the contribution of women to household, community and provincial economic growth and at the same time, may limit the extent to which agricultural and rural development programmes are able to confront the gender issue directly. In many instances, it may be that the best way to empower women may be to empower men and families as well. Successful project interventions will be the ones in which women's economic participation are seen to benefit the family and household as a whole. The proposed project will therefore focus women-centred activities on income generation and market-orientated activities in general.

1.3.2. Development Priorities

1.3.2.1. Government of Pakistan's New Growth Framework

The Federal Government of Pakistan's Planning Commission is engaged in rethinking the country's growth strategy with a view to developing policy and reform ideas for achieving sustainable growth acceleration. While continuing with public sector investment programmes, the strategy will focus on productivity enhancement (especially in the public sector), deregulation to make better markets, encourage innovation and investment, and deregulate city space for economic and commercial growth. The new growth strategy places on the "software" of development (i.e. incentives, institutions, markets, communities and especially questions of governance) rather than on the "hardware" (i.e. physical investment in buildings and equipment) such that it emphasises micro-economic foundations of the macro-economic framework. The Framework represents a different approach to promote the dynamism of individuals and enterprises.

The "Pakistan: New Framework for Economic Growth (May 2011)", which replaces the Government's Medium-Term Development Framework identifies the following themes of growth as national priorities:

- "the need for productivity" (particularly agriculture) though innovation, creation and commercialisation of knowledge, broader investment and encouraging private sector involvement;
- market, land and taxation reforms (including legal issues and their regulatory environment);

- promoting trade openness and competition, improving transport efficiency, storage facilities and packaging, and deregulating agriculture and rural markets;
- "creative cities"; and
- "youth engagement".

The Planning Commission proposes that increased productivity be achieved through, amongst other processes, the "promotion of public-private partnerships".

1.3.2.2. Government of Pakistan's National Zero Hunger Action Plan

In March 2012, the Federal Government of Pakistan recognised the fact that many parts of Pakistan are food and nutrition insecure (Section 1.3.1.7) and launched it's "National Zero Hunger Action Plan", which is being prepared by a technical working group co-lead by the Ministry of Food Security and Research (MINFSR), FAO, World Food Programme and Sustainable Development Policy Institute.

1.3.2.3. Balochistan Poverty Reduction Strategy

In 2003, the Provincial Government of Balochistan published a Balochistan Poverty Reduction Strategy which still guides the development priorities in the province. The poverty reduction strategy's key pillars include engendering broad-based growth in the main sectors of provincial economy, managing scarce water resources efficiently, governance reforms, emphasis on human development and addressing vulnerability to shocks through social safety nets.

Farm to market and rural access roads is an area of priority along with access to formal affordable credit in water conservation and management. The strategy also emphasises the introduction of efficient water use systems such as trickle and drip irrigation, flood water harnessing and expansion of irrigated command areas. The human development axis focuses on the provision of literacy and education – with special focus on vocational training and technical training – improving health and nutrition of vulnerable groups and the provision of potable water and sanitation facilities. In gender, the empowerment of women, equal job opportunities, equity of status and adult female education are listed as priority areas. In environment, conservation of natural resources and sustainable management of dry and wetlands are priority areas. Pro-poor interventions, such as *Zakat* and *Baitual Mal* funding and food support programmes, are listed as key interventions for pro-poor safety nets.

The Government of Balochistan is at present preparing a seven-year **Comprehensive Development Strategy** for the province to reflect the post-Eighteenth Amendment and Devolution environment (Section 1.4.1). The Comprehensive Development Strategy is an evolutionary document that is based on lessons learned from the Poverty Reduction Strategy and various recent thematic/sectoral studies commissioned by the Government of Balochistan's Planning and Development Department (P&DD). The Government of Balochistan is currently in discussion with the World Bank and in an advanced stage of convening a donor co-ordination conference to establish a common framework of understanding amongst the various actors in the province's development. In this context, P&DD has agreed to the formation of a provincial Technical Working Group (TWG) for the agriculture sector to be convened by the Department with responsibility for investment co-ordination, sharing experiences and building synergies in the crops, livestock, fisheries and forestry sub-sectors (Section 4.1.3).

1.3.2.4. Millennium Development Goals

While the Project principally seeks to contribute to progress with respect to MDG 1 (the "eradication of extreme poverty and hunger)", the other Goals also play an important role. For example: all improvements in agricultural productivity would be "environmentally sustainable" (MDG 7) through enhanced soil and water conservation and quality, watershed management and rangeland improvement, etc; and "significant reductions in child and maternal mortality and improvement in child development, as well as improved resistance to diseases" (MDG 6), could be significantly achieved through better nutrition by way of increased household consumption of fruit, vegetable, dairy and meat products. Moreover, "gender equality and the empowerment of women" (MDG 3) is a fundamental requirement and ways would be demonstrated to achieve this Goal, e.g. the expansion of group-based women community organisations for empowerment and community-led development, women "farmer field schools" for technology transfer, and women farmers' marketing collectives and their mutual marketing organisations for produce marketing.

Pakistan's Poverty Reduction Strategy Paper, prepared in 2003, recognises the importance of reducing rural poverty as part of the country's overall poverty reduction efforts. It also assigns a key role to the rural sector in accelerating growth and reducing rural poverty, placing major emphasis on employment-generating growth in agriculture and other sectors.

1.3.2.5. AusAID's Strategic Approach to Aid in Pakistan

The overall objective of the Australian aid programme is to work with the Government of Pakistan towards a stable, secure, democratic country through broad-based social and economic development and poverty reduction in line with MDGs. Australia's aid programme to Pakistan will be guided by the Australia-Pakistan Development Partnership which was formalised in 2011. The partnership sets out the principles, mutual commitments and priorities for development co-operation as agreed to by the Governments of Australia and Pakistan. It will form the basis of ongoing engagement on the Government of Pakistan's development priorities and the performance of Australia's aid programme to Pakistan.

Australia's aid programme in Pakistan is based on four pillars, viz: (i) enhancing basic service delivery in health and education; (ii) increasing agricultural productivity and improving rural livelihoods; (iii) strengthening democratic governance; and (iv) supporting vulnerable populations through humanitarian assistance. Australia will also seek to assist Pakistan with reconstruction and rehabilitation in response to the devastating floods that hit the country in 2010 and 2011. In delivering the aid programme, Australia will work with the Government of Pakistan, established and credible partners including the United Nations, multilateral development banks, international and local non-government organisations (NGOs), and like-minded donors.

Australia is well placed to engage in Pakistan's agriculture sector and will do so through: (a) addressing rural food insecurity, particularly in the less fertile areas bordering Afghanistan; and (ii) extending and expanding its existing Agricultural Sector Linkages Programme (ASLP) with the Australian Centre for International Agricultural Research (ACIAR), which focuses on poverty reduction and technical linkages between agriculture researchers and institutions in the two countries.

1.3.2.6. United Nations Development Assistance Framework

The Project represents a key element of the "agriculture, rural development and poverty reduction" thematic area of the One UN Programme-I (2008 to 2012). In late-2011, the United Nations Country Team prepared a framework for the successor One UN Programme-II

(2013 to 2017), which comprises six strategic priority areas. The Project represents a key element of one priority area, viz. (i) inclusive economic growth through the development of sustainable livelihoods; and contributes to four other priority areas, viz. (ii) food and nutrition security for the most vulnerable groups; (iii) increased resilience to natural disasters, crises and external shocks; (iv) strengthening governance and social cohesion; and (v) ensuring gender equality and social justice.

1.3.2.7. FAO's New Vision and Strategic Framework, 2010 to 2019

The Independent External Evaluation of FAO conducted in 2006 provided the Organization with leverage for change. To respond to some of the key issues highlighted in the Evaluation, FAO has realigned its core business towards a new strategic framework, implemented through an initial plan of action for renewal. The strategic framework, which is driven by results-based management, requires a strengthened planning and reporting capacity, as well as more effective knowledge sharing in order to achieve the common goal of FAO.

The Vision included in **FAO's Strategic Framework**, **2010-2019** is that, by 2020, we will be living in a "world free of hunger and malnutrition where food and agriculture contribute to improving the living standards of all, especially the poorest, in an economically, socially and environmentally sustainable manner".

This will be achieved through the active pursuit of three Global Goals, viz:

- i. Reduction in the number of people suffering from hunger, progressively ensuring a world in which all people at all times have sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life.
- ii. Elimination of poverty and the driving forward of economic and social progress for all, with increased food production, enhanced rural development and sustainable livelihoods.
- iii. Sustainable management and utilisation of natural resources, including land, water, air, climate and genetic resources, for the benefit of present and future generations.

In order to achieve the Vision of FAO and the Global Goals of its Members, the Organization has defined **eleven Strategic Objectives**. They focus on where FAO can best assist Members to achieve sustainable impacts in addressing the challenges and opportunities facing food, agriculture and rural development. The Strategic Objectives represent a combination of interlinked and cross-sectoral impacts, addressing the areas of crops, livestock, fisheries, food safety, forestry, natural resources, enabling environments, food security, gender, emergencies and investment. Added to these, FAO has also identified **six guiding principles** to underpin the Organization's development work, viz: (i) work through participatory and process-oriented approaches; (ii) build on existing knowledge, methods and capacities; (iii) ensure complementarity of actions and links with other stakeholders and actors; (iv) focus on capacity development of rural communities and all other stakeholders of the food chain; (v) focus on gender equity; and (vi) promote "do no harm" and "rights-based" approaches.

1.3.2.8. FAO's Country Programming Framework (2012 to 2017)

In late-2011, the FAO Representation in Pakistan drafted a Country Programming Framework (CPF) to define FAO's medium-term response to the assistance needed by Pakistan in pursuit of its development objectives (i.e. the "New Growth Framework"), MDGs and the One-UN Programmes and within FAO's Strategic and Regional Priority Frameworks. The CPF takes a strategic results-based approach that builds on FAO's comparative strengths and partnerships at national and international levels to increase the impact and effectiveness of FAO support as well as to enhance resource mobilisation opportunities.

The FAO Representation in Pakistan identified four priority action areas for CPF, viz: (i) food and nutrition security; (ii) inclusive agricultural economic growth; (iii) governance capacity development; and (iv) disaster risk reduction and emergency response; while "empowerment of women and ensuring gender equality" would be treated as a cross-cutting action for all outputs and activities of CPF. The proposed outputs and indicative activities and anticipated results of the Project would be expected to connect with the results matrix of CPF.

1.4. Sectoral Policy and Legislation

1.4.1. The Eighteenth Amendment and Devolution

On 1 July 2011, the Government of Pakistan devolved the mandate of the Ministry of Food and Agriculture (MINFA) and of Ministry of Livestock and Dairy Development (MINLDD) to the provincial Departments of Agriculture and Co-operatives and of Livestock and Dairy Development respectively. MINFA and MINLDDs' federal responsibilities were transferred to the Economic Affairs Division of the Ministry of Economic Affairs and Statistics and the Ministry of Commerce respectively. However, on 27 October 2011, the Government of Pakistan established the Ministry of Food Security and Research (MINFSR) which, amongst others, is responsible for the Agriculture Policy Institute, Federal Seed Certification Board, National Fertiliser Development Corporation and Pakistan Agriculture Research Council (which includes the Arid Zone Research Centre (AZRC) in Quetta, Balochistan Province).

1.4.2. Provincial Government of Balochistan

In Balochistan Province, the agriculture sector is represented by the Agriculture and Cooperatives, Livestock and Dairy Development, Forest and Wildlife, and Irrigation Departments. The Agriculture and Cooperatives Department includes Directorates of Agricultural Extension, On-Farm Water Management, Agricultural Research, Agricultural Engineering and Agriculture Economics and Marketing Directorates. The Livestock and Dairy Development includes Directorates of Research and Supplies, Farms and Feed Resources and Animal Health and Production Extension. It should be noted that the Livestock and Dairy Development Department has no provision to address the problems of inefficient livestock marketing systems and overgrazing/pasture management of degraded rangelands. The Forest and Wildlife Department includes Conservator and Directorates of Forestry, Range, Soil Conservation and Wildlife.

Poor governance, low institutional capacity, and a lack of political will and commitment by the public sector to address food insecurity, rural poverty and environmental degradation in a planned and systematic way are common agricultural issues. Provincial Government departments lack well-qualified, trained and experienced personnel, and existing staff are occupied with the operation and maintenance of current government farms, outdated research institutions and dilapidated irrigation schemes and sectoral administrative bureaucracies. Thus, little capacity exists to conduct technical surveys (i.e. socio-economic, marketing, engineering, etc) and holistically plan and design new and modern projects. Moreover, crops, livestock, irrigation and forestry service delivery are handled in isolation and smallholder mixed farming systems have no one agriculture support service provider to assess and address their day-to-day issues on a livelihoods basis. At the community level, there is also little interaction or information exchange among communities and the Provincial Government on the options available to them to increase agricultural productivity and income on a long-term basis.

Department of Agriculture and Co-operative's extension officers and agents are present in most districts and tehsils of western Balochistan Province (at district and tehsil agriculture offices, agriculture circle offices and agriculture extension centres), but lack the financial resources and technical knowhow to deliver an efficient and effective modern-day extension service to resource-poor farmers. Department of Livestock and Dairy Development-owned veterinary services (i.e. tehsil veterinary hospitals, civil veterinary hospitals and civil veterinary dispensaries) are well represented in Kech, Kharan, Nushki and Panjgur Districts but lack the resources to extend diseases surveillance, animal health and artificial insemination services to remote rural areas, in particular those of Chagai and Washuk Districts. NGO and CBO-initiated **community animal health services have proven successful in other parts of Pakistan and need to be introduced and extended to rural parts of western Balochistan**.

2. RATIONALE

2.1. Problems/Issues to be Addressed

Districts of western Balochistan Province are characterised by high levels of rural poverty. Rural livelihoods are largely dependent on crop and livestock production. Rainfall is limited, variable and unpredictable and crops are either irrigated or reliant on water-harvesting or rainfed systems. Irrigated cropping systems are the most productive while rainfed cropping systems are of lower productivity and extremely variable, but the largest cultivable area available to poor farm families. The depleted rangelands are critical to smallholder farming systems because they support most of the province's livestock.

Agricultural problems and issues faced by marginal and smallholder farmers in western Balochistan Province can be summarised as follows:

- Crop and livestock productivity levels are generally low and partial or complete crop failures are common under rainfed conditions.
- Limited access to water supplies, inefficient use of the water that is available, and low levels of on-farm water management compounded by the ever increasing effects of climate change and variability. Increasing droughts mean that water flow and flooding in seasonal rivers has been significantly reduced, groundwater supplies are diminishing because of over-exploitation by tube-wells and *karezs* (with little opportunity for recharge), and the increasing frequency of flash floods results in worsening riverbank erosion and damage to water harvesting structures.
- Poorly managed, over-grazed and degraded rangelands resulting in low levels of livestock production, increasing soil erosion and reduced water storage. There is an overall livestock nutritional deficit in total digestible nutrients and protein and this is reflected in low conception, lambing and weaning percentages. The 2000 Balochistan Conservation Strategy reported that the number of sheep and goats in Balochistan Province was six to seven times the actual carrying capacity of the rangelands. The resulting poor nutrition has led to high mortality, high parasite loads and the stunted growth of young animals. Livestock owners sustain high losses, especially during droughts.
- Weak research and extension systems with very limited outreach capacity mean that farmers have very little, if any, access to knowledge and information on new and improved technologies, practices and opportunities for increasing crop and livestock productivity.
- A significant proportion of high-value horticultural and animal produce never reaches prime markets because of inadequate knowledge of post-harvest requirements and weak and underdeveloped value chains. As new methods to raise productivity for agricultural production are introduced, farmers will need to understand the demands of the market and how to obtain the best prices for their products. However, and despite the expansion

of mobile telephone networks, farmers lack access to up-to-date information on demands for their produce and current market prices and still rely on "middlemen" (who are prone to charge excessive overheads for their services) for such information and for buying their produce (at relatively low prices) at the farm-gate.

Helping to raise farmer incomes by connecting them to markets (i.e. urban areas and population centres) through support of physical and institutional structures for high-value products is a primary goal of this Project. Studies and analysis show that significant and rapid progress can be made by supporting and strengthening the value chains and information flow from groups of smallholder men and women farmers and markets.

- Off-farm employment opportunities in rural areas are often limited and seasonal migration, particularly of male household members, is common.
- Most poor rural households of western Balochistan are food deficit, and devote as much as 80 percent of household expenditure on food items, but at the same time, there is considerable scope to increase household incomes by raising agricultural production.
- Continuing increases in food prices to unprecedented levels create both risks and opportunities for resource poor smallholder farmers.

Women's participation in economic decision-making is often limited and their direct contribution to agriculture is less than in many other parts of Pakistan and the world as a whole. Women are far less likely to engage in field-based crop and livestock activities, owing in large part to their greater confinement to the home. There is therefore significant scope to increase women's involvement in economic decision-making and income-generation at the household levels (e.g. homestead vegetable and poultry production and agro-processing), but this can only be achieved in ways that are sensitive and amenable to existing cultural norms and traditions.

In short, the economic opportunities for poor rural households in western Balochistan Province are limited. Crop and livestock productivity is low, markets are highly undeveloped, household food and nutrition insecurity is common and household livelihoods are vulnerable and fragile. At the same time, there can be no doubt that agriculture will remain the mainstay of household livelihoods and for the majority of households in rural areas for decades and generations to come. As a result, there is considerable need and scope to increase household incomes by improving crop and livestock productivity and strengthening market access and value chain linkages. This would enable smallholder farmers to enjoy increased returns from crop and livestock production in western Balochistan.

2.2. Stakeholders and Target Beneficiaries

2.2.1. Project Stakeholders

Key stakeholders of the AUSABBA Project include:

- Poor men and women smallholder farmers from existing co-operatives and communitybased organisations (CBOs), newly created informal men and women community organisations (COs) and their district, tehsil and/or union council-based CO alumni associations and farmer field school (FFS) networks, and farmers marketing collectives (FMCs) and their more formal mutual marketing organisations (MMOs) – all brought together to establish smallholder producer and marketing groups and improve the competiveness of targeted value chains.
- Private sector organisations such as chambers of commerce, market boards and private companies that are crucial to value chain development in the project area, i.e. input

suppliers, buyers, collectors and traders, manufacturers of farm tools and agricultural implements and equipment, and wholesalers, processors, transporters and retailers.

- Government line departments, institutes and agencies specialising in agricultural research and development and produce marketing, e.g. the Balochistan Provincial Agriculture and Co-operatives, Livestock and Dairy Development, and Forestry and Wildlife Departments; the Pakistan Agricultural Research Council (PARC) and its National Agricultural Research Centre (NARC), Islamabad and AZRC, Quetta; the Pakistan Space and Upper Atmosphere Research Commission (SUPARCO); and national and provincial universities and colleges/faculties of agriculture.
- AusAID and FAO, as well as like-minded donors (especially the International Fund for Agricultural Development (IFAD), USAID and the World Bank), and their international implementing partners and associated programmes and projects (e.g. ACIAR, the International Centre for Agricultural Research in the Dry Areas (ICARDA), International Maize and Wheat Improvement Centre (CIMMYT), International Water Management Institute (IWMI), Internet and Mobile Marketing Association (IMMAP) and United States Department of Agriculture (USDA) within both Balochistan Province and Pakistan and the South and West Asia regions as a whole. All of these organisations/centres have representations in Pakistan.

2.2.2. Project Area

The Project would target the arid and mountainous districts of **Chagai**, **Kech**, **Kharan**, **Nushki**, **Panjgur and Washuk** in western Balochistan Province. As mentioned above, the project area covers 138,000 km² of barren mountainous terrain comprised of arid rangelands and potentially fertile valley bottoms. It is estimated that the project area comprises nearly 905,000 rural households reliant on marginal and smallholder mixed farming systems (more than 40 percent of whom reside in Kech District). It should be noted that the six districts of western Balochistan have received very little investment in the agriculture sector in the past and any community organisation interventions would be starting at a very basic level. However, potential for small-scale water harvesting and irrigation development and horticultural and animal products' value chains is high.

2.2.3. Target Beneficiaries

The AUSABBA Project would target primarily the resource-poor and agriculture-dependent households engaged in crop and livestock production in the project area. Project support might also be directed to larger producers who do not qualify as poor, yet play an integral role in the development of a competitive agricultural value chains and whose development could indirectly benefit smaller agricultural producers. The Project therefore aims to increase the incomes of some 10,200 direct beneficiary households (equivalent to 39,000 men, women and children¹⁰) by 20 percent in the target communities. This will lift approximately 50 percent of the beneficiary households identified as below the poverty line at the start of the Project above the poverty line by the end of the Project.

The AUSABBA Project would target both men and women marginal and small-scale farmers. The primary point of engagement would be through men and women's COs, although some activities might work directly with individual farmers or small groups of farmers and entrepreneurs not linked directly to a specific men or women CO. The Project would establish and support some 340 new COs or existing co-operatives and CBOs in the project area. The Project would maintain its policy of a minimum of 40 percent of COs established being

¹⁰ the average household size in the project area is 5.7 persons, with a high of 6.7 in Nuhski District and a low of 5.1 in Washuk District

women COs¹¹. This would mean a project target of 204 men COs/CBOs and 136 women COs/CBOs. The average size of COs would be 20 people, with a range of 15 to 30 household representatives – hence a total of some 6,800 primary household beneficiaries. An additional 3,400 beneficiary households are expected to benefit from the implementation of men and women FFSs and community animal health services and support to FMCs, MMOs, agroenterprises and agri-business development services as well as neighbouring non-project communities. The Project would also employ 20 District Leaders/Marketing Associates and Community Development and Market Facilitators, (i.e. 10 male and 10 female), each of whom would support approximately 20 COs (but only ten to 15 COs in the more remote areas of Chagai and Washuk Districts).

Although the Project will work primarily through men and women COs, the project approach seeks to enable other people in the project area to see, understand and adopt the same practices and technologies developed by the Project for the direct beneficiaries. The number of secondary beneficiaries to benefit indirectly from the Project is expected to be at least double the number of direct beneficiaries, equivalent to approximately 20,400 households (or 116,000 men, women and children). Such households would benefit through improved access to food and reduced food insecurity and malnutrition and improved on and off-farm employment opportunities (e.g. seed, vegetable seedling and fruit tree nursery production, blacksmithing and fabrication of farm tools and equipment, agro-processing (i.e. fruits, vegetables, dairy products and wool), trading and transportation and food service industries).

The total number of project beneficiaries is therefore expected to be 30,600 households (i.e. 175,000 men, women and children), equivalent to 20 percent of the total rural population in the six project districts.

Particular efforts will be made to ensure that project design and implementation are fully gender sensitive and that benefit streams are shared equitably between men and women. In this regard, the Project would have a strong gender dimension cross-cutting all project activities, while several interventions would have women-specific activities (e.g. drinking water supplies, homestead gardening and poultry, dairy produce and wool processing). As a result, at least 4,100 women will benefit directly from the Project, leading to expected income increases of between 20 and 50 percent through agricultural improvements on the one hand, and new or strengthened market linkages on the other, including for non-agricultural products. It is also expected that an additional 5,100 women would likewise benefit from the Project indirectly (due to restrictions on women's mobility experience indicates that a lower multiplier for indirect beneficiaries is prudent).

Project beneficiaries would be selected following socio-economic baseline surveys (including initial market assessments) and participatory needs assessments of the six project districts. The baseline surveys would include food security and poverty impact assessments at the household level. Villages considered as good candidates to participate and contribute in project activities and establish and sustain COs on community-led development basis would be selected according to community-level participatory action planning principles.

2.3. Project Justification

The World Bank prepared an economic report for Balochistan Province¹² proposed a "road map" for provincial economic development based on "generating economic growth", "delivering services" (targeting the poorest and most vulnerable people) and "financing development" (emphasising careful prioritisation and effective management). The strategy for

¹¹ as developed under the USAID-funded and FAO-implemented USABBA Project

¹² The World Bank; Pakistan: Balochistan Economic Report – from Periphery to Core; May 2008

economic growth focuses on four thematic thrusts, viz: (i) exploiting the natural resource base; (ii) developing the location advantage; (iii) upgrading the value chains associated with (i) and (ii); and (iv) strengthening the foundations of business activity. Security issues are a direct obstacle for developing these economic thrusts. But such problems in selected districts (especially in eastern areas) affect the perceptions of potential investors for the entire province and thereby lower investments in other regions such as the more stable western districts of the province. Skills development is another dimension of business activities promoted by the World Bank, as Balochistan's labour force required human capital to embrace economic opportunities.

The same World Bank economic report for Balochistan Province proposed a series of instruments for generating growth, i.e. mining, oil and gas, Gwadar port, coastal development, linking enterprises and trade, the rural economy, livestock, agriculture and water. Details of the instruments for growth of the rural economy and crops, livestock and water sub-sectors are provided in Table 2.

	Investment	Innovation	Integration	Institutions
Rural Economy	Pursue rural electrification programmes		Promote off- farm income generation and basic motorised access to underserved communities	Promote programmes of bank loans to rural and small town entrepreneurs
Water	Phase out tube-well subsidies; invest in <i>sailaba</i> agriculture and high-efficiency irrigation systems; and invest in flood-water storage dams for drought mitigation	Initiate pilot schemes for micro-irrigation techniques; and encourage farmers to change to water- efficient crops	Promote structural change and urbanisation to switch water use away from agriculture	Improve cost re- covery mechanisms; establish a water entitlement scheme for large basins; and launch integrated water resource management systems
Crops	Increase funding for "green revolution" technologies and agricultural research on water-efficient crops; and expand vocational training centres at strategic rural locations	Establish public- private partnerships for "one-window" agro-service centres/value chains		Improve capacity to meet food safety and quality and sanitary phyto-sanitary standards
Livestock	Provide practical fiscal incentives to adjust stock size to meet grazing capacities	Engage communities in sustainable rangeland management; and set-up public-private collection and marketing systems	Promote market integration through "agro- livestock centres"	Promote grading systems that reward quality of produce; and improve inform- ation systems for pasture management and marketing

Table 2. Instruments for Generating Agricultural Economic Growth in Balochistan Province

Source: The World Bank; Pakistan: Balochistan Economic Report - from Periphery to Core; May 2008

Section 2.1 has already explained why the Federal Government of Pakistan requires external support through a project to address the problems and issues described. The AUSABBA Project would build on lessons learned from activities undertaken during the FSPAB Pilot

Project Phase and the ongoing USABBA Project. In this regard, particular attention will be paid to the findings and recommendations of the November 2010 FAO Terminal Report for the FSPAB Pilot Project Phase and the October 2011 USAID/MIS "independent" evaluation of USABBA and continued guidance and decisions provided by the Provincial Government of Balochistan's Planning and Development, Agriculture and Co-operatives, Livestock and Dairy Development, and Forestry and Wildlife Departments. In addition, consultations have been undertaken with all major stakeholders that have contributed to the identification of lessons learned from the FSPAB Project Pilot Phase and USABBA Project¹³.

2.3.1. Community Development

The Project would continue to follow community-led and participatory development approaches to economic and agricultural growth. The Project would establish men and women COs to function as the primary delivery point for the new knowledge, practices and technologies and similarly and act as the primary vehicle for linking male and female beneficiaries to markets through more informal men and women FMCs and more formal and registered MMOs - both comprising more entrepreneurial members of one or more contiguous men and women COs. Particular attention would be paid to strengthening women's capacity to participate, whereby 40 percent of all COs would be all-women COs. These would receive support tailored to their specific needs, capacities and potentials and would be offered preferential terms with regard to cost-sharing in comparison to the all-male COs. The COs would be formed and supported through the same participatory methodologies and demand-driven approaches as developed and practised under the USABBA Project, but adapted as required to satisfy the different ethnic groupings and farming systems of western Balochistan Province. The organisational capacities of community development staff of FAO and its implementing partners and service providers would be strengthened to ensure that these adjustments are made during the first year of the Project.

The USABBA Project has developed a "CO maturity index" assessment to assist with the project's exit strategy process to be agreed with local stakeholders¹⁴. The assessment system will include an analysis of empirical data to verify the proposed timelines. FAO proposes a different "exit strategy" for each of three different levels of CO maturity supported by the AUSABBA Project, viz: (i) "mature" COs – self-sustaining men and women COs, FMCs and MMOs, also supporting neighbouring non-project communities; (ii) "semi-mature" COs – food secure and profit making men and women COs, with some functional FMCs and MMOs; and (iii) "new" COs – food secure men and women COs and a few functioning FMCs. The proposed assessment system will be presented and ratified at the AUSABBA Project's Stakeholders' Inception Workshop.

The USABBA Project has also further developed its present cost-sharing system (50/50 for men COs and 25/75 for women COs) for the more mature COs, so that they gradually assume greater and greater financial responsibility for their own investment programmes, *perhaps graduating to 75 percent and 90 percent contributions on subsequent investments (i.e. 50 percent and 75 percent for women COs)*. However, any second or third round of investment packages would be for new production purposes and not a repeat of a previous cost-sharing investment package (unless a good case can be made for further research and demonstration). With COs assisted in assessing the most suitable investment options that are likely to lead to the optimum return on their investment with a view to them ultimately taking responsibility for their own future investment needs and plans.

¹³ FAO Project Preparation Missions for the USABBA Project extension and AUSABBA Project; October 2011 and January 2012

¹⁴ As recommended by the USAID-funded independent evaluation of USABBA (2011) (Section 2.4.1.2)

One mechanism that could be explored during the Inception Phase of the AUSABBA Project is a notional investment quotient per CO, e.g. the first PKR one million of investment the Project would contribute 50 percent (75 percent for women COs); for the second PKR 500,000, the Project would contribute 25 percent (50 percent for women COs); and the third and final PKR 500,000, the Project would contribute ten percent (25 percent for women COs); and only for women COs a final investment tranche of PKR 500,000 where the Project would contribute ten percent. This effectively means that, for the first PKR one million of investment, men COs would mobilise PKR 500,000 (equivalent, in cash and/or kind); the second PKR 500,000 of investment, they would mobilise PKR 375,000; and for the final PKR 500,000, they would mobilise PKR 450,000. The total cost sharing on a PKR two million investment would be: men CO – PKR 1,325,000; and the Project – PKR 675,000. For women COs, the four levels of community contribution would be PKR 250,000, PKR 250,000, PKR 375,000 and PKR 450,000 respectively. The total investment ceiling for male COs would be thus set at PKR 2,000,000 and for Women COs at PKR 2,500,000.

Again, the exact process for graduated cost-sharing (including exact amounts of the investment ceilings and modalities for their implementation) will be developed prior to the start-up of the AUSABBA Project and presented for ratification at the Stakeholders' Inception Workshop.

It is anticipated that the more mature COs will network into district, tehsil and/or union council-based alumni associations to assist with information exchange between government administrations and agencies, private sector organisations, NGOs and CBOs and provide follow-up and further empowerment to sustain COs after project completion. This assistance would include technical support in formation, registration, administration and the start-up, co-ordination and monitoring of knowledge sharing and social mobilisation activities. As an example, the USABBA Project has already assisted COs with the establishment and registration of two district-level Livestock Producers Associations (i.e. Killa Saifullah and Loralai) – which should evolve into MMOs over time, with further marketing and agribusiness support from the project.

2.3.2. Technological Innovation and Management

The FSPAB Pilot Project Phase and USABBA Project have already identified the key value chains and the most appropriate crop and livestock technologies and practices that are best adapted to the particular and fragile agro-ecological, economic and cultural conditions in the project areas of north-eastern Balochistan Province. Value chains include almonds, apples, apricots, grapes, onions and other vegetables, water melons and wool – some of which have been analysed at the district level. Preliminary market investigations have already identified dates, figs, grapes, mangoes and pomegranates, cumin, onions and other vegetables, water melon, animal fodder, camel milk and wool as potential value chains for the AUSABBA Project area (Table 1). New and improved crop and livestock production and post-harvest technologies and practices developed by the FSPAB Pilot Project Phase and USABBA Project and to be adapted and extended under the AUSABBA Project could include:

- improved water harvesting and water management structures and land levelling;
- certified improved wheat and vegetable seeds;
- improved fruit tree seedlings;
- small farm equipment and hand-tools;
- homestead gardening packages (e.g. hand tools, seeds and watering equipment);
- prefabricated metal silos for seed and grain storage;

- poultry production packages (Fayoumi chickens and solar-powered egg incubators); and
- animal feed, fodder seed packages and community-based vaccination programmes.

The USABBA Project has also identified the following new and improved crop and livestock production and post-harvest technologies and practices for development and extension under both BAP and the AUSABBA Project:

- community-based range management;
- solar and wind-powered water pumps;
- high efficiency irrigation systems (e.g. trickle, drip and bubbler);
- integrated pest and disease management (IPDM) for the control of wheat rust and pests in date plantations;
- conservation agriculture machinery;
- greenhouses and low, walk-in and high tunnels;
- improved breeding milk goats;
- dairy milk collection and chilling systems; and
- battery-powered sheep-shearing machines.

Both technology development and transfer will require marshalling the necessary technical expertise and know-how, backed up by proven research and the identification of the best mechanisms for transferring these innovations to farmers in the project area. In this context, the AUSABBA Project would adopt market-led and group-based adaptive research and participatory learning approaches already proven successful in other parts of Pakistan¹⁵ and piloted by the USABBA Project for women's homestead vegetable production, i.e. men and women FFSs.

2.3.3. Value Chain Development

Improved market linkages and marketing skills would enable poor households to derive significant income benefits from the abovementioned productivity increases. For this reason, the AUSABBA Project would undertake value chain analysis and development work by: undertaking detailed reviews of local, national and selected international markets; establishing commodity-specific informal FMCs and registered MMOs from entrepreneurial members of COs; and providing male and female beneficiaries with appropriate market information; and facilitating new and expanded linkages with produce marketing channels – so that they can derive optimised income returns from the newfound crop and livestock productivity gains that would result from other project interventions.

The BAP would support FMCs and MMOs with seed capital (on a cost-sharing basis, similar to COs) to initiate their marketing activities. Although no credit would be provided directly to farmers under the Project, the first three crop cycles will be a substantial change from traditional marketing systems, and project support would provide a transition from the pre-

¹⁵ FAO-implemented projects: European Commission-funded Integrated Pest Management for Cotton in Asia (1999-2004); Asian Development Bank-funded "Immediate Support to Poor and Vulnerable Households Devastated by the 2005 Earthquake (2007-2008); European Commission-funded Community-based Livelihoods Recovery Programme for Earthquake-affected Areas of AJK and NWFP (2006-2009); and European Union-funded "Food Facility – Combating Rising Food Prices" (2009-2011).

funding of the commission agent to full self-funding. Moreover, pre-funding of key crop inputs through a voucher system (rather than cash) could be repaid from crop sales as part of a revolving fund system. The project could also co-finance grading/processing, storage and marketing infrastructure/facilities to support FMCs and MMOs with farmers/members paying for their operation on a usage basis. Such interventions would be determined through feasibility studies and business plans initially prepared by specialist project staff or subcontractors and latterly by business support service (BSS) providers strengthened by the Project.

To date, the USABBA Project has undertaken 26 value chain studies with the more entrepreneurial members of men and women COs and initiated the development of eight value chains, viz: almonds, fresh apricots, dried apricots, grapes, live sheep and goats (two), and wool (two), in the districts of Killa Saifullah (two), Loralai (three), Mastung (two) and Quetta (one). Post-harvest management and marketing interventions followed completion and beneficiary endorsement of positive value chain analyses. The USABBA Project has subsequently initiated the formation of four pilot FMCs – with interventions to improve their efficiencies and linkages to markets in Lahore, Karachi, Multan, Quetta, etc.

In this regard, the AUSABBA Project would assist the more entrepreneurial members of contiguous COs to establish commodity-based FMCs to facilitate group marketing of a single products identified by a specific value chain. FMCs are "intermediary" groups that do not need to satisfy the rigours of registration under the Co-operatives Act. With further project assistance, FMCs might "graduate" or "merge" into co-operated MMOs overtime or indefinitely remain as informal groupings. This model of marketing organisation has been adopted by FAO and the Provincial Government of Balochistan to differentiate itself from the failures of the past in the co-operative movement. The AUSABBA Project would, in turn, link FMCs and MMOs to cold chains developed by the private sector, some value chains developed with support of the USAID and USDA-funded FIRMS and Pakistan Agriculture and Cold Chain Development (PACCD) Projects, where appropriate.

The USABBA Project has also organised ten district-level annual Eid *maundis* for the marketing of livestock in four districts over the past four years. Operation of the *maundis* in Killa Saifullah (75 percent) Loralai (50 percent) and Zhob (25 percent) will partially handed over to their respective Eid Livestock *Maundi* Committees for the 2012 Eid – and increased by 25 percent every year thereafter. The BAP aims to establish Eid livestock *maundis* in its three new districts while completing the phased hand-over of the existing *maundis*.

The AUSABBA Project will therefore follow similar value chain development approaches to that used by the USABBA Project and BAP in north-eastern parts of Balochistan Province – again, with adaptations to suit the changed conditions found in the Baloch society, the more arid farming systems of the Western Plateau Agro-ecological Zone, and the more remote locations prevailing in western Balochistan. It should be further noted that the expanding seaport of Gwadar, close to the southern border of the project area, provides an excellent opportunity for the export of high value commodities produced in western Balochistan to the Gulf States (e.g. dates, mangoes, live animals and meat products) – as an alternative to the traditional markets of Quetta, Multan, Lahore and Karachi far away to the east.

To date, the Project Co-ordination Unit of the USABBA Project has identified 16 key commodities from the six districts of western Balochistan Province that could possibly require new or improved technologies to increase their production levels and/or value chain development to improve their marketing and income generation potential (Table 3). These commodities would be confirmed (or added to) during socio-economic baseline surveys and initial market analyses carried out during the Inception Phase of the AUSABBA Project and/or village profiling carried out as part of the project's community development interventions.
It is anticipated that most of the value chains supported by the AUSABBA Project will culminate in the provincial capital of Quetta, the international ports of Karachi and Gwadar (and, by inference the Persian Gulf states) and the commercial centres of Punjab (e.g. Lahore and Multan). This will mean that the commodities traded will cross, not only local administrative boundaries and provincial and international borders, but ethnic and political divides. Given the fragile nature of Balochistan Province, there is a possibility that the Project could add a conflict resolution lens to value chain and analysis and development and have an indirect benefit of "increasing peace and stability in the border areas" of western Balochistan Province. It should be noted that, the original development objective of the USABBA Project was "to reduce poverty and increase peace and stability in the border areas of Balochistan". However, the "increase peace and stability" has been dropped from the project extension because of its insensitivity in northern-eastern Balochistan Province and difficulty to measure over such a short project timeframe.

In taking a value chain approach, the Project would seek to introduce and enhance linkages between farmers from different Baloch and non-Baloch tribal groups and between them and traders and local/regional markets in Balochistan, Punjab and Sindh Provinces, so facilitating greater social interaction and economic activity and hence more jobs and higher income. In this regard, some (indirect) impact indicators set by the project would include, for example, the number of new business relationships created between businesses drawn from different sides of the ethnic and political divide (e.g. Baloch/Pashtun/Punjabi/Sindhis and Balchistan/Punjab/Sindh Provinces) and the levels of those relationships. However, this is a sensitive issue, and, any other further disaggregation by ethnic groups might be counterproductive. However, the Project's socio-economic base line study could explore this idea further and the future monitoring of value chains and analysis of their structures could investigate how they may contribute to conflict prevention/resolution.

Key Commodities	Districts					
	Ch	Ke	Kh	Nu	Pa	Wa
Wheat						
Black beans						
Cumin						
Dates						
Figs						
Grapes						
Mangoes						
Onions						
Other vegetables (homestead gardening)*						
Pomegranates						
Pulses						
Water melon						
Animal fodder (sorghum, millet, etc)						\checkmark
Camel milk						\checkmark
Live animals (mainly sheep and goats)		goats			sheep	
Poultry (backyard chickens)						

Table 3 Key Commod	itias of Wastar	n Ralachistan	Province
Table 5. Key Commou	illes of wester	n Dalochistan	Frovince

* except in Kech District, where irrigated vegetables (particularly tomatoes) are important

2.3.4. Stakeholder Capacity Building

Following devolution of MINFA and MINLDD in July 2011, the Provincial Government of Balochistan (as well as other provinces) has requested FAO to assist its Planning and Development, Agriculture and Co-operatives, Livestock and Dairy Development, and

Forestry and Wildlife Departments to: (i) enhance systems for the collection and analysis of gender and age-disaggregated data for the agriculture sector; (ii) reform/develop key agriculture policies and legal regulatory frameworks in consultation with all stakeholders; (iii) restructure and strengthen key agricultural organisations in light of devolution; and (iv) strengthen the capacity of policy makers to monitor agricultural policy reform. FAO has included such interventions as a "priority area" in its draft CPF for Pakistan (Section 1.3.2.7) and looks to the AUSABBA Project and BAP, in collaboration with other policy development projects (e.g. the USAID-funded "IFPRI Pakistan Strategy Support Programme" and "FIRMS Project"), to initiate, facilitate and support this important governance capacity development work for the agriculture sector in Balochistan Province.

2.4. Past and Related Work

The AUSABBA Project would benefit by way of lessons learned from recently completed projects and build synergies with on-going projects funded by AusAID, IFAD, USAID, World Bank, etc and implemented by FAO, the Federal Government of Pakistan, the Provincial Government of Balochistan and their development partners which include agricultural research, technology transfer and value chain interventions. Activities of on-going projects would be harmonised and co-ordinated through a provincial TWG for the agriculture sector to be established by P&DD of the Government of Balochistan (Section 4.1.3).

2.4.1. FAO

The AUSABBA Project is regarded as an extension of existing USAID and FAO support to smallholder agricultural research and development in Balochistan Province. This was initiated in 2004 by a pilot project that tested approaches that responded to problems of the drought years in three districts at the turn of the century, i.e. the FSPAB Pilot Project Phase (USD 6.27 million; 2004 to 2008). This was independently evaluated by USAID in 2008, which resulted in a seamless transition to an extension, replication and up-scaling phase in five districts, i.e. the USABBA Project (USD 8.90 million; 2009 to 2012), which is expected be increased by USD 16.50 million and extended to eight district until 2015 under BAP.

2.4.1.1. FSPAB Pilot Project Phase

The FSPAB Pilot Project Phase operated in three districts of Balochistan Province, viz: Killa Saifullah, Loralai and Mastung. Achievements of the project included: (i) mobilisation of 249 COs directly benefiting 4,135 poor rural households (33,080 beneficiaries) – 92 COs (32 percent) were women-only COs; (ii) 27,433 beneficiaries adopted project innovations such as new and improved seed varieties and improved animal health services; (iii) on-farm water efficiency increased by more than 40 percent, household cereal yields increased by 35 percent and livestock production increased by 21 percent, as a result of project interventions; (iv) incomes of targeted households subsequently increased by 35 percent by the end of the Project.

The FAO Terminal Report for the FSPAB Pilot Project Phase¹⁶ concluded that the project performed well and identified several areas for further development and recommended that it be extended to a full implementation phase (including additional districts) with the following improvements:

• A need for a refocus on agricultural production systems away from assessing land usage to assessing water usage.

¹⁶ FAO; Terminal Report (Project Findings and Recommendations) of the Food Security and Poverty Alleviation in Arid Agriculture Balochistan – Pilot Phase; 2010

- Current research and extension systems do not adequately address water use on-farm water management tends to confine itself to reducing transmission losses rather than details of soil and plant-water relations.
- A need to continue community development processes to build sustainable community-level institutions that enable poor farm families to engage with civil society and obtain a stake in the social stability of the state their current state of development is not at the stage where they can continue to function as independent entities; further needs to be extended to the stage where they become self-actualising.
- Government should consider its approach to community development and, rather than supporting free or heavily subsidised delivery of inputs, should look to increasing community contributions to 50 percent in an effort to empower communities, ensure their participation as equal partners and support them in ownership of their own future.
- Further development of village-based cereal and vegetable seed enterprises should be undertaken – the potential to develop a commercial seed production industry through small enterprises is high.
- The Government should support training of indigenous students in the scientific disciplines of crops and livestock to build the local capacity to support appropriate institutions (including international and national research centres) focussed on the research, development and extension needs of Balochistan's agro-ecological diversity.
- Balochistan is losing out on potentially lucrative live animal exports to the Middle East due to national policies restricting live animal export the Government should review policies in light of the Project's marketing studies which show that Balochistan range-reared livestock do not find favour on the main markets of the country but could be sold at a substantial premium on export markets thus earning valuable foreign exchange.
- The Government should consider the privatisation of animal health delivery services.
- The Government needs to take a comprehensive overview of Balochistan's range resources, which are suffering from severe depletion and overstocking; long-term community development approaches to introducing more ecologically friendly range management practices need to be explored.
- Wool is a neglected resource and a detailed value chain study is required to improve handling and increase benefits to women.
- Detailed value chain studies are required to determine the competitive advantage of the offseason production of temperate vegetables and deciduous fruit.
- The programme of Eid livestock markets needs to be expanded and extended to other project districts.
- The Government should continue the funding of the surveillance network as an early warning system for avian influenza and expand its facilities to handle other trans-boundary animal diseases and pests.

2.4.1.2. USABBA Project

The USABBA Project operates in five districts of Balochistan Province, viz: the original pilot districts plus Quetta and Zhob. Achievements of the USABBA Project to date include: (i) establishment of and support to 564 COs (including 249 COs from the FSPAB Pilot Project Phase), benefiting some 11,800 rural households – 234 (42 percent) are women-only organisations; (ii) an additional 1,900 hectares of land and some 114,000 people directly benefiting from new and improved water harvesting and management, and crop and livestock production practices; (iii) an additional 7,700 CO members have been trained in a variety of skills; (iv) 34 marketing value chain studies and have been undertaken and development of 14 value chains initiated, including wool¹⁷ and high-value horticultural crops; (v) Eid livestock

¹⁷ Washing and sorting of wool colours has resulted in a 80 percent price premium for women

maundis in four districts¹⁸; and (vi) establishment of two village-based certified seed enterprises, seven improved village-based fruit tree nurseries and one fabricator of egg incubators and prefabricated metal silos.

In October 2011, USAID funded independent evaluations of selected projects funded by the Agency, including the USABBA Project. The conclusions and recommendations of the evaluation were as follows:

- Considering the difficult operating environment, USABBA is a highly successful project because: (i) decision making is vested in the donor and a single implementing partner (i.e. FAO) while ensuring buy-in from the Government; (ii) FAO is a specialised international agency providing superior technical support reflected in the breadth of capacity development in project staff; (iii) its participatory approach is very similar to that developed by successful programmes elsewhere in the country; and (iv) it is developing a practical and promising approach for linking producers and entrepreneurs to market institutions.
- For the remainder of its lifetime, the Project should intensify its coverage by: (i) aiming to organise as many as possible of the household that have been left out of COs in communities already reached; and (ii) increase the number of women's mobilisation by similar means and by expanding relevant activities, particularly drinking water, poultry and homestead gardening, to women community organisations.
- The Project should identify an exit strategy by: (i) identifying COs that have already "matured" or received a certain amount of funding; (ii) finding a way of winding down its support by increasing the COs' shares in investment costs, providing only technical assistance, etc; and (iii) negotiating with existing non-governmental organisations, Pakistan Poverty Alleviation Fund, etc ways and means for linking COs established.
- The Project should "fine-tune" its approaches by: (i) making a more inclusive approach to community mobilisation, including removal of the restriction on numbers of members per CO (i.e. 15 to 25); (ii) providing more resources for women COs in relevant activities; (iii) having a more effective response to livestock diseases control, with greater emphasis on community animal health workers (CAHWs); and (iv) adopting a more systematic approach to training, including trainers' manuals.
- The Project should be extended and expanded, viz; (i) extended for another phase and include an adaptive research component; (ii) expanded to another two or three districts in consultation with the Government to promote replication and greater "buy-in": and (iii) from the early stages of the next phase, implement the exit strategy agreed with local partners and "fine-tune" approaches to activities indicated above.

USAID, FAO and the Provincial Government of Balochistan are at present preparing a fouryear successor project to the USABBA Project (i.e. "BAP", totalling USD 18.74, with a timeframe from 2012 to 2015), which will expand FAO's operations into three further district of north-eastern Balochistan Province (i.e. Musakhel, Pishin and Sherani) and, amongst others, establish and support an additional 200 men and women COs, 30 FMCs and eight MMOs, and provide institutional support to the Provincial Government of Balochistan following the Eighteenth Amendment and devolution of MINFAL and MINLDD. It is anticipated that AUSAID and USAID would share the costs of a project management, monitoring and evaluation unit as well as selected joint stakeholder capacity building interventions undertaken in Quetta and outside of Balochistan Province until BAP finishes in December 2015.

¹⁸ In 2010 support to four Eid livestock *maundis* resulted in a total turnover of USD eight million

2.4.2. AusAID

2.4.2.1. Agricultural Sector Linkages Programme

Australia engages in the agriculture sector through an extension and expansion of ASLP with ACIAR, with a focus on poverty reduction and technical linkages between agriculture researchers and institutions in the two countries. Since 2006, ACIAR has helped improve farm management practices in central Punjab, Pakistan's most important agricultural area. Australia's support has increased milk production and resulted in an increase in farmers' incomes by around AUS cents 50 per day. In 2009, 225 poor dairy households were trained to increase dairy productivity. The ASLP is complemented by a broader set of initiatives focused on improving rural livelihoods, building market access and enhancing community resilience to external shocks, including the AUSABBA Project.

Lessons learned from Phase 1 of ASLP include:

- The consultative development processes, framing and implementation approaches built a strong foundation for the success of ASLP Phase 1 (including a focus on project support to three key agro-industries (citrus, dairy and mango) with engagement at federal and provincial levels and close liaison with government agencies through PARC).
- The ACIAR modality of operation and mandate to focus on research of mutual interest where Australia has a strong comparative advantage strengthened programme implementation (including the development of projects through well-funded scoping studies, rigorous ACIAR project development processes and peer reviews, and strong working relationship between ACIAR and commissioned organisations in Australia.
- ASLP support for capacity building and access to knowledge and information provide a lasting legacy and impact on agricultural research and development and agro-industry improvements, including: flexible and responsive approaches to capacity building, study tours and technical training (project personnel from Pakistan have gained invaluable experience through technical training and collaborative research in Australia and collaborative visits from Australian teams of experts) the ACIAR website and publications provided ready access to past research and information.
- ACIAR provided cost-effective and fiscally robust management and oversight of the programme.
- Experience from Phase 1 has influenced the design and implementation of Phase 2.

2.4.2.2. Market Development Facility (for Asia and the Pacific)

In 2012, AusAID will extend its regional "Market Development Facility (MDF)" to Pakistan. The goal of MDF is to increase employment and incomes for poor women and men in rural and urban areas. It is doing this by increasing the competitiveness of sectors and industries that involve poor and marginalised women and men. AusAID believes that MDF could be of assistance to the Government of Pakistan in its efforts to foster prosperity through market development. The MDF works by analysing socio-economic conditions and market dynamics to identify constraints and opportunities to growth, and identify innovative, commercially sustainable, market solutions. Other AusAID-funded projects which employ a market-based approach like MDF have generated substantial, lasting benefits for large numbers of poor people in several developing countries.

In Pakistan, MDF would carry out comprehensive assessments of high-potential sectors (e.g. agriculture, livestock, handicrafts and textiles) to identify opportunities to generate higher

incomes and more jobs for poor households and develop a detailed plan to support chosen sectors and implement interventions with commercial and Government partners to create sustainable innovations. MDF interventions will build, provide, promote, and advocate for changed relationships and linkages between market actors and the use of new business models. It will do this by providing: funding including grants and co-funding; research and analysis; training and capacity building; and information and ideas, including technical advice. Innovative ideas will trigger lasting improvements in industrial productivity and competitiveness. This includes improvements in business models, marketing strategies, supply chain management, technical capacities, regulatory procedures, research capacities, etc. Such changes will facilitate better access to production inputs, services, information, skills, infrastructure or improvements in the overall systems of key rural and urban sectors.

MDF will benefit the poor indirectly by improving the functioning of the markets around them. MDF will identify motivated private and public sector players to partner with and work together to improve market systems. For example, if MDF proposes to address market access issues in agriculture it would discuss options with relevant Pakistan Government agencies. Together MDF and the Government of Pakistan might examine relevant policies and seek solutions to increase sector competitiveness and growth. Alternatively, if MDF wanted to address the use of agricultural inputs or output buying practices it might work directly with private companies that sell inputs to, or purchase outputs from smallholder farmers. Where MDF works with private companies there must always be a benefit to the enterprise itself, but also for the community, such as increases in incomes or employment. The Government of Pakistan and private sector representatives will also play a critical role in MDF by supporting identification of pro-poor growth sectors as part of the Steering Committee.

2.4.3. Other Donors

The Project would collaborate with three on-going and forthcoming USAID and USDAfunded value chain and capacity development projects, viz:

- i. **FIRMS Project (USD 89.75 million; 2009 to 2013):** The FIRMS project aims to develop a dynamic, internationally competitive business sector in Pakistan that is increasing exports, employing more people and producing higher value-added products and services (e.g. cattle slaughterhouses, cotton ginning, IPDM on dates; fresh mangoes and potatoes for export, and walnuts and pine-nuts). The project will accomplish this by creating business enabling environments, developing and upscaling value chains and improving food quality and safety, i.e. working at the policy level, with business sectors and with individual firms to improve productivity and competitiveness in 20 of Pakistan's fastest growing districts. The project has initiated policy work on updating regulatory frameworks for the slaughtering and marketing of livestock products in Balochistan Province.
- ii. **PACCD Project (USD 18 million; 2010 to 2013):** The PACCD Project aims to link horticultural and fisheries production in Balochistan Province to modern markets in Hyderabad, Islamabad, Lahore and Karachi, as well as abroad. Objectives of the project include: (a) strengthening and capacity building of farmers; (b) agri-business and association support (e.g. new planning materials); (c) cold chain development, i.e. construction of ten private-public partnership cold stores; (d) improve Chaman wholesale market (targeting fruits and vegetables) at the border crossing with Afghanistan in Killa Abdullah District; (e) fisheries marketing assistance for the port of Gawadar; and (f) strengthening and capacity building of institutions.
- iii. International Food Policy Research Institute (IFPRI) Pakistan Strategy Support Programme (USD 22.7 million; 2011 to 2014): IFPRI is aiming to enhance the capacity of researchers and knowledge providers, policy makers, implementation agents and stakeholders (including civil society and the private sector) to generate

policy results for the design and implementation of development strategies, absorb policy research in support of national, provincial and local priorities, to support propoor policy dialogue and strategic priority setting (including the devolution of MINFAL and the need for provincial-level agricultural policy development).

A fourth on-going agricultural development project of relevance includes the World Bank – funded **Balochistan Small-scale Irrigation Project (USD 25 million; 2008 to 2013)**. This project, which is initially focusing on the Pishin-Lora Basin in northern Balochistan Province, has three components, viz: (i) partial restoration of of water storage capacity in the Bund Khushdil Khan; (ii) development of small-scale irrigation schemes; and (c) institutional strengthening and capacity building of the Irrigation and Power Departments, water management institutions, and farmer and COs. Improved watershed management and rangeland management and on-farm water management, including the introduction of high efficiency irrigation systems, are integral components.

In 2011, IFAD approved a USD 30 million loan in support of the **Gwadar-Lasbela Livelihoods Support Project**. The goal of this six-year project is to increase the incomes and enhance the livelihoods of poor farmers and fishers in the two coastal districts to the south of the AUSABBA project area. The project borders the AUSABBA Project area to the south and has the potential for collaboration in value chain development centred on the port city of Gwadar and the coastal highway from Gwadar to Karachi. FAO is at present in negotiations with IFAD and the Provincial Government of Balochistan to provide technical assistance to this project.

2.5. FAO's Comparative Advantage

Pakistan became a member of FAO in 1947 and, in 1951, FAO and the Government of Pakistan signed an agreement that represents the beginning of FAO's presence in the country. Since that date, FAO has successfully implemented more than 400 projects totalling in excess of USD 500 million of aid. In addition, FAO has also facilitated the participation of Pakistan to more than 100 regional and sub-regional projects. FAO's interventions throughout the years have always been in line with the Government's agricultural policies and development and humanitarian priorities.

FAO has also had a long presence in Balochistan Province, implementing numerous development projects in the Province over the past 30 years. Over this period, FAO has built considerable expertise in the technical areas and approaches that apply to Balochistan, and has established strong and productive relationships with all provincial stakeholders. In addition, with the Government implementing agency – the recently established MINFSR as FAO's accredited partner institution at the federal level, the Organization can play a pivotal role in ensuring full integration of project activities into the wider policy and structural environment of the country, and can assist in bringing appropriate lessons learned to the attention of key policy making bodies.

As mentioned earlier, FAO has successfully implemented and is successfully implementing precursor projects funded by USAID, i.e. the FSPAB Pilot Project Phase and USABBA Project (Section 2.4.1). These focused/focus on improving the livelihoods of rural poor farming families through farming systems development in eight districts of north-eastern Balochistan Province close to the border with Afghanistan. Those two projects had a number of inter-related interventions that would be adapted (where necessary) and replicated in the AUSABBA Project, viz: development of applied research to practice, water conversation and efficient water use, improved crop and livestock production, community development and produce marketing/value chain development.

In addition, and with reference to Balochistan Province, FAO also:

- has <u>recently completed</u> the European Union-funded "Combating Rising Food Prices in Pakistan – Addressing the Negative Impact of Rising Food Prices on Food Insecure and Vulnerable Households in Pakistan (USD 33.98 million; 2009 to 2011), which operated in 16 districts of Pakistan, four of which were in Balochistan Province (i.e. Jaffarabad, Killa Saifullah, Pishin and Sibi);
- is <u>at present implementing</u> the Government-funded "Support to the Fisheries Resources Appraisal in Pakistan Project" (USD 5.84 million; 2008 to 2013), along both Balochistan and Sindh coastlines and the USAID-funded "Support to Increase Sustainable Livestock Production" (USD 7.14 million; 2010 to 2015), focusing on the control of food and mouth disease throughout the country.
- in 2012, will <u>start providing</u> technical support to the IFAD-funded "Gwadar-Lasbela Livelihoods Support Project" (USD 35.27 million; 2012 to 2018) in two coastal districts of southern Balochistan Province.

The team of technical and administrative support staff from both the FSPAB Pilot Project Phase and USABBA Project is still in place and will provide support to ensure a rapid commencement of operations under the AUSABBA Project. In addition, during the FSPAB Project Phase Pilot and USABBA Project, FAO developed a cadre of Community Development and Market (CDM) Facilitators, who would provide initial technical support of project operational level interactions with the target communities of the AUSABBA Project. The same facilitators would also be a key element in the training of new facilitators recruited from the AUSABBA project areas.

The focus of the AUSABBA Project is in areas of direct relevance to FAO's global goals of food security, poverty alleviation and sustainable management and utilisation of natural resources, including: increased agricultural productivity from small and fragile landholdings and increased farmer access to markets, leading to increased income generating opportunities: and developed approaches to improve gender equity and balance in access to project benefits.

3. PROJECT FRAMEWORK

3.1. Goal and Objectives

The goal of the AUSABBA Project, which would focus on improving conditions for broadbased agricultural and economic growth in Balochistan Province, is to make a significant contribution to the reduction of poverty and economic inequalities for some 175,000 impoverished people from the western border districts of Chagai, Kech, Kharan, Nushki, Panjgur and Washuk through sustainable agriculture development.

The Project would contribute to the Federal Government's "Pakistan: New Framework for Economic Growth" and "National Zero Hunger Action Plan" by, amongst others, increasing agricultural productivity and reforming agriculture and rural markets. The Project would also contribute to AusAID's Strategic Approach to Aid in Pakistan, the objective of which is "to work with the Government of Pakistan towards a stable, secure, democratic country through broad-based social and economic development and poverty reduction".

The Project would represent key elements of the agriculture, rural development and poverty reduction thematic/priority areas of the One UN Programme-I (2008 to 2012) and the inclusive economic growth, food and nutrition security, strengthening governance, and ensuring gender equality priority areas of the proposed successor One UN Programme-II

(2013 to 2017). Moreover, the Project would represent a model for demonstrating two of FAO's four priority action areas of its Country Programme Framework (2012 to 2017), i.e. "sustainable agricultural economic growth" and "capacity development for agriculture sector management" – while "empowerment of women and ensuring gender equality" would be treated as a cross-cutting action for all outputs and activities.

The Project is expected to make contributions towards achieving MDG Nos. 1 and 3, to eradicate extreme poverty and hunger and to promote gender equality and empower women, while indirectly supporting MDG No. 7 (ensure environmental sustainability), specifically in targeted areas of western Balochistan Province, Pakistan.

The outcomes of the A Project are shared with those of BAP (with exception of the geographical location of the projects) viz: a significant improvement in food and nutrition security and a significant increase in income generation of some 30,600 poor households from 340 rural communities targeted in Chagai, Kech, Kharan, Nushki, Panjgur and Washuk Districts (as compared to the pre-project situation (as measured by socio-economic baseline surveys)). It is anticipated that the Project's target households would reduce their food insecurity by 25 percent and increase their annual incomes by 20 percent within two years of project completion. Further quantifiable results are provided in the Project's Logical Framework Matrix (Annex 4).

3.2. Expected Outputs and Key Activities

The outputs of the AUSABBA Project are also shared with those of BAP (with exception of the project area), viz:

- iv. Improved enabling environment for the development of provincial agricultural policies and regulatory frameworks, market-led and community-driven investments, strategies and processes, and women's empowerment in agricultural development.
- v. Increased crop and livestock productivity and value of agricultural products produced in Chagai, Kech, Kharan, Nushki, Panjgur and Washuk Districts, through improved technological innovation and management practices and improved community-based water management practices in project-assisted communities and their value chains.
- vi. Small local agri-business enterprises established and market linkages strengthened for target poor communities of Chagai, Kech, Kharan, Nushki, Panjgur and Washuk Districts to increase sales of their surplus produce and improve competitiveness and sustainability of their value chains.

The Project's "monitoring and evaluation (M&E)", "communications and reporting", and "work planning and budgeting" activities are included under the "implementation and M&E plans" of the Project (Chapters 4 and 5). "Women's empowerment" and "gender sensitisation" would be treated as cross-cutting interventions to all three outputs listed below, e.g: the expansion of women COs and FFSs and women-oriented value chain development (e.g. women FMCs for vegetables, poultry, dairy and wool products).

3.2.1. <u>Output No. 1</u>. Improved enabling environment for the development of provincial agricultural policies and regulatory frameworks, market-led and community-driven investments, strategies and processes, and women's empowerment in agricultural development

Realising the visions of the Government's New Framework for Economic Growth and the devolution of MINFA and MINLDD calls for a series of policy reforms and action planning for the implementation of innovative development programmes (Sections 1.3.2.1 and 1.4.1). This will require a strengthened governance capacity within the Planning and Development,

Agriculture and Co-operatives, Livestock and Dairy Development and Forestry and Wildlife Departments of the Provincial Government of Balochistan and their respective District Agriculture (DAOs), District Livestock Offices (DLOs) and Divisional Forest Offices (DFOs) and among relevant stakeholders for sector planning, investment programme preparation, food security analysis, evaluation and related information management (Section 2.2.4). In this context, the AUSABBA Project would, in partnership with BAP, facilitate and assist other development actors supporting the provincial Government of Balochistan in policy reform while filling any gaps on request and within FAO's technical mandate.

Moreover, the Project would enhance the institutional capacity of both government and private sector agricultural support service providers to adopt and practice the new decentralised and participatory approaches to agricultural research and development in both, Balochistan Province as a whole, and the six project districts in particular – following the FSPAB Pilot Project Phase's and USABBA Project's success with group-based adaptive research and participatory extension approaches, community-based animal health services and value chain development methodologies.

The Project would undertake its community organisation work through the empowerment of poor farm families and the establishment of new men and women COs in the project areas. However, FAO anticipates that a minimum of 40 percent of COs will "mature" and become independent and self-sustaining by the end of the Project in 2016. Such COs would be encouraged to register as CBOs or to join together and establish alumni associations and networks, e.g. District Agriculture Committees, Eid Livestock *Maundi* Committees and FFS networks. FAO further anticipates that mature COs will partner with neighbouring "non-project" communities and assist them to form new COs and develop their agricultural production.

Project interventions of Output No. 1 might include, but are not limited to, the following key activities:

- Provide technical support to the Planning and Development, Agriculture and Cooperatives, Livestock and Dairy Development, and Forestry and Wildlife Departments to reform agriculture, livestock, forestry and marketing policies and their legal and regulatory frameworks – through linkages with national policy institutes and on-going agri-business policy reform and strengthening projects (e.g. the USAID-funded IFPRI Pakistan Strategy Support Programme and FIRMS Project), international and national consultancy support and international exchange visits (in collaboration with BAP and the AusAID-funded ASLP implemented by ACIAR).
- Build the capacities of Planning and Development, Agriculture and Co-operatives, Livestock and Dairy Development and Forestry and Wildlife Departments, relevant DAOs, DLOs and DFOs, private sector organisations (e.g. chambers of commerce) and rural support programmes to re-organise and re-align their strategies in light of the reformed agriculture, livestock, forestry and marketing policies and their legal and regulatory frameworks through international and national consultancy support and participatory training (in collaboration with BAP and AusAID-funded ASLP implemented by ACIAR).
- Develop and strengthen linkages between the Agriculture and Co-operatives, Livestock and Dairy Development and Forestry Departments, AZRC, ACIAR, relevant Consultative Group on International Agriculture Research (CGIAR) centres (e.g. ICARDA, CIMMYT and IWMI) and remote sensing centres (e.g. SUPARCO and IMMAP) for expanding local knowledge in range management, conservation agriculture, dry-land farming, water management, IPDM, water management, use of greenhouse technologies, and high value horticultural production, etc through information exchange, provincial workshops and exchange visits.

- Provide technical support to government and private sector agricultural support service providers operating in the project area (e.g. subject matter specialists of Agriculture and Co-operatives, Livestock and Dairy Development and Forestry and Wildlife Departments, extension workers from DAOs, DLOs and DFOs, technicians from suppliers of farm inputs and buyers of farm produce, and social mobilisers of rural support programmes and NGOs) in the development of adaptive research and participatory extension approaches with linkages to NARC, relevant agriculture universities in Pakistan and projects promoting FFSs and community animal health services (in collaboration with AusAID-funded ASLP implemented by ACIAR).
- Undertake socio-economic baseline surveys (including initial market assessments), profiling and participatory needs assessments of short-listed villages from the project area and select communities to benefit from community development interventions using GIS mapping systems; and selection of communities suitable and willing to participate in project community-led development.

Information would be collected in a sex-disaggregated manner and data collected based on a set of socio-economic indicators. Gender analysis of the baseline information and data would be used in drawing up the detailed design and implementation arrangements of the Project during its Inception Phase, thereby ensuring their suitability for the local context. Communities considered as good candidates to participate and contribute in the Project would be selected according to community-level participatory action planning principles.

• Establish and support 204 men and 136 women COs in the project area – through community organisation processes already developed by, and adapted from, the FSPAB Pilot Project Phase and USABBA Project (Section 2.2.1). FAO would use a "CO maturity index", developed by the USABBA Project, to assess and guide COs with regard to their future sustainability, either as independent and registered CBOs, or as member COs of alumni associations or networks.

It anticipated that 82 men and 54 women COs will reach full maturity with project support and be self-sustaining beyond the Project's lifetime. On the other hand, time is insufficient for 122 men and 82 women COs to reach full maturity and, it is anticipated that, they will become food secure and profit making by the end of the Project, but not necessarily sustainable beyond its lifetime.

- Establish between six and 20 district, tehsil and/or union council-based CO alumni associations and FFS networks to assist with information exchange between government administrations and agencies, private sector organisations, NGOs and CBOs and empowering, follow-up and sustaining COs after project completion including technical support in formation, registration, administration, etc to initiate, co-ordinate and monitor knowledge sharing and social mobilisation activities.
- Undertake gender gap analyses and ensure that women are socially and economically empowered through agricultural productivity and income increases, including: a minimum of 35 percent of COs supported by the Project would be women COs; the number and scale of women's income-generating activities through women COs would be extended, including value chain development; linkages between women COs and women-centred micro-finance organisations would be developed; and staff of the Project and its implementing partners would be aware of gender issues in project design, implementation, monitoring and evaluation, and follow-up.

3.2.2. <u>Output No. 2</u>. Increased crop and livestock productivity and value of agricultural products produced through improved technological innovation and management practices in project-assisted communities

The AUSABBA Project would improve access to water, increasing its efficiency of use, and increasing crop and livestock production – as researched and developed under the FSPAB Pilot Project Phase and USABBA Project. In this context, the innovation of providing water harvesting and management and crop and livestock production packages on a 50 percent cost contribution by the beneficiaries (25 percent for women) for physical improvements and purchased agricultural inputs would continue under the AUSABBA Project. The type of production package "cost-shared" with the respective COs would continue to be demand-led, with the Project guiding the member of COs to which inputs would be the most cost-effective and sustainable in the long-term, given their specific circumstances.

Both the AUSABBA and Project and BAP would develop an "exit strategy" by refining the cost-sharing arrangements for the more mature COs so that they gradually assume greater and greater financial responsibility for their own investment programmes. The projects would introduce investment ceilings on a sliding scale, whereby the projects' contributions would decrease (and the COs' share increase accordingly) over time and up to an agreed maximum amount of funding (Section 2.2.1), after which COs themselves would conceivably provide the necessary financial support through their own mobilised savings while seeking any necessary technical support from government, non-for-profit and private sector agricultural support service providers. Part of the exit strategy training for more mature COs would cover aspects of proposal writing and presentation to potential service providers of funding required over and above the resources available within community structures.

This type of innovation would require that the Project imparts further financial management skills to CO members to help them judge investment priorities and how to measure returns on potential investments (as part of CO strengthening under Output No. 1). This need has also been identified under marketing and value chain analysis and development whereby men and women farmers need to understand the rudiments of farm budgeting so that they have a notion of their costs before entering into price negotiations.

During the latter stages of the USABBA Project, FAO introduced the FFS and CAHW approaches to adaptive research and participatory extension and community animal health approaches which has proved successful with smallholder and resource poor farmers both, throughout the world, and other parts of Pakistan. The AUSABBA Project would ensure that each men and women CO benefits from the implementation of a men or women FFS (to introduce new or to improve existing production or post-harvest technologies) and has access to the placement of a fully trained CAHW (Section 2.2.2). However there is at present a lack of capacity in FFS learning processes in Balochistan Province, and master trainers from the Agriculture and Co-operatives, Livestock and Dairy Development and Forestry and Wildlife Departments and DAOs, DLOs and DFOs and FFS Facilitators (selected from extension agents of the relevant agriculture circle offices and agriculture extension centres, and technicians, social mobilisers and lead farmers of NGOs, CBOs and the more "entrepreneurial" COs) would receive comprehensive training at the Social Sciences Institute of NARC, the federal agency responsible for promoting FFS approaches) prior to starting and expanding the Project's FFS programme. Similarly, CAHWs would receive training at the Quetta Veterinary Institute in Quetta. They might also require more advanced training available from Veterinary Institutes in Lahore and Peshawar.

The Project would also undertake research and development work on potential technologies and best practices that have proven successful in similar agro-ecological zones of Pakistan and the South and Central Asia Regions as a whole. The Project would make full use of linkages developed with ACIAR and CGIAR centres, facilities at AZRC and the new CO alumni associations/FFS networks for the adaptive research of new and improved production and post-harvest management technologies.

Project interventions of Output No. 2 might include, but are not limited to, the following key activities:

- Invest in community-based civil works for the rehabilitation and improvement of water harvesting and management structures (i.e. *sailaba, khuskaba* and *kaurjo* systems and land levelling of farmers' fields, the rehabilitation and extension of *karezs*, construction of water storage reservoirs, micro-catchment structures and flood protection walls, repair and upgrading of tube-wells, and/or lining or piping of farmer-managed water courses) to men COs; and invest in improved shallow drinking water wells to women COs on the agreed cost-sharing basis.
- Invest in certified improved seeds and fruit tree seedlings and small farm equipment and hand tools to men COs; invest in homestead garden inputs (e.g. hand tools, seeds and watering equipment), medicinal herbs packages and post-harvest processing equipment to women COs; and invest in prefabricated metal silos for the storage of seeds or grains to both men and women COs – on the agreed cost-sharing basis.
- Invest in poultry production packages (*Fayoumi* chickens and/or solar-powered egg incubators) and improved breeding milk goats to women COs; and invest in animal feed and vaccinations to both men and women COs on the agreed cost-sharing basis.
- Implement 204 men and 136 women FFSs within COs linked to neighbouring "nonproject" communities, including: (i) curriculum development and training of 25 master trainers and 100 men and women FFS Facilitators at NARC: (ii) execution of FFSs with the support of their FFS Facilitators; (iii) monitoring of FFSs by specialist private sector agricultural support service providers; and (iv) organisation of annual provincial and district-level community congresses. The FFSs would focus on: (a) wheat grains and lentil production and on-farm water management and conservation agriculture; (b) improved vegetable production and post-harvest management; (c) improved dates, mango and fruit-tree orchards and post-harvest management; and (d) range management and improved livestock production.
- Establish 68 community-based animal health services through the community selection, training (in basic animal health care, business management, etc), monitoring and follow-up of 40 men and 28 women CAHWs. The CAHWs would also be provided with basic animal health kits from which they would sell their medicines and services with sufficient margins to cover replenishment costs and their fees.
- Train some 1,100 lead farmers and representatives of men and women COs in technical topics not covered by the men and women FFSs and community animal health services

 by subject matter specialists and master trainers of government and private sector contracted by the Project.
- Research and develop potential production packages and best practices, including: community-based range management, solar and wind-powered water pumps and high-efficiency irrigation systems (e.g. trickle, drip and bubble), conservation agriculture machinery, IPDM for wheat rust and date and mango pests, farm machinery (e.g. *rabi* drills and battery-powered sheep shearing machines), greenhouses and low/walk-in/high tunnels, and animal breed improvement, pasture management and milk collection and chilling systems for testing and demonstration by COs, and embedded within existing research centres (e.g. NARC and AZRC), and national and provincial universities and colleges/faculties of agriculture and reformed extension systems (supported by ACIAR, CIMMYT, ICARDA and IWMI).

3.2.3. <u>Output No. 3</u>. Small local agri-business enterprises established and market linkages strengthened for targeted poor communities to increase sales of their surplus produce and improve competitiveness and sustainability of their value chains

The USABBA Project has assisted CO members to establish certified village-based seed enterprises, improved village-based fruit tree nurseries and Quetta-based small-scale agroindustries to develop prototype solar-powered egg incubators, greenhouses and prefabricated metal silos to support and sustain its crop and livestock production interventions. The AUSABBA Project would subsequently extend the number of certified village-based seed enterprises to important wheat and vegetable growing areas and improved village-based tree nurseries to important fruit producing areas of western Balochistan Province. Moreover, he AUSABBA would collaborate with BAP to develop relevant and demand-driven small-scale agro-industries and business development services in Quetta city as well as key urban centres of southern and western Balochistan, (e.g. Gwadar, Tarbat, Pangjur and Kharan).

The AUSABBA Project would replicate the value chain methodology tested and validated by FAO under the USABBA Project (Section 2.2.3) and provide entry points for and opportunities for collaboration with the AusAID-funded MDF. The Project Co-ordination Unit of the USABBA Project has provisionally identified 16 commodities worthy of initial market analyses (Table 3). The village profiles prepared by the AUSABBA Project and the priorities given by entrepreneurial members of one or more COs would confirm the commodities required of further analyses. The Project would assist COs to undertake detailed district, tehsil or union council-level value chain analyses of selected commodities to assess the feasibility of further market development.

Those positive value chain analyses would lead to the establishment of FMCs and the further development of post-harvest management practices and product market linkages to improve the income generating efficiencies of their membership and their constituent communities as a whole. The more profitable and business-minded FMCs might develop or merge into MMOs and register with the appropriate authorities as recognised businesses, with further technical support from the Project. The AUSABBA would also expand the concept of district-level Eid livestock *maundis* developed by USABBA as a key decentralised marketing outlet for the live sheep and goats of marginal and smallholder farmers of the remote and distant project areas (Section 2.2.3).

Project interventions of Output No. 3 might include, but are not limited to, the following key activities:

- Build the capacity of some 18 small agri-business enterprises to support input supply chains in the project districts, including certified village-based wheat and vegetable seed enterprises, fabricators for solar and wind-powered pumps; blacksmiths for the fabrication of metal silos, fabricators of solar-powered egg incubators, shearing gangs for wool, and other small enterprises.
- Establish some 15 men and 10 women FMCs (from entrepreneurial members of contiguous men and women COs) to facilitate group marketing of a specific commodity that has been identified/confirmed by their respective value chain analyses (Section 2.2.3); and provide: (i) market empowerment through bulk marketing of produce; (ii) benefits of enhanced bargaining power or larger lot sizes: (iii) savings in bulk purchase of inputs such as fertiliser and transport; and (iv) opportunities for direct selling by contract with large retail and food
- Assist men and women COs and FMCs to undertake analyses of some 25 value chains for important commodities produced in all project districts (Section 2.2.3), i.e. marketing needs assessments, identification of inefficiencies in the specific marketing system and "walking the chain", and recommendations for improving the financial

returns to small-scale producers of the respective project districts (e.g. variety changes, improved packaging, grading for size and appropriate packing sizes) – in collaboration with the AusAID-funded MDF.

• Assist men and women COs and FMCs to develop 25 value chains of priority commodities (Section 2.2.3), i.e. improved storage, regulation and certification, product development, transportation, infrastructure and cleaning, drying, grading and packaging that would improve the financial returns to their small-scale producers – in collaboration with the USDA-funded PACCD Project and AusAID-funded MDF.

The Project would also introduce marketing arrangements including investigation and implementation of all aspects of the respective commodity value chains, for both domestic and export target markets and for FMCs and MMOs, again in collaboration with AusAID-funded MDF where feasible.

- Build the capacity of successful/most entrepreneurial FMCs and establish a minimum of eight MMOs through further training and registration under the Co-operatives Act MMOs would be linked to cold chains developed by the PACCD Project where appropriate.
- Assist public-private partnerships (i.e. FMCs, MMOs, the Department of Agriculture Marketing, chambers of commerce, market boards, etc), supporting Project interventions to remediate problems in value chains, to develop information systems to enhance the marketing of their respective commodities using data collection of current prices at relevant wholesale markets and provide dissemination of this information by voice-based mobile telephone systems accessible to farmers in over two-thirds of project districts and radio and television information services. These public-private partnerships would be hosted by the Agriculture Marketing Department of the Provincial Agriculture and Co-operatives Department.

Additionally, support and implement data hygiene monitoring for television dissemination of market price information ensuring high quality output (i.e. timely, accurate and reliable) and maximising coverage for producers and agri-business actors at all stages of the targeted value chains. The development of market information systems would be undertaken in collaboration with BAP, USAID-funded FIRMS Project and AusAID-funded MDF and their support to market regulatory reforms and development.

- Establishment and hand-over of six district Eid livestock *maundis* to Eid Livestock *Maundi* Committees, including the formation and capacity building of the Eid Livestock *Maundi* Committees to sustain livestock marketing activities after project completion.
- Build capacity and formalise the formation of a cadre of business support service (BSS) providers (at provincial and district levels), who would prepare and be available for the long-term to assist the formation and operation of CO alumni associations/FFS networks, FMCs, MMOs and small agri-business enterprises (i.e. accounting (e.g. bookkeeping, and transparent financial reporting), business operations (e.g. organisational procedures, planning, logistics and supply management) and produce marketing (e.g. contracts, direct selling and value chain management)).
- Research into and development of potential actions and investments required to improve post-harvest management (i.e. processing, storage, packaging, transportation, etc) and strengthen linkages in targeted value chains and embedded within existing research centres, national and provincial universities and colleges/faculties of agriculture, reformed extension systems, input suppliers and buyers of agricultural produce.

3.3. Sustainability Issues

3.3.1. Technical Aspects

The AUSABBA Project aims at promoting the adoption of more financially and environmentally sustainable food production and marketing practices by marginal and smallscale producers operating in western Balochistan with surplus or potentially surplus production for selected high-value commodities. The Project also aims to sustain small-scale farmers/livestock keepers' increased income generating capacity through the establishment and technical support to COs, FMCs and MMOs to link them to local input suppliers, agricultural support service providers, marketing outlets, social institutions and private sector organisations. It is argued that the best manner in which sustainability can be achieved is through:

- The establishment of community management structures that is viewed by the community as fair, transparent and which follows approved procedures.
- A process of detailed support, training and supervision of group-based savings schemes, which ensures that such procedures are put in place and followed over the period of project implementation.
- The requirement that the savings and establish rules, which will contribute to their sustainability, especially with regards to interest rates, stipends for group leaders and an investment approach to utilise funds to grow the business, together with regulations as to how defaults or overdue payments should be dealt with.
- Development of sustainable technical services, i.e. (i) those financed by COs, FMCs and MMOs through membership fees, savings schemes, etc; (ii) those provided by small-scale agro-industries and agri-business services developed and strengthened by the Project; and iii) those facilitated by linkages between small-scale producers and markets that ensure that the buyers also provide necessary inputs, extension services and post-harvest infrastructure and equipment.

The experience in Balochistan with the savings and loan model in the past under the Cooperative movement has not been good; many loans taken out by cooperatives were not paid back resulting in insolvency. The project approach focuses on mobilising internal savings and utilising those funds to grow the business by retaining profits and building the capital base. The formal organisations such as MMO's that are incorporated under the Cooperatives Act have specifically removed engaging in loan activities from the governing bylaws to help in overcoming this issue. However as participants gain experience in operating in a "for profit" organisation, these strictures may be replaced as they become more sophisticated in their understating of various financial arrangement,

The expanded or strengthened market linkages arising from the Project would not be dependent upon project resources for their continuation. Rather, they would continue to function because the linkages developed are of value to both local producers, intermediate traders and other value chain actors. The fast expanding private agri-business entities and the large supermarkets in Pakistan are also keen to organise and support producer groups (e.g. COs) for their own business interest of having regular and steady supply of raw materials for their processing plants and supermarkets (e.g. through the provision of premium prices for quality product, sharing of knowledge of market trends, preferred packaging etc, and transport facilities and organising producers as "contract growers").

The Project would work on the concept of public-private-partnerships and develop sustainable linkage with them through the implementation of value chains. This would be one of the key favourable factors of sustaining the Project's adaptive research, participatory extension and value creation activities. The knowledge gained through training and self-confidence through participating in COs, FMCs and MMOs (and their FFSs, farmer business schools (FBSs) and produce marketing systems) would be of long-term value to participants. The Project would give attention to ensuring the ability and capacity of local agriculture support service providers to continue supporting COs, FMCs and MMOs with similar technology transfer and income generating activities after completion of the Project. Moreover, the Project would assist all stakeholders to share information and develop strategies and policies which would sustain the Project's successful technical innovations.

3.3.2. Financial and Economic Aspects

Adoption of new and improved production and post-harvest technologies and enhanced linkages of the market chains of selected food commodities would lead to increased agricultural productivity and income generating capacity of primary producers and improved food quality for consumers. The AUSABBA Project would therefore lead to increased production of selected key agricultural commodities, greater diversification of sources of income, and higher net returns for marginal and small-scale men and women farmers/livestock keepers. Section 2.2.1 has already reported how all of the Project's production and marketing packages would be provided to COs, FMCs and MMOs on a cost-sharing (and sliding scale) basis to enhance ownership and sustainability of the joint investments.

The community-led development and value chain processes would help COs to enhance their financial as well as social capital in the communities. The Project would encourage COs, FMCs and MMOs to open and/or maintain bank accounts and establish and operate groupmanaged funds to sustain their financial operations. Initially, group-based savings schemes would be established by COs to provide the necessary funding for the cost-sharing of project investments. In this case, project contributions would be matched by CO members through, for example, membership joining/registration fees, annual membership fees, monthly deposits of savings, etc.

It is anticipated that, over time, the savings schemes may evolve into more sustainable savings and loan schemes and revolving funds. Project inputs such as water harvesting structures, water management systems, farm tools, machinery and equipment, and processing, storage and marketing facilities, would remain common property of COs, FMCs and MMOs, which would charge members for their use, plus a mark-up sufficient to create operation, maintenance and replacement funds. The members of FMCs and MMOs would also be expected to purchase their inputs and market their produce through the groups for which there would be a small levy to cover administration costs, the replacement of inputs, and the creation of retained capital funds for future group investments.

Self-financing from micro-savings of the members of COs, FMCs and MMOs would be the driving force of sustainability of the groups. Separate bank accounts for individuals would be encouraged and would be mandatory for groups to maintain trust and respect among all of their members. The Project would provide the necessary coaching to group leaders in small business management for the organisations to sustain their financial operations. The groups would also be linked with local financial institutions so that their savings could be grown and thereby increasing the opportunities of investment to small businesses by the group members.

Recent analysis has concluded that there are significant economic gains to be derived from a reduction in pre and post-harvest losses of selected food commodities in Pakistan. The Project therefore appears to be economically viable – bringing better returns to all stakeholders which include producers, traders, processors, wholesalers, retailers and exporters. The recent USAID-funded "independent" evaluation of the USABBA Project (Section 2.4.1.2) estimated

a positive benefit-cost ratio of 3.42, net present value of USD 14,363,000, and internal rate of return of 16 percent¹⁹.

3.3.3. Institutional Levels

While the AUSABBA Project has made conscious decisions to work with exiting progressive CBOs and co-operatives, especially for the adaptive research of new and improved production and post-harvest technologies, it has also decided to let COs and FMCs function as informal organisations and not register them under, for example, Co-operative Societies Registration Acts, unless there is a strong necessity to do so. This is because, in Pakistan, co-operatives have generally been politicised and proven to be dysfunctional. The few successful examples thus far of organising COs and FMCs indicate that the most effective approach consists of informal organisations based on group needs. The AUSABBA Project would therefore organise COs, FMCs and MMOs according to the following principles: (i) market oriented; (ii) based on members' needs; (iii) provision of necessary technical and management support; (iv) existence of local leadership; (v) provision of the requisite benefits to the members; (vi) provision of trained BSS providers who are self-funded by COs, FMCs, MMOs (as well as small agri-business enterprises and CO alumni associations/FFS networks) for long-term support and proven sustainability; and (vii) the use of "community audits" to minimise risk of fraud and misuse of members funds.

As a research and development project, well-performing FMCs would be encouraged to develop into appropriately registered MMOs to strengthen their institutional sustainability. The Project would ensure that both FMCs and MMOs exist beyond the Project by helping them develop sustainable market linkages with buyers representing higher value markets. In order to promote the replication of the Project, information concerning the successful models would be widely disseminated through the final dissemination workshop and the Project's communication campaign (Section 5.3). The Project's exit strategy would be to enable the beneficiaries to assume responsibility for the development activities. The Project would function as a catalyst and motivate the farmers themselves to be the driver for development through the leaders of their respective COs, FMCs and MMOs. And, the long term support provided by the self-funded BSS providers has been shown in some other countries to make a huge difference in sustainability levels, after donor support has been terminated.

In this context, the recent USAID-funded "independent" evaluation of the USABBA Project (Section 2.4.1.2) concluded that: "in the absence of Government resources and outreach and higher level of NGO engagement, it is unlikely that project activities will be sustained when the project ends; thus, it is unrealistic to expect sustainability of many COs, though FMCs and MMOs linked to markets may be sustainable; but, many of the impacts of project (agricultural) activities can be sustained by (individual) beneficiaries. One of the reasons for extending the USABBA Project from three to five years was to strengthen those COs in districts where the Project has been operational for the longest time (without forming new COs) to enhance their sustainability as genuine CBOs. Similarly, the aim is also to establish more FMCs and MMOs following appropriate and well targeted value chain development work.

3.3.4. Policy Levels

During the implementation of the AUSABBA Project, attention would be paid to convert technical matters through to policy development. The close linkages of the USABBA Project with the Federal Government of Pakistan's Planning and Development Department and

¹⁹ It should be noted that the evaluation included the high costs of project security in their calculations and did not incorporate the very high turnover attained by the ten Eid livestock *maundis*

MINFSR (and its policy units and research centres) and the Provincial Government of Balochistan's Agriculture and Co-operatives, Livestock and Dairy Development, and Forestry and Wildlife Departments – and by inference, the AUSABBA Project as well – would facilitate this process, particularly in the context of the Eighteenth Amendment and devolution of MINFA and MINLDD to their respective provincial departments, as well as implementation of FAO/CPF. In this context, FAO (jointly through the AUSABBA Project and BAP) would assist the Provincial Government of Balochistan to reform agriculture, livestock, forestry and marketing policies and their legal and regulatory frameworks and strengthen the capacities of Agriculture and Co-operatives, Livestock and Dairy Development and Forestry and Wildlife Departments, DAOs, DLOs and DFOs, private sector organisations and rural support programmes to ensure sustainability of its capacity building interventions.

The Project would also facilitate the multi-sectoral approaches to policy development that are necessary for addressing provincial issues, developing public-private partnerships, and reducing food insecurity and rural poverty. The further development of policies for the promotion of good agricultural practices and private sector investment in value chain development in Balochistan Province would also prove a useful model for generic approaches to reducing pre and post-harvest losses and increasing rural household incomes in Pakistan.

At the grassroots level, the AUSABBA Project would continue to involve as many stakeholders as possible in its development of food production strategies and produce marketing policies through the dissemination of good agriculture practices and support to COs, FMCs and MMOs. Notable stakeholders that would be involved in these consultations would be the families of marginal and small-scale farmers/livestock keepers, district and tehsil extension workers, local input suppliers, local buyers and traders, and local rural-based agri-businesses. The Project would assist the stakeholders to ensure the appropriate and transparent targeting of the Project's adaptive research and participatory extension, experimental and iterative policy making, and monitoring and evaluation interventions.

The successful models developed by the USABBA Project would be (adapted and) scaled up in western Balochistan Province through the AUSABBA Project, where applicable. Similarly, successful models further developed by both the AUSABBA Project and BAP could be scaled up in other parts of Balochistan and Pakistan with contributions from the Provincial Government of Balochistan, the Federal Government of Pakistan, other international organisations supporting economic growth and food security (e.g. AusAID, IFAD, USAID, the World Bank and CGIAR centres), and national and international private sector organisations (e.g. Nestle Pakistan Limited, Ahmed Food Products Limited, Shezan International Limited, Mitchells Fruit Farms Limited and Dittu and Sons Fruits Products) supporting the research and development of food technologies.

3.3.5. Environmental and Social Safeguards

One of the aims of the AUSABBA Project is to develop and promote new and improved crop and livestock production and marketing technologies for the sustainable restoration and management of natural resources through integrated and collaborative approaches to natural resource management that encourage the environmentally friendly but productive use of land, water and forests, while contributing to their conservation. These would include the demonstration and extension of appropriate conservation agriculture, water harvesting, onfarm water management, integrated plant nutrient management, IPDM and range management technologies and practices – which should reduce soil erosion while improving soil and water quality and water holding capacities.

However, technical support to the crops and livestock sub-sectors may have some environmental impacts which may require mitigation measures, e.g. soil and water pollution due to use of chemical pesticides and fertilisers during crop production, storage and processing (e.g. contamination of ground and surface water sources through seepage and runoff and increase acidity of the soil due to prolonged use of fertilisers); slow uptake of agricultural diversification practices, and continued monoculture of wheat leading to deficiencies in soil nutrient status, and depletion of soil fertility due to more intensive farming; overgrazing and land degradation of rangelands and water-points; and potential social conflict with other occupational groups over access to water supplies (e.g. farmers versus livestock rearers, and small-scale farmers versus large-scale farmers). The Project would therefore ensure that, as part of its adaptive research of new and improved technologies and conflict resolution training of COs, any risk of environmental damage and social conflict is mitigated. FAO already has experience in the implementation of disaster risk management plans in accordance with AusAID guidelines and procedures.

3.4. Risks and Assumptions

Risk	Impact	Probability	Mitigation
Balochistan is a volatile area prone to outbreaks of ethnic and political violence and kidnapping for financial gain. There is an ongoing low level insurgency, particularly in Baloch areas.	Outbreaks of violence can prevent access to areas and communities (particularly for international staff) and can slow down project operations and/or reduce effectiveness.	High	FAO will recruit field staff from inside project areas and, as such, are respected by the local people and less affected by security issues. International staff will comply with UNDSS guidelines and Government procedures for Balochistan, which include the provision of an armour- plated vehicle and police escorts for field travel. National staff will travel in low profile vehicles, either hired from the local market or project vehicles (with project UN- trained drivers) that have no UN identification marks or logos.
Balochistan's reputation of being a backward region prone to political and ethnic instability prevents outside companies from investing in agri- business ventures	Project investments in the establishment of FMCs and MMOs and development of value chains will not be sustainable without investment in long-term market linkages	Moderate	The Project's approaches to community empowerment and value chain development will educate project beneficiaries and make both provincial and outside investors aware of the benefits of introducing and enhancing linkages between farmers from different tribal groups and between them and traders and local/regional markets, so facilitating greater social interaction and economic activity, and indirectly conflict resolution and peace building.
Lack of co-operation from community leaders in conservative areas.	Increasing militancy along the border is being felt, with extremists advocating non co-operation with development agencies, particularly NGOs.	Low	The Project will adopt a full participatory approach with influential members of the local society and its communities. FAO is already perceived as non-aligned and even- handed UN agency in its actions in Balochistan. This gives it credibility in remote areas and, through excellent co- operation with provincial and local government officials, FAO will continue to work with tribal elders and senior community leaders to receive their endorsement and support.

3.4.1. Risks and Mitigation Measures

Risk	Impact	Probability	Mitigation
Conservative social norms prevent outreach to women.	Female members will not be permitted to participate in the Project by male family members or informal community pressures will intimidate females into non- participation.	High	The Baloch areas are not as strict in their adherence to these requirements as the Pashtoon north-east. The Project will be presented to rural communities as benefiting families by increasing household incomes that can only be achieved through the participation of female family members. These will be facilitated by female staff of the Project who themselves will be recruited from local populations. Given the sensitive relations with Government institutions in Baloch areas, FAO will work with tribal elders and community leaders to receive their endorsement and support.
Intended project beneficiaries are not willing to contribute 50% (25% for women) as matching contributions because other rural development programmes in Balochistan require only 15% (e.g. BRSP and UNDP/BADP).	A sense of ownership of project investments by project beneficiaries is lost, and operation and maintenance, repairs, further self- investment, etc are not sustained. In addition, project outputs are not achieved.	Low	Positive experiences of the USABBA Project in sustainable agriculture will be shared with selected communities of western Balochistan Province through exchange visits and consultations. Moreover, the One UN-II Programme of Pakistan (in particular its "economic growth" priority area) will put in place a coherent policy on cost-sharing from project beneficiaries that conforms to current development best practices.
FMC Members are unwilling or unable to fund the self-help BSS providers and this support ceases. And the risk of failure increases exponentially after project support is withdrawn	Few if any FMC members will have the education and skills to successfully manage their finances, to negotiate direct marketing arrangement with buyers and manage the FMC unaided.	Medium	After the first one or two trading cycles, conducted with support from CDMF's, it is far more likely that members will see the benefits provided by BSS providers and FMC.
Locating international technical assistance (TA) personnel who are willing to work in Balochistan Province.	Failure to recruit suitable international TA will reduce project effectiveness, local staff will not access latest thinking on development process and methods, and M&E systems will be less effective.	Moderate	FAO has a wide range of expertise with good networks in their technical specialisation to identify suitable individuals. Salary packages will be modified to make them more attractive and the existing UN system of mobility and hardship classification addresses the remote and difficult operational environment.
Attracting suitably qualified national staff to implement and backstop field activities.	Much local expertise in Pakistan comes from the Punjab and KP Provinces. However the security situation in Balochistan seriously constrains the use of non-Balochistani staff.	High	FAO will actively recruit from within Balochistan Province and, in particular, the project areas or from Khyber Pakhtunkhwa (KP) Province and utilise international support staff and consultants to raise skill levels through in-service training. Remuneration packages will be structured to attract the best local candidates available.

Risk	Impact	Probability	Mitigation
Return of moderate or severe drought conditions to western Balochistan.	This could prevent full adoption of new and improved crop and livestock production and natural resource management technologies and practices with consequential effects on the achievement of project outputs.	Moderate	Part of the project strategy is to enhance farm families' resilience to adverse climatic events, in particular increasing emphasis on development of irrigated agriculture and use of water harvesting technologies. However, given the nature of farming in these marginal areas and the relative of short-time horizon of the Project, this risk may have to be accepted.

3.4.2. Child Protection

The 2010 Balochistan Multiple Indicator Study reported that almost none of children under five years of age had been registered with local councils. The study also estimated that one-fifth of children are involved with some form of paid or unpaid work, e.g. farm work, labouring, tutoring and family businesses (20.5 percent for boys and 17 percent for girls), i.e. (i) 3.5 percent employed outside of the household; (ii) 18.5 percent involved with some form of household economic activity (20 percent for boys and 16 percent for girls); and (iii) 25 percent involved with household chores (21 percent for boys and 29 percent for girls).

Like all United Nations agencies, FAO abides by all international declarations, conventions and agreements on child abuse and child labour. However, FAO will ensure that the AUSABBA Project is implemented in compliance with AusAID's Child Protection Policy and its standards²⁰. The Policy's overall goal is "to protect children from abuse of all kinds in the delivery of Australia's overseas aid programme". The Policy also provides a framework for managing and reducing risks of child abuse by persons engaged in delivering aid programme activities such as the AUSBBA Project. The Policy has four guiding principles, viz: (i) zero tolerance of child abuse; (ii) recognition of children's interests; (iii) sharing responsibility for child protection; and (iv) use of risk management approaches. In this context, FAO will ensure that appropriate mechanisms are in place to protect children from abuse in beneficiary communities, minimise the employment of children in farm, construction and agro-processing work related to project investments, and participate fully in AusAID Pakistan's awareness campaigns, risk assessments and treatments, and audits (as an integral part of project socio-economic baselines and participatory needs assessments, in-service training courses, FFSs, monitoring and reporting systems, evaluations, etc).

3.4.3. Anti-Corruption

FAO and USAID have not received any reports of corruption during implementation of the FSPAB Pilot Project Phase and AUSABBA Project. However, FAO will ensure that the AUSABBA Project is implemented in compliance with AusAID's Anti-corruption for Development Policy and its standards²¹. The Policy's overall goal is "to assist developing countries bring about a sustainable reduction in corrupt behaviour for the purpose of improving economic and social development". Australia's approach to anti-corruption focuses on three mutually reinforcing elements, viz: (i) building constituencies for anti-corruption through the strengthening of organisational leadership; (ii) reducing opportunities for corrupt

²⁰ Australian Government, AusAID; Child Protection Policy; January 2009

²¹ Australian Government, AusAID; Tackling Corruption for Growth and Development – a Policy for Australian Development Assistance on Anti-Corruption; March 2007

behaviour by working closer with leaders, public officials and those in the private sector to discourage and enforce corruption.

In this context, the Project, through its participatory capacity development interventions, will make government and private sector agricultural support service providers aware of the need and empower rural communities to improve governance and tackle grass-roots corruption. Long-term sustainability is most likely to be achieved through such a partnership approach. Moreover, AusAID and FAO will partner with relevant government departments, bilateral agencies, multi-lateral donors, regional and global organisations, private sector organisations and civil society operating in the agricultural sector of Balochistan Province in putting AusAID's policy into practice.

The implementing agencies involved with the project, particularly the Provincial Government of Balochistan's Planning and Development, Agriculture and Co-operatives, Livestock and Dairy Development and Forestry and Wildlife Departments, have a long history of and a good working relationship with FAO and are familiar with FAO's financial and administrative procedures. Also to mitigate any risk of corruption, FAO has planned close follow-up, and would emphasise due diligence and transparency in financial management, procurement of goods, services and works and independent audits, coupled with periodic reviews of accounts, statement of expenditure and close monitoring of the targeting of investments under the Project. The FAO Representation in Pakistan would also monitor the Project's implementation closely and initiate performance audits of key contracts.

3.5. Estimated Project Budget

The total cost of the AUSABBA Project is estimated at AUD 12.88 million. The project budget is summarised in Tables 4 and 5.

Project Output/Component	Cost (AUD)
Output 1. Policy Development and Capacity Building	1,336,800
Output 2. Community development and Technology Transfer	4,164,800
Output 3. Produce marketing and Value Chain Development	1,881,200
Project Management, Monitoring, Evaluation and Reporting	4,015,430
FAO Support Costs (13 percent)	1,481,770
Total	12,880,000

Table 4. Project Budget – by Outputs and Components

- E	
	Total
r - 1	TOTAL

Cost Category	Cost (AUD)
Personnel	3,193,000
Contracts	1,345,800
Travel	752,000
Training	1,635,700
Expendable Procurement	2,999,800
Non-expendable Equipment	258,600
Technical Support Services	196,400
General Operating Expenses	1,016,930
Sub-total	11,398,230
Other Direct Costs	1,481,770
TOTAL	12,880,000

Table 5. Project Budget – by Cost Category

A detailed budget for the Project is provided in Annex 1.

4. IMPLEMENTATION ARRANGEMENTS

4.1. Institutional Framework and Co-ordination

The AUSABBA Project would be implemented through the Government of Pakistan's Ministry of Food Security and Research (MINFSR) and executed by the Food and Agriculture Organization of the United Nations (FAO) in collaboration with the Provincial Government of Balochistan's Agriculture and Co-operatives, Livestock and Dairy Development, and Forestry and Wildlife Departments. The main project review and policy setting mechanism would be the semi-annual Project Steering Committee (PSC) meetings chaired by the Secretary, MINFSR, or his appointed representative (Section 4.1.3).

4.1.1. Organisational Structure

The Project's organisational chart is similar to that of the USABBA Project and BAP, with a shared "FAO in Balochistan" Programme Co-ordination Unit (PCU)". An organisational chart for the AUSABBA Project is provided in Annex 2.

4.1.2. Contractual Arrangements

AusAID will sign a Financing Agreement with FAO for implementation of the Project. FAO may sub-contract with relevant partners for the provision of specialised technical assistance to specific project activities. The AUSABBA Project would be carried out over 48 months from the date specified in the Financing Agreement between FAO and AusAID. It is anticipated that the Project will start on 1 May 2012 and extend until 30 April 2016.

4.1.3. Project Steering Committee, Provincial Focal Point and Technical Working Group

The PSC would be responsible for overall project oversight and high-level policy guidance and meet at least twice per year. In addition, it would be required to review and approve the annual project work plans and budgets and review the bi-annual progress reports (for approval by FAO). The Committee would meet twice during each project year, at a time suitable for approving the annual work plan and budgets and reviewing the semi-annual progress reports. Among other issues, the first meeting of each project year would concern itself with reviewing the annual (second semi-annual) progress report and approving the proposed action plan for the coming project year and the mid-project year meeting would be required to review the first semi-annual progress report and revise the annual project work plan (for the second half-year) accordingly. The PSC would not play a major role in the day-to-day administration of the AUSABBA Project.

The Foreign Aid Division of the Government of Balochistan's P&DD has agreed that PSC hosted by the federal MINFSR without affecting the availability of resources from the counterpart provincial line departments. The PSC would therefore be chaired by the Secretary, MINFSR, or his appointed representative, and would have members from MINFSR and the National Planning Commission (Food and Agriculture Section), Provincial Government of Balochistan's Planning and Development, Agriculture and Co-operatives, Livestock and Dairy Development, and Forestry and Wildlife Departments, and AusAID and FAO Representations in Pakistan, as well as appropriate representatives from the project area and other key stakeholders as deemed appropriate to participate at the discretion of Chairperson. The FAO's international Programme Manager and national Assistant Programme Manager would be *ex officio* members of PSC, with responsibility for meeting organisation, information sharing and minute taking.

The Provincial Government of Balochistan's Secretary, Agriculture and Co-operatives Department would act as the "Provincial Focal Point" for the Project. The Provincial Focal Point would ensure effective co-ordination between the Project and relevant government line departments in Balochistan Province (including Livestock and Dairy Development and Forestry and Wildlife) and their full participation in project activities. The Provincial Focal Point would also be a member of PSC.

The PSC would be supported by a provincial TWG for the agriculture sector in Balochistan Province hosted by P&DD. The TWG would meet on a quarterly basis to harmonise donor and government-funded interventions in the agriculture sector, support the Government of Balochistan in the reform of agricultural policies, and guide PCU of AUSABBA and BAP and project management units of ASLP, MDF, FIRMS, PACCD, Pakistan Strategy Support Programme, Balochistan Small-scale Irrigation Project, Gwadar-Lasbela Livelihoods Support Project, etc in a co-ordinated approach to agricultural development. The TWG would be chaired by the Chief Foreign Aid of P&DD, or his appointed representative, with the Provincial Focal Point/Secretary, Agriculture and Co-operatives Department as secretary, and would have members representing the Government of Balochistan's Agriculture and Co-operatives, Livestock and Dairy Development and Forestry and Wildlife Departments, AusAID, FAO, IFAD, USAID and the World Bank, and the respective programme co-ordination and project management units.

4.1.4. Affiliation with Government Departments

Each project sub-sector would be affiliated with its respective government department or research institute, viz:

- Agricultural policy reform and strategy development Pⅅ
- water harvesting and water management Agriculture and Co-operatives Department (On-farm Water Management Directorate);
- crop production Agriculture and Co-operatives Department (Agricultural Extension Directorate);
- livestock production Livestock and Dairy Development Department;
- value chain development Agriculture and Co-operatives Department (Agriculture Economics and Marketing Directorate, with support from the Agriculture Research Food Technology and Post-Harvest Directorate and the Co-operatives Department);
- range management Forestry Department (Chief Conservator of Forests (South Region));
- agricultural research AZRC (with backstopping from NARC) and the Agriculture and Co-operatives Department (Agricultural Research Department).

4.2. Strategy and Methodology

4.2.1. Implementation Process

The Federal Government of Pakistan and USAID originally agreed that the USABBA Project focus on knowledge gathering and information sharing, capacity development with decentralised, community-led development and market-led approaches to agricultural research and development". The BAP has since integrated provincial-level policy development and value chain development to the list of focal areas. AusAID has further agreed that the implementation process of the AUSABBA Project would "mirror" that of BAP in a different geographical location and a different agro-ecological zone and ethnic grouping.

The implementation process of the AUSABBA Project would therefore be structured, participatory and consultative, while always emphasising the development of marginal and small-scale producers of western Balochistan Province, as well as food processors, traders and exporters of the Province as a whole. The Project would fully engage with the Provincial Government of Balochistan's Agriculture and Co-operatives, Livestock and Dairy Development, and Forestry and Wildlife Departments and their district, tehsil and divisional-level extension systems, and national and provincial-level policy and development departments and research centres, while maintaining focus on community development, post-harvest management and marketing, and stakeholder capacity building through the management support and technical assistance of FAO.

Sections 2.2 and 3.3 have already outlined the strategy and methodologies to be used by the AUSABBA Project to successfully achieve its outcome in a timely and efficient manner. The strategy behind the Project will contribute to the Balochistan Poverty Reduction Strategy, Pakistan's New Framework for Economic Growth and the One UN Programme-II and FAO/CPF by increasing food production and agricultural economic growth, reforming agricultural and rural markets, and ensuring gender equity in Balochistan Province.

The AUSABBA Project would be implemented in the field through locally accepted best development practices in community-led development, adaptive research, participatory extension and value chain development which have been tested and validated under the USABBA Project (and other similar agricultural development projects in Pakistan). Such approaches and practices would be adapted for the different ethnic groupings and agro-ecological conditions prevailing in western Balochistan as part of the AUSABBA Project's capacity building interventions during the first year – following the district-level socio-economic baseline surveys. Stakeholder participation and ownership would be ensured through participatory needs assessments, demand-level technologies, the establishment of men and women COs, FMCs and MMOs administered by democratically elected committees, the implementation of men and women FFSs and FBSs, the cost-sharing of project investments by members of COs, FMCs and MMOs, and the re-investment of group savings.

To enhance local ownership, COs, FMCs and MMOs would be guided by locally recruited men and women District Team Leaders/Marketing Associates, CDM Facilitators, FFS Facilitators and CAHWs. Such staff would trained by the AUSABBA Project and closely monitored by community development, crops, livestock, water management and marketing specialists employed by the Project and assisted by Provincial Government subject matter specialists and district, tehsil and divisional-level extension workers. The Project's research and development activities would be closely linked to relevant on-going national and provincial programmes of NARC, AZRC and the Agricultural Research Directorate of the Balochistan Provincial Government's Agriculture and Co-operatives Department. These activities would be enforced through the sharing of knowledge with relevant agricultural research and development work in similar agro-ecological zones outside of Pakistan through letters of agreement or memoranda of understanding with ACIAR and CGIAR centres present in Pakistan.

However, the AUSABBA Project's strategy and methodology would not be rigid but sufficiently flexible so that both may adapt and change if necessary as experiences are gained and lessons learned from the field. Projects often "learn by doing" and this approach is accommodated within the project design. In this context, the Project's three components and participatory monitoring activities (including regular attendance and support of COs', FMCs' and MMOs' meeting by project field staff) would be implemented in an integrated and closely co-ordinated manner to ensure feedback, modification and follow-up of the Project's community development, technology transfer and value chain development interventions.

4.2.2. Implementation Plan

The Project would be carried out over 48 months from the date specified in the Financing Agreement between AusAID and FAO (proposed at 1 May 2012). The Inception Phase of one to two months would focus on project preparation, planning and establishment. The remainder of the Project would focus on the implementation of project activities and achieving the three key capacity building and agricultural investment outputs – with the final six months focusing on the self-funding and sustained operations of COs, FMCs and MMOs. The time-lines for the implementation of individual project activities are shown in the detailed work plan (Annex 3).

4.3. Government Inputs

Achievement of the objectives defined by the AUSABBA Project is understood to be the joint responsibility of the Federal Government of Pakistan, Provincial Government of Balochistan and FAO. In this context, The Federal Government of Pakistan would assign PSC and the Provincial Government of Balochistan would assign the Provincial Project Focal Point Person from the Agriculture and Co-operatives Department (in agreement with the collaborating Livestock and Dairy Development and Forestry and Wildlife Departments).

The Federal Government of Pakistan will make the necessary arrangement for clearance of international consultants, customs clearance of equipment and imported germplasm. As part of the Provincial Government of Balochistan's contribution to the Project, the Agriculture and Co-operatives, Livestock and Dairy Development and Forestry and Wildlife Departments would make available the needed number of qualified personnel from and the required office space, utilities, training facilities, research and field equipment and local services necessary for the implementation of project activities.

4.4. Donor Inputs through FAO

AusAID has provided a grant of AUD 12.88 million to fund activities under the AUSABBA Project. In this regard, FAO would utilise project funds to finance the inputs listed below.

4.4.1. Personnel

To implement the AUSABBA Project, FAO would recruit the following short-term and fulltime international and national consultants and assign them to PCU and six district field offices (terms of reference of key personnel are provided in Annex 5):

International Staff

• full-time International Programme Manager (48 work-months).

International Consultants

- short-term M&E Specialist (four missions; four work-months);
- short-term Agriculture Policy Specialist (three missions; three work-months);
- short-term Value Chain Development Specialist (four missions; four work-months);
- short-term Marketing Specialists (four missions; four work-months); and
- unspecified short-term consultants (between two and four missions; four work-months).

National Consultants

- full-time Assistant Programme Manager (48 work-months);
- full-time Community Development Specialist (48 work-months);
- full-time Community Outreach Associate (48 work-months);
- six full-time District Team Leaders/Marketing Associates (252 work-months);

- 14 full-time CDM Facilitators (504 work-months);
- full-time Water Resources Management Specialist (48 work-months);
- three full-time Site Overseers (117 work-months);
- full-time Senior Agronomist (48 work-months);
- full-time Assistant Agronomist (24 work-months);
- full-time Livestock Specialist (48 work-months);
- full-time Livestock Assistant (24 work-months);
- full-time Gender Specialist (45 work-months);
- full-time Marketing Specialist (42 work-months);
- full-time M&E Specialist (48 work-months);
- full-time Communications and Reporting Specialist (45 work-months);
- full-time Information Technology Specialist (48 work-months); and
- short-term unspecified national consultants (24 work-months).

National Support Staff

- full-time Senior Administrator (48 work-months);
- full-time Executive Secretary (administration and human resources) (48 work months); and
- 24 national administrative support staff (finance assistants, clerks, messengers and caretakers/guards) (1,044 work-months).

4.4.2. Contracts

This expenditure category is a provision for letters of agreement with implementing partners and agricultural support service providers (i.e. government line departments, NGOs, research and training institutions, consultancy firms, consultants, etc) for the following services:

- communication and awareness campaigns;
- socio-economic baseline surveys (including initial market assessments), village profiles and participatory needs assessments (using GIS mapping systems);
- support to the development of work plans, guidelines and procedures;
- technical support for policy development;
- development of linkages with international agricultural research and remote sensing centres for the research and development of new and improved technologies at provincial and district levels;
- curriculum development for FFSs;
- production of training materials for FFSs;
- technical backstopping of FFS programme;
- technical support services from NARC;
- research and development of new and improved production technologies at the community level;
- value chain analysis and development;
- development of district/value chain market information systems;
- support to mobile telephone, radio and television information systems;
- research and development of new and improved post-harvest management and agroindustrial technologies and practices; and
- assistance with preparation of the project completion report.

4.4.3. Travel

This expenditure is a provision to cover international travel expenses, hazard allowances and daily subsistence allowances for overnight stays by project staff and Government counterpart staff outside of their duty stations in Quetta, the project districts and Islamabad.

The support to value chain analyses and market development missions requires extensive travel for project staff, participating beneficiaries and government officials associated with the respective project interventions. In addition, the very difficult security environment of Balochistan Province makes visits by the donor to the project area problematic, therefore the Project would implement a policy of, wherever possible, supporting visits by the beneficiaries to meet AUSAID officials in Islamabad and Quetta which, in turn, increases the amount required for travel.

4.4.4. Training

This expenditure category is a provision to cover the cost of the following training activities:

- capacity building of stakeholders for in light of re-organisation of relevant government line departments, private sector organisations and rural support programmes;
- strengthening of public and private sector agricultural support service providers;
- establishment of men and women COs;
- establishment of district, tehsil and union council-level CO alumni associations/FFS networks;
- training of FFS Facilitators;
- organisation of farmers' awareness workshops;
- implementation of men and women FFSs;
- organisation of FFS field days and graduation ceremonies;
- organisation of farmers congresses;
- training of CAHWs;
- training of men and women COs (not covered by FFSs);
- capacity building of small agri-business enterprises;
- establishment of FMCs;
- establishment of MMOs;
- initial support and strengthening of BSS providers;
- support to M&E;
- organisation of PSCs; and
- organisation of a final project dissemination workshop.

4.4.5. Expendable Procurement

This cost category is a provision to cover the cost of procuring:

- new and improved production and post-harvest management packages for distribution to members of men and women COs on a cost-sharing basis (including supply and works contracts for agricultural inputs and small community-based civil works);
- CAHW kits; and
- marketing packages for distribution to FMCs and MMOs on a cost-sharing basis (including supply, service and small community-based civil works contracts for processing and marketing equipment, materials and facilities).

4.4.6. Non-Expendable Procurement

This cost category is a provision to cover the cost of procuring one armour-plated four-wheel drive vehicle, computers, printers, photocopiers, office furniture, communication equipment, training equipment, etc. to strengthen PCU in Quetta and equip the six district field offices.

4.4.7. Technical Support Services

This cost category is a provision to cover technical support from FAO Headquarters, Rome and FAO/RAP, Bangkok for backstopping and monitoring of project operations, including reporting costs, mid-term review and terminal evaluation and technical advisory services from FAO technical units.

4.4.8. General Operating Expenses

This cost category is a provision to cover the rental of six district field offices and the operation and maintenance of vehicles, motor cycles, computers, photocopiers, communications, training and office equipment etc, the hiring of vehicles in the project districts, the purchase of office supplies, the provision of security and incremental costs for MOSS compliance, and payment of utility and general office expenses.

4.4.9. Support Costs

This cost category is a provision to cover the administrative and miscellaneous expenses related to the implementation of the Project at FAO Headquarters, FAO Regional Office for Asia and the Pacific (RAP) and FAO Representation in Pakistan. This is a transparent approach by FAO to apportion charges for such overhead costs. It is Organization policy not to overcharge other budget lines to hide this expenditure. All funds on other cost categories are thus fully dedicated to project implementation.

4.5. Technical Support and Linkages

The Federal Government of Pakistan, the Provincial Government of Balochistan and AusAID have agreed that FAO be responsible for overall project execution and the provision of technical assistance of the AUSABBA Project. FAO would therefore be responsible for the quality of the technical assistance that is provided by the Project and for ensuring that it is provided in a timely manner. The technical assistance would be provided by FAO technical staff, international and national technical specialists/consultants and specialists from partner organisations and institutions (e.g. government agencies, academic and research institutions, private sector organisations, NGOs, ACIAR, relevant CGIAR centres, etc).

Section 1.3.2.6 has outlined the goals and objectives of FAO's Strategic Framework for the period, 2010 to 2019. In this context, the FAO Representation in Pakistan and PCU of the AUSABBA Project and BAP would strengthen and maintain their linkages with the relevant technical and operational departments and divisions of FAO Headquarters and RAP, viz:

- Agriculture and Consumer Protection Department (e.g. Animal Production and Health, Nutrition and Consumer Protection, Plant Production and Protection and Rural Infrastructure and Agro-industries Divisions); and
- Natural Resources Management and Environment Department (e.g. Land and Water Division).

Overall technical supervision would be provided by the relevant technical division at FAO through the appropriate lead technical unit (LTU), which, for the AUSABBA Project, would be its Headquarter's Rural Infrastructure and Agro-industries Division, which is represented by a technical officer within the Agriculture and Food Systems Group of FAO/RAP.

Moreover, the FAO Representation in Pakistan and PCU would develop and maintain linkages with ongoing donor-funded agricultural development projects in Balochistan Province for knowledge sharing and potential co-financing, in particular those funded by AusAID, IFAD, USAID and World Bank – some of which are listed in Sections 2.4.2 and 2.4.3. Similarly, the FAO Representation in Pakistan and PCU would develop linkages with ACIAR and CGIAR centres (e.g. ICARDA, CIMMYT and IWMI) based in Pakistan for the research and development of new and improved technologies.

4.6. Management and Operational Support Arrangements

4.6.1. "FAO in Balochistan" Programme Co-ordination Unit

The AUSABBA Project would assist FAO to extend and maintain PCU, which has already been established by the USABBA Project²², and six district field offices (Chagai, Kech, Kharan, Nushki, Panjgur and Washuk) for the overall co-ordination, supervision, management and reporting of project activities and evaluation of project interventions – using development evaluation methods which encourage the adoptions of lessons learned over time. The Project would also assist PCU to collect, analyse and provide FAO and AusAID with sufficient information upon which to target, monitor and evaluate project outputs and activities. The PCU would continue to be located at AZRC in Quetta.

A full-time international Project Manager already heads PCU. Acting under the delegated authority of the FAO Representative for Pakistan, and in line with FAO's rules and procedures, the international Project Manager would be responsible for ensuring timely disbursement of the project's financial resources, the effective delivery of project outputs, management of the project's human resources, effective project administration and overall smooth operation of the Project on a day-to-day basis – and will continue to do so with support of the AUSABBA Project.

The PCU would oversee the work of district teams who would be based in the six project districts consisting of selected national technical specialists, CDM Facilitators and operational and administrative staff. All district staff would report directly to the Project Manager. The work of the CDM Facilitators would be co-ordinated and supervised on a day-to-day basis by the national technical specialists in relation to the implementation of individual community development, crop and livestock production, and marketing activities.

The AUSABBA Project would fund 36 national specialists and field staff. National specialists would work under the direct supervision of the international Project Manager and the technical supervision of the relevant FAO Technical Division and would be responsible, entirely or in part, for the implementation of selected project key activities. The national specialists would be based in PCU but may be required to spend considerable time in the project districts, providing direct support to community and field-level project activities.

In addition, four short-term international specialists in agricultural policy development, capacity building, value chain development and produce marketing and between one and four unspecified international consultants would provide technical assistance and supervisory support to project activities. They would work under the direct supervision of the international Project Manager and the technical supervision of the relevant FAO Technical Divisions. They would be attached to PCU and would be required to spend time in the project districts.

Included in the field staff are 20 CDM Facilitators (10 male and 10 female), who will be employed full time to work directly with COs and be an interface between the organisations and the project staff, researchers and Provincial Government's counterpart DAO, DLO and DFO extension staff.

²² The USABBA Project is expected to terminate in December 2014, from when the AUSABBA will totally fund PCU

4.6.2. Management Plan

Some key activities of the management plan for the AUSABBA Project might include, but not be limited to:

- Prepare work plans and refine implementation guidelines and procedures for project funding during the Inception Phase of the AUSABBA Project.
- Undertake communication and awareness campaigns in Chagai, Kech, Kharan, Nushki, Panjgur and Washuk Districts on project targeting, group approaches, project operations, cost-sharing arrangements, etc during the Inception Phase of the AUSABBA Project.
- Extend and support the AUSABBA Project and BAPs' joint monitoring, reporting and evaluation system, including the preparation and presentation of semi-annual progress reports to FAO, AusAID, the Provincial Government of Balochistan and the Federal Government of Pakistan using GIS mapping systems where applicable. Lessons learned and recommendations for implementation of appropriate changes and interventions would be highlighted.
- Facilitate a Mid-term Review of project implementation during the twenty-fourth month of the AUSABBA Project. The Mid-term Review would focus on project impacts, particularly those relating to: (i) institutional, administrative, organisational and technical aspects; and (ii) social aspects and poverty reduction.
- Organise a final dissemination workshop with representatives of relevant government line departments from federal, provincial and district levels (e.g. Federal EAD, Planning Commission, MINFSR and PARC, Provincial Planning and Development, Agriculture and Co-operatives, Livestock and Dairy Development and Forestry and Wildlife Departments and DAOs, DLOs and DFOs, FAO, AusAID and other relevant development partners, key agriculture support service providers and representatives of relevant private sector organisations and companies, and men and women COs, CO alumni associations/FFS networks, FMCs and MMOs, to share the impact outcome of the AUSABBA Project, and recommend and seek consensus regarding further actions for longer term agricultural development.
- Prepare a Project Completion Report within six months of project completion by FAO and the Provincial Government of Balochistan. This comprehensive report would summarise all activities, achievements and outputs of the Project, lessons learnt, objectives met or not achieved, structures and systems implemented, etc and would be the definitive statement of the Project's activities during its lifetime. It would also set out recommendations for any further steps that may need to be taken to ensure sustainability and replication of the Project's outcome in other settings.

5. OVERSIGHT, MONITORING, MANAGEMENT INFORMATION, AND REPORTING

5.1. Monitoring and Evaluation System

Project monitoring, reporting and evaluation would be conducted in accordance with established procedures of FAO, the Federal Government of Pakistan and AusAID. A Logical Framework Matrix (Annex 4) would provide performance and impact indicators for project implementation along with their corresponding means of verification. These would form the basis on which the Project's monitoring, reporting and evaluation system would operate.

The PCU for the USABBA Project has already established a monitoring reporting and evaluation system which will be extended and further supported (on a cost-sharing basis) by the AusAID-funded Project to accommodate the new project area. The extended monitoring, reporting and evaluation system would be developed during the Inception Phase of the Project, including the detailed elaboration of targets, indicators and means of verification of outputs for the AUSABBA Project.

5.2. Oversight and Reviews

MINFSR, the Provincial Government of Balochistan, FAO and AusAID would review the Project every six months (or more frequently as deemed necessary) through the preparation of bi-annual progress reports which would be drafted by PCU and approved by the FAO Representation in Pakistan and FAO/LTU prior to onward transmission to AusAID. This would allow parties to take stock and to solve any problems pertaining to the Project in a timely fashion to ensure smooth implementation of project activities. Annual technical reviews may be undertaken if deemed necessary. The terms of reference, timing, place and organisation of these reviews would be decided in consultation between FAO, MINFSR and AusAID.

The MINFSR, Provincial Government of Balochistan, FAO and AusAID could each call for a project evaluation at any stage of the Project, if deemed necessary.

FAO, MINFSR and AusAID would carry out a Mid-term Review of project implementation at the end of the second project year. The Mid-term Review would focus on project impacts, particularly those relating to: (i) institutional, administrative, organisational and technical aspects; and (ii) social aspects and poverty reduction. It will also:

- review the original project scope, design, implementation arrangements and other relevant issues in light of the development strategies and policy frameworks of the Federal Government of Pakistan and Provincial Government of Balochistan and the strategic concerns of AusAID, including any modifications if needed;
- examine progress towards achieving the measurable objectives of the Project and agree on minor changes in the project's design and implementation;
- assess compliance with the Financing Agreement between FAO and AusAID and letters of agreement between FAO and implementing partners and agricultural support service providers;
- identify problems and constraints;
- formulate appropriate recommendations for corrective actions; and
- develop a revised project implementation schedule for effective implementation of the interventions.

The organisation, terms of reference and timing of the Mid-term Review would be determined by MINFSR, FAO and AusAID in accordance with established terms of reference for tripartite review missions for donor-funded projects.

5.3. Monitoring and Knowledge Sharing

The present M&E system for the USABBA Project consists of a set of participatory planning, information gathering, analysis and reporting processes, along with the necessary supporting conditions and capacities required for M&E outputs to make a valuable contribution to future project decision-making and learning processes. The system guides the ongoing review of the overall project intervention strategy and any decisions to adjust or otherwise modify project

operations. The system also provides the basis for determining the impact of the different interventions supported by the Project and the efficiency of the overall approach. As indicated above, the present M&E system would be extended to monitor AUSABBA Project operations in the districts of Chagai, Kech, Kharan, Nushki, Panjgur and Washuk.

During the Inception Phase of the AUSABBA Project, the AUSABBA Project and BAP would jointly provide for a short-term international M&E Specialist to review the existing monitoring, reporting and evaluation system and, in consultation with all key stakeholders, make recommendations for extension and improvement to accommodate the AUSABBA Project and any further requirements of AusAID – while maximising the participatory and self-monitoring nature of the system. The baseline values for objectively verifiable indicators of the Logical Framework Matrix for the AUSABBA Project would also be established during the aforementioned Inception Phase.

The joint Projects' M&E system would be run on a daily basis by the national M&E Specialist and assisted by two M&E Assistants, each one dedicated to one of the AUSABBA Project and BAP. The three M&E staff would be based in the joint PCU, Quetta and work under the direct supervision of the international Project Manager. An international M&E Specialist would provide extensive oversight and technical backstopping during the course of the two Projects. The Evaluation Unit at FAO Headquarters would provide the necessary technical supervision.

A global work plan and budget, covering the entire period of the Project would be finalised by an FAO Inception Mission for the AUSABBA Project within two months from the date that the Project is declared effective by FAO and AusAID. The global work plan would incorporate an extension of the Projects' monitoring, reporting and evaluation system and a detailed annual work plan and budget for the first year of the AUSABBA Project. The global work plan and budget would be closely monitored by MINFSR and the Provincial Government of Balochistan to ensure the quality of technical assistance and efficient management and implementation of the Project. They would ensure that the different levels of results of the intervention as well as the corresponding assumptions and risks are adequately monitored.

The AUSABBA Project's Logical Framework Matrix would include a series of indicators against which progress of project interventions would be measured. In monitoring and reporting on the project progress to MINFSR, the Provincial Government of Balochistan, FAO and AusAID, the FAO's international Project Manager and national Assistant Project Manager would be ably assisted by international and national specialists in project operations, M&E and communications throughout the project period. Periodic monitoring of progress and achievements of project implementation at district levels would be undertaken against the objectively verifiable indicator defined in the Logical Framework Matrix. Monitoring of risks that might affect project delivery would also be undertaken.

The PCU would be responsible for tracking, monitoring and evaluating project implementation. In this regard, PCU, with the assistance of the Provincial Government of Balochistan's Agriculture and Co-operatives, Livestock and Dairy Development, and Forestry and Wildlife Departments, would prepare and submit annual project implementation plans and budgets. These would provide a basis for PCU to carry out monitoring of the Project's implementation performance. FAO's international Project Manager and national Assistant Project Manager, assisted by the Project's M&E Specialist, would monitor physical progress of the project activities undertaken directly by FAO and indirectly by their respective implementing partners and agricultural support service providers. FAO's international Project Manager would, in turn, keep MINFSR, the Provincial Government of Balochistan, and the FAO Representation in Pakistan, RAP and Headquarters continuously informed about

activities and problems and issues encountered during project implementation through FAO's national Programme Co-ordinator and FAO's regular reporting mechanisms.

5.4. Communication and Visibility

In accordance with the relevant provisions of the Financing Agreement between FAO and AusAID, visibility and communication actions for the AUSABBA Project would be developed following firstly, the guidelines of the Federal Government of Pakistan and AusAID (under their Australia-Pakistan Development Partnership and AusAID's Visibility and Recognition Guidelines, both dated 2011) and secondly, the communication strategies of FAO and its implementing partners. Communication activities would focus on the outcome and outputs achieved of the Project, targeting general and specific audiences in the villages and districts of western Balochistan Province as well as in AusAID's sphere of influence. The Project's communication plan would be prepared at the Inception Phase to ensure "buy-in" from all stakeholders, and would then be shared with AusAID for endorsement.

The key objectives of the communication plan would be to relay the Project's successes, reporting regularly to AusAID, FAO, the Federal Government of Pakistan and the Provincial Government of Balochistan, and to publicise the AUSABBA Project internationally and nationally through various means of communications and media outlets. Implementation of the Project's Communicant Plan would be co-ordinated by PCU through a national Communications and Reporting Specialist co-funded by the Project. The national Communications and Reporting Specialist would be assisted by a national Communications and Reporting Specialist would be assisted by a national Communications and Reporting Assistant dedicated to the AUSABBA Project.

The FAO communications campaign for the USABBA Project has a multi-pronged approach, targeting multiple audiences with tailored communications products – which would be extended and further supported by the AUSABBA Project. The campaign would therefore continue to emphasise the human face of assistance from AusAID, as well as the efficient, varied and sustainable efforts of FAO, while ensuring that the main objectives of AusAID, the Federal Government of Pakistan and the Provincial Government of Balochistan are clearly communicated and retained by the audience. In order to reach the relevant audiences, a variety of communication tools would continue to be used, such as newspapers and magazines of different languages, both regionally and nationally, and radio and television. Television is not that widespread in Balochistan Province, but many rural people are listening to the hitherto underused and comparatively economic national and local radio stations.

The AUSABBA Project's communication campaign would be co-branded with AusAID and FAO as the "AUSABBA" (or "Australian Assistance to Agriculture in Balochistan Border Areas" Project). Continually describing the project as "ABBA" has positive connotations for the Project's recipients/beneficiaries as "*abba*" is the honorific word for "father" or a "paternal father" figure in most of the languages found in Pakistan. The Project should not be identified as AusAID/FAO as this suggests that the two organisations are one and the same. The relationship of AusAID and FAO should be clearly stated – AusAID is a donor agency of the Australian Government and FAO is a United Nations organisation providing technical assistance. The following sentence should therefore be used repeatedly to describe the relationship: "the AusAID-funded and FAO-implemented Assistance to Agriculture in Balochistan Border Areas (AUSABBA) Project".

The key audiences for the AUSABBA Project's communications campaign would be: (i) direct beneficiaries (men, women, boys and girls); (ii) rural populations of indirect beneficiaries (men, women, boys and girls); (iii) the general public of Balochistan Province, as well as the wider public of Pakistan; (iv) the Provincial Government of Balochistan, as well as the Federal Government of Pakistan and other provincial governments; (iv) AusAID and FAO Pakistan, as well as AusAID, Canberra and FAO/RAP, Bangkok and FAO

Headquarters, Rome; (v) the general public of Australia; policy makers of the Australian Government, as well other governments supporting the agriculture sector in Pakistan; (vii) other donors and United Nation's agencies operating in the agriculture sector of Pakistan, e.g. IFAD, USAID and the World Bank; and (viii) national and international media.

The main outputs of the Project's communications campaign would be:

- project database to systematise the information that the Project staff gathers in each district and community;
- project website with links to AusAID and FAO Pakistan (and including a project photo gallery);
- newspaper supplements;
- radio campaign on local radio stations (i.e. talk shows, radio spots, public service announcements, market prices, etc) linked to national and international radio stations and various FM stations;
- television talk shows: however, these are expensive and television is not a widely used medium in rural Balochistan; television should be targeted at key events and important dates to make the Federal Government of Pakistan and other provincial governments, other donors and United Nations agencies aware of the project's success stories;
- local events recorded, e.g. CO meetings/workshops, FFS graduation ceremonies/community congresses, Eid livestock *maundis* and local festivals;
- success stories documented;
- documentaries and premiere events;
- publicity brochures published at the time of local and premiere events and success stories targeted at the Provincial Government of Balochistan, Federal Government of Pakistan, the Australian Government, the One-UN in Pakistan, FAO worldwide and other donors;
- AUSABBA Project publicity materials, e.g. calendars and diaries with illustrative photographs and captions, and caps and T-shirts for project staff, those of implementing partners, and representatives of COs, FMCs and MMOs.
- Monitoring of the Project's communication campaign and a post-campaign assessment.

5.5. Reporting Schedule

An AUSABBA Project **Inception Report** would be prepared by a FAO Inception Mission, in consultation with the Provincial Government of Balochistan's Planning and Development, Agriculture and Co-operatives, Livestock and Dairy Development, and Forestry and Wildlife, within two months of project effectiveness. The draft Inception Report would be shared with and reviewed by a stakeholder inception workshop (which could be followed by the first PSC meeting to endorse the First Annual Work Plan and Budget). The Inception Report would therefore include: (i) an introductory section on project establishment and start-up activities; (ii) a detailed Logical Framework Matrix with progress indicators, an outline communication plan, etc; (iii) a detailed First Year/Annual Work Plan divided in monthly time-frames detailing the activities and progress indicators; and (iv) a detailed budget for the first full year of implementation, prepared on the basis of the Annual Work Plan.

During the Project's implementation period, PCU would prepare detailed **Semi-annual Progress Reports** using the agreed FAO format for AusAID-funded projects, covering: (i) the progress achieved during the previous six months; (ii) problems encountered and solutions applied or suggestions for their solution; (iii) backstopping required concerning specific
technical aspects; and (iv) a revised work plan for the next six months. The reports would also cover financial and procurement information, including: (v) comparison of actual physical and financial outputs with forecasts and updated six-monthly forecasts; (vi) financial statements, including sources and application of funds, expenditures and by category statement; and (vii) a procurement management report, showing status and contract commitments.

The draft semi-annual progress reports would be circulated to project stakeholders for comment and review at the appropriate PSC meetings. The semi-annual progress reports would be finalised by the FAO international Project Manager for submission to the FAO Representation in Pakistan and FAO/LTU. The FAO progress reporting period for trust fund projects funded by AusAID is March-August and September-February, with the semi-annual progress reports due at FAO Headquarters by the end of September and March respectively.

The respective FAO technical specialists, implementing partners and agricultural support service providers of the AUSABBA Project would also prepare **Field Reports** on various technical matters for issuance by PCU under the authority of the international Project Manger. Copies would be provided directly to the officers concerned in the Federal Government of Pakistan and provincial Government of Balochistan and the concerned FAO technical officers in FAO/RAP and/or FAO Headquarters through the FAO Representation in Pakistan.

Major reports on substantive technical matters would be issued as **Technical Reports** under the authority of the respective technical services at FAO/RAP and FAO Headquarters.

In the concluding months of the AUSABBA Project, the PCU would prepare a draft **Terminal Report.** This comprehensive report would summarise all activities, achievements and outputs of the project, lessons learnt, objectives met or not achieved, structures and systems implemented, etc and would be the definitive statement of the Project's activities during its lifetime. It would also set out recommendations for any further steps that may need to be taken to ensure sustainability and replication of the Project's outcome in other settings. Upon completion of the Project, the Terminal Report would be finalised by FAO and submitted to the Federal Government of Pakistan and AusAID.

A **Project Completion Report** would be prepared by FAO and MINFSR within six months of project completion for final submission to AusAID. The Project Completion Report would build on the Terminal Report and include closing financial statements (i.e. sources and application of funds and expenditures by cost category) and procurement management statements.

AUSABBA PROJECT – BUDGET

Outputs/Activities	Unit	Quantity	Costs (AUD)						
			PY1	PY2	PY3	PY4	Total		
Salaries:			607,600	901,000	901,000	783,400	3,193,000		
				-					
International staff									
International Project Manager	p/y	4	145,000	145,000	145,000	145,000	580,000		
International consultants				, ,					
Technical Specialists	p/m	15	30,000	75,000	75,000	45,000	225,000		
Unspecified consultants	p/m	4	15,000	15,000	15,000	15,000	60,000		
			·						
National consultants									
Technical Specialists	p/m	1,218	199,200	391,200	391,200	303,600	1,285,200		
Project Management, M&E Specialists	p/m	234	96,000	102,000	102,000	102,000	402,000		
Unspecified consultants	p/m	24	12,000	12,000	12,000	12,000	48,000		
		<i>•</i>							
National support staff									
Administrators, Clerks, Messengers, Guards, etc		1,044	110,400	160,800	160,800	160,800	592,800		
Contracts			521,500	306,000	344,240	226,840	1,398,580		
Develop linkages with international research									
centres	lumpsum		100,000	100,000	100,000	60,000	360,000		
FFS Programme	lumpsum		100,000	65,500	87,740	33,340	286,580		
Research and development	technology	20	75,000	60,000	30,000	10,000	175,000		
Value chain development and maket information	commodity	25	100,000	75,000	120,000	95,000	390,000		

Outputs/Activities	Unit	Quantity	Costs (AUD)						
			PY1	PY2	PY3	PY4	Total		
Livestock mundis	each	6	1,500	5,500	6,500	3,500	17,000		
Support to project management, M&E	lumpsum		145,000	0	0	25,000	170,000		
Travel			190,567	211,600	211,700	180,200	794,067		
Project staff	lumpsum		130,500	193,600	193,700	162,200	680,000		
Partners	lumpsum		60,067	18,000	18,000	18,000	114,067		
Training			660,400	418,700	567,200	265,800	1,912,100		
Policy development and capacity development	lumpsum		300,000	75,000	110,000	0	485,000		
Establish COs and alumni associations	each	360	25,000	31,200	47,600	800	104,600		
Implementation of FFSs	each	340	250,400	104,000	119,800	68,800	543,000		
Community animal health workers	each	68	0	30,600	30,600	0	61,200		
Specialist training to COs, enterprises and BSS	event	368	35,000	74,900	125,200	67,700	302,800		
Establishment of FMCs and MMOs	each	33	0	90,000	120,000	97,500	307,500		
Support to project management, M&E	lumpsum		50,000	13,000	14,000	31,000	108,000		
Expendable Procurement			200,000	436,167	1,176,803	773,083	2,586,053		
Production packages for men COs	each	402	100,000	205,000	538,103	264,200	1,107,303		
Production packages for women COs	each	261	100,000	143,600	488,900	409,883	1,142,383		
Community animal health worker kits	each	68	0	6,800	6,800	0	13,600		
Marketing packages for FMCs	each	25	0	69,767	110,000	55,000	234,767		
Marketing packages for MMOs	each	8	0	11,000	33,000	44,000	88,000		
Non-expendable Procurement			250,000	33,200	0	0	283,200		
Armour-plated 4x4 vehicle	each	1	150,000	0	0	0	150,000		
Office, training and communication equipment	lumpsum		100,000	33,200	0	0	133,200		
Technical Support Services			30,000	77,100	21,100	86,100	214,300		
Project evaluations and reporting costs	study	2	0	65,000	0	65,000	130,000		
Technical support from FAO/HQ and RAP	mission	6	30,000	12,100	21,100	21,100	84,300		

Outputs/Activities	Unit	Quantity	Costs (AUD)						
			PY1	PY2	PY3	PY4	Total		
General Operating Expenses	lumpsum		194,800	271,100	317,780	233,250	1,016,930		
Security Costs									
SUB_TOTAL			2,654,867	2,654,867	3,539,823	2,548,673	11,398,230		
Support Cost (13 percent)			345,133	345,133	460,177	331,327	1,481,770		
TOTAL			3,000,000	3,000,000	4,000,000	2,880,000	12,880,000		

ABBA PROGRAMME - ORGANISATIONAL CHART



Project Activity				2	012					201	13	
	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr
Output No. 1. Capacity Building												
1.1.1.Review of provincial agricultural policies												
1.1.2. Reform of provincial agricultural policies												
1.1.3. Reform of agricultural legal & regulatory frameworks												
1.2. Re-organise & re-align agricultural development strategies												
1.3. Linkages GoB & AZRC with ACIAR, USADA & CGIAR												
1.4. Strengthen government & private sector service providers												
1.5.1. Socio-economic baselines/market assessments												
1.5.2. Village profiles & participatory needs assessments												
1.6. Establish and support men & women COs												
1.7. Establish CO alumni associations/FFS networks												
1.8. Ensure that women are socially/economically empowered												
Output No. 2. Community Development /Technology Transfe	r											
2.1.1. Invest in water harvesting & management structures												
2.1.2. Invest in improved shallow drinking water wells												
2.2.1. Invest in crop production (improved seeds/tree seedlings)												
2.2.2. Invest in homestead gardening & post-harvest equipment												
2.2.3. Invest in seed & grain storage infrastructure												
2.3.1. Invest in poultry & goat milk production												
2.3.2. Invest in animal feed production & vaccinations												
2.4.1. Develop curriculum for FFS programme												
2.4.2. Train master trainers & FFS Facilitators												
2.4.3. Implement men & women FFSs												
2.4.4. Monitor FFS programme												
2.4.5. Organise FFS graduation ceremonies												

AUSABBA PROJECT – WORK PLAN

Project Activity	2012								2013			
	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr
Output No. 2 continued												
2.4.6. Organise annual community congresses												
2.5.1. Train men & women CAHWs												
2.6. Train farmers not covered by FFSs & CAHWs												
2.7. Research & develop production technologies & practices												
Output No. 3. Value Chain Development												
3.1.1. Feasibility studies/business plans for 18 small enterprises												
3.1.2. Build the capacity of 18 agri-business enterprises												
3.2. Undertake 25 commodity value chain analyses												
3.7.1. Establish Eid livestock <i>maundi(s)</i>												
3.9. Research & develop post-harvest & marketing technologies												
Project Management, Monitoring and Reporting			X									
4.1. Operational plan & implementation guidelines												
4.2. Communication & awareness campaigns												
4.3.1. Project Inception Mission												
4.3.2. Project Inception Workshop												
4.4. Project Steering Committee meetings												
4.5. Expansion/support "ABBA" monitoring/reporting system												

AUSABBA PROJECT – WORK PLAN continued

Project Activity	Project Year and Quarter											
		2013			20	14			20	15		2016
	2	3	4	1	2	3	4	1	2	3	4	1
Output No. 1. Capacity Building												
1.1.1.Review of provincial agricultural policies	(
1.1.2. Reform of provincial agricultural policies												
1.1.3. Reform of agricultural legal & regulatory frameworks												
1.2. Re-organise & re-align agricultural development strategies												
1.3. Linkages GoB & AZRC with ACIAR, USDA & CGIAR												
1.4. Strengthen government & private sector service providers												
1.6. Establish and support 340 men & women COs												
1.7. Establish/support between 6 & 20 CO alumni associations/FFS networks												
1.8. Ensure that women are socially & economically empowered												
Output No. 2. Community Development /Technology Transfer												
2.1.1. Invest in water harvesting & water management structures												
2.1.2. Invest in improved shallow drinking water wells												
2.2.1. Invest in crop production (improved seeds/tree seedlings)												
2.2.2. Invest in homestead gardening & post-harvest equipment												
2.2.3. Invest in seed & grain storage infrastructure												
2.3.1. Invest in poultry & goat milk production												
2.3.2. Invest in animal feed production & vaccinations												
2.4.2. Train 25 master trainers and 100 FFS Facilitators												
2.4.3. Implement 340 FFSs												
2.4.4. Monitor FFS programme												
2.4.5. Organise FFS graduation ceremonies												
2.4.6. Organise annual community congresses												
2.5.1. Train 68 CAHWs												
2.5.2. Establish 68 community animal health services												
2.6. Train men & women farmers not covered by FFSs /CAHWs												
2.7. Research & develop production technologies & practices												
Project Activity				I	Projec	t Year	r and	Quart	er			

		2013			20	14			20	15		2016
	2	3	4	1	2	3	4	1	2	3	4	1
Output No. 3. Value Chain Development												
3.1.1. Feasibility studies/business plans for 18 small enterprises												
3.1.2. Build the capacity of 18 agri-business enterprises												
3.2. Undertake 25 commodity value chain analyses												
3.3.1. Feasibility studies/business plans for 25 FMCs												
3.3.2. Establish and build the capacity of 25 FMCs		-										
3.4.1. Develop market linkages of 25 commodity value chains												
3.4.2. Broker marketing arrangements for FMCs and MMOs												
3.5. Establish and support 8 MMOs												
3.6.1. Develop 8 public-private market information systems												
3.6.2. Enhance electronic/media price information systems												
3.7.1. Establish 6 Eid livestock maundis												
3.7.2. Support and hand-over 6 Eid livestock maundis												
3.8. Build a cadre of agricultural BSS providers												
3.9. Research & develop post-harvest & marketing technologies												
Project Management, Monitoring and Reporting												
4.4. Project Steering Committee meetings												
4.5. Support of "ABBA" monitoring & reporting system												
4.6. Project Mid-term Review												
4.7. Project Terminal Report												
4.8. Final stakeholder dissemination workshop												

Outcome & Outputs	Indicators	Baselines	Targets	Means of Verification
Goal				
Reduced poverty and economic inequalities in border districts of western Balochistan Province	Impoverished rural people from Chagai, Kech, Kharan, Nushki, Panjgur and Washuk Districts are less poor	 In 2005, the rural poverty headcount of Balochistan Province was estimated to be 35 percent In 2011, the six project districts were classified as "extremely food insecure" 	• 175,000 men, women and children from target districts with improved food and nutrition security and increased income from agricultural development	 Government of Pakistan's Annual Nutrition Reports WFP/VAM studies BISP Poverty Census (2010) World Bank Balochistan Economic Report (2008) Project Evaluation Report
Outcome				
Improved food and nutrition security and increased income generation	Poor beneficiary households reducing food insecurity by 25 percent and increasing annual incomes by 20 percent within two years of project completion	 Poor rural households are food deficit, and devote 80 percent of expenditure on food items Off-farm employment opportunities are limited and seasonal migration of men is common 	 30,600 rural households from 340 target rural communities benefiting from project interventions (i.e. 10,200 direct and 20,400 indirect beneficiaries) Capacity of some 270 service providers and community-based facilitators developed 	 Balochistan Government's District Profiles Project socio-economic baseline studies Project Completion Report Annual and technical reports of AusAID, FAO and Balochistan Government
Outputs				
1. Improved enabling environment for the development of pro- vincial agricultural policies and regulatory frame- works, market-led	1.1. Number of agricultural policy and legal frameworks developed and implemented by the Balochistan Government (post-18 th Amendment scenario) – <i>in collaboration with</i> <i>BAP</i>	1.1. 18 th Amendment; Government of Pakistan's New Growth Framework; and the absence of agricultural policies and regulatory frameworks at the provincial level	1.1. Provincial seed and fruit tree seedlings certification, livestock movement and animal health, forestry/rangeland and marketing policies and regulatory frameworks prepared	 Project progress reports Satisfactory quality of reformed provincial agricultural policies and regulatory frameworks BAP progress reports

AUSABBA PROJECT – RESULTS FRAMEWORK MATRIX

Outputs	Indicators	Baselines	Targets	Means of Verification
<i>(Output No. 1 continued)</i> and community- driven investments, strategies and processes, and women's empower- ment in agricultural development	 1.2. Number of Balochistan Government departments and relevant DAOs, DLOs and DFOs, PSOs and RSPs reorganised and realigned – <i>in collaboration with</i> <i>BAP and ASLP</i> 1.3. Number of partnerships developed between Government agricultural departments and research institutions and international research centres – <i>in collaboration</i> <i>with BAP and ASLP</i> 1.4. Number of public and private sector agricultural support service providers adopting and practising adaptive research, participatory extension, community animal health and market-led value chain development approaches – <i>in</i> <i>collaboration with BAP and ASLP</i> 1.5. Number of targeted men and women COs established and functioning 1.6. Number of district, tehsil and union council CO alumni associations/FFS networks functioning 1.7. Number of women empowered through project interventions 	 1.2. Lack of awareness in the devolution and reformation of agricultural policies amongst relevant provincial policy makers and stakeholders 1.3. Few and decreasing exchanges of knowledge between Balochistan's and international research centres 1.4. "Top-down" research and extension systems; and relevant peer reviews; and institutional capacity assessments and TNAs 1.5. No agricultural-based CBOs operational in Chagai, Kech, Kharan, Nushki, Panjgur and Washuk Districts 1.6. No agricultural-based CO alumni associations/FFS networks operational in Chagai, Kech, Kharan, Nushki, Panjgur and Washuk Districts 1.7. Project socio-economic baseline studies (including data on women's household and community roles); and the overall ABBA Programme's gender strategy 	 1.2. Policy makers of Balochistan P&D, Agriculture, Livestock and Forestry Departments satisfactorily reforming agricultural policies 1.3. Linkages developed and strengthened between Balochistan Agriculture, Livestock and Forestry Departments and AZRC and ACIAR, USDA, ICARDA, CIMMYT and IWMI 1.4. All government and private sector service providers supporting the Project adopting and practising adaptive research and participatory extension, community animal health and market-led value chain development approaches (including some 50 subject matter specialists trained) 1.5.1. 82 men and 54 women mature, independent and self-sustaining COs 1.5.2. 122 men and 82 women food secure and profit-making COs 1.6. Between six and 20 self- sustaining district, tehsil-level CO alumni associations/FFS networks established and functioning 1.7. A minimum of 4,100 women directly empowered 	 Annual and technical reports and budgets of reformed departments and organisations Research papers and technical bulletins published jointly by Balochistan and international research centres Project training and study tour reports Project "COs' maturity index" assessment reports Constitutions and bylaws of COs Project reports on training of COs Minutes of COs' meetings Constitutions and bylaws of CO alumni associations/FFS networks Minutes of CO alumni associations/FFS networks' meetings Project evaluation reports Annual and technical reports of AUSAID, FAO, ACIAR, USDA, CGIAR centres and ASLP

Outputs	Indicators	Baselines	Targets	Means of Verification
2. Increased crop and livestock productivity and value of agricultural products produced through improved technological innovation and management practices in project- assisted communities	 2.1. Percentage increase in the yields of cereal and horticultural crops; and percentage increase in the value of annual household livestock production – across project areas 2.2. Number of water harvesting structures and drinking water wells and area of improved water management in targeted communities 2.3. Area cultivated/planted with improved seeds and fruit tree seedlings, homestead gardens and medicinal herbs and percentage reduction of post-harvest losses in targeted communities 2.4. Percentage increase in the production of livestock and animal products (i.e. goats, poultry and sheep and eggs, meat, milk and wool) in targeted communities 2.5. Number of new and improved production and post-harvest technologies transferred through the implementation of men and women FFSs 2.6. Number of community animal health services functioning 	 2.1, 2.2, 2.3, 2.4, 2.5, 2.6 & 2.7: Low crop and livestock productivity levels and high post-harvest losses of agricultural produce Limited access to water supplies by rural communities and inefficient use of irrigation water that is available Poor quality seeds and planting materials used by farmers Poorly managed, over-grazed and degraded rangelands, resulting in low carrying capacities and nutrition deficiencies for livestock Farmers have very little access to knowledge, information and opportunities on new and improved agricultural production and post-harvest management technologies and practices Lack of effective veterinary services in remote rural areas 	 2.1. 20 % increase in crop yields and 20 % increase in livestock production 2.2, 2.3 and 2.4. Some 750 production packages invested (with cost sharing ranging from 50-50% to 90-10% for men COs and 25-75% to 75-25% for women COs), i.e. 2,000 ha of land levelling and efficient irrigation systems installed, improved seeds and tree seedlings planted and integrated homestead gardens established; and 150 water harvesting structures, drinking water wells, and poultry, milking and post-harvest units functioning – all on a community-driven development basis (benefitting some 6,800 farm families) 2.5. 204 men and 136 women FFSs implemented (including the training of 25 master trainers and 100 men and women FFS facilitators) 2.6. 40 men and 28 women CAHWs trained and equipped 2.7. Some 1,100 men and women farmers trained in specific topics through short courses 	 Balochistan Provincial Government's and Government of Pakistan's Annual Agriculture Statistics Project socio-economic baseline studies and participatory needs assessments Village profiles of targeted communities Project progress reports Project progress reports Project technical designs and cost estimates COs' records and minutes of meetings FFSs' diaries and technical field reports NARC and NGOs' FFS programme progress and completion reports Project training needs assessments (TNAs) and training reports Research papers and technical bulletins published jointly by the Project and national and international research centres Annual and technical reports of AusAID, FAO and national and international research centres

Outputs	Indicators	Baselines	Targets	Means of Verification
(Output No. 2 continued)	 2.7. Number of men and women farmers practising specific skills (outside of the Project's FFS programme) 2.8. Number of potential crop and livestock production technologies and practices developed by the end of the Project 	2.8: USAID "independent" evaluation of USABBA (2011); technical reports of national and international research centres; and annual work plans of NARC and AZRC	2.8. 12 new or improved crop and livestock production technologies and practices researched and demonstrated by NARC, AZRC and others in collaboration with ACIAR, USDA, ICARDA, CIMMYT, IWMI and/or others	
3. Small local agri- business enterprises established and market linkages strengthened for targeted poor rural communities to increase sales of their surplus produce and improve competitiveness and sustainability of their value chains	 3.1. Percentage increase in sales of agricultural products by target beneficiaries and number of new contracts issued between buyers and small primary producers, through COs, LMCs, MMOs and small business enterprises 3.2. Number of small agri-business enterprises functioning, employing local people and making profits (and guided by BSS providers (see 3.9)) 3.3. Number of value chain analyses completed and recommendations adopted and practised by FMCs – <i>in collaboration with public-private partnerships, BAP, MDF, PACCD Project, etc</i> 3.4. Number of FMCs functioning and making profits (and guided by BSS providers (see 3.9)) 	 3.1, 3.2, 3.3, 3.4, 3.5, 3.6, 3.7 and 3.8: Limited opportunities for off- farm employment in rural areas of project districts No local suppliers of quality agricultural inputs in project districts (i.e. seeds, tree seedlings, farm tools and implements, irrigation equipment, storage structures, poultry equipment, etc) Farmers have inadequate knowledge and information of post-harvest requirements, resulting in high losses and poor quality produce Weak and underdeveloped value chains, especially for high-value agricultural produce produced in the project districts 	 3.1. 20 % increase in sales of agricultural products by target beneficiaries and 150 new contracts issued between buyers and small producers 3.2. 18 small agri-business enterprises established or strengthened and operational 3.3. 25 value chain studies completed for selected commodities and followed up 3.4. 15 men and 10 women FMCs established and operational 3.5. 25 commodity value chains developed by FMCs and MMOs with support of the Project and government and private sector service providers 	 Balochistan Provincial Government's and Government of Pakistan's Annual Agriculture Statistics Project socio-economic baseline studies and market assessments USAID "independent" evaluation of USABBA Project (2011) AUSABBA, MDF and PACCD Projects' socio-economic baseline studies and market assessments Project progress reports Project feasibility studies and business plans for FMCs, MMOs and small agri-business enterprises

Outputs	Indicators	Baselines	Targets	Means of Verification
(Output No. 3. continued)	 3.5. Number of value chains developed by COs and FMCs – <i>in</i> <i>collaboration with public-private</i> <i>partnerships, BAP, MDF, PACCD</i> <i>Project, etc</i> 3.6. Number of MMOs established, registered, functioning and making profits (and guided by BSS providers (see 3.9)) 3.7. Number of market information systems developed and operational by the end of the Project 3.8. District-level Eid Livestock <i>Maundis</i> supported and self- sustaining by end of the Project 3.9. A cadre of BSS providers successfully guiding small agri- business enterprises, CO alumni associations/FFS networks, FMCs and MMOs by the end of the Project 3.10. Number of potential input supply, post-harvest management and marketing technologies and practices developed by the end of the Project 	 No organised local outlets/collection points for agricultural produce, resulting in a total reliance on "middlemen" for market information and buying of surplus production or high costs for transporting small quantities of produce to district centres Little or no opportunities for adding value to primary produce in rural areas of the project districts 3.9. Lack of business support services for developing the agriculture sector in the project districts 3.10. USAID "independent" evaluation of USABBA (2011); technical reports of national and international research centres; and annual work plans of private sector service providers, PACCD and FIRMS Projects, etc 	 3.6. Minimum of eight MMOs established and operational 3.7. Eight market information systems developed, operational and sustained by stakeholders 3.8. Six District Eid Livestock <i>Maundi</i> Committees self-sustaining and operating Eid Livestock <i>Maundis</i> 3.9. Minimum of six business support services strengthened and linked to the Project's small agribusiness enterprises, FMCs and MMOs on a sustained basis 3.10. Eight new or improved input supply, post-harvest management and marketing technologies and practices researched and demonstrated by private sector service providers in collaboration with national and international research centres, PACCD and FIRMS Projects, etc 	 Contracts agreed and signed between buyers and FMCs and MMOs for selected commodities Project TNAs and training reports Records of any existing CBOs and producer marketing organisations Records of FMCs, MMOs and small agri-business enterprises Registrar of Co-operatives Registrar of Companies Records of Chambers of Commerce and the Agriculture Marketing Department Research papers and technical bulletins published jointly by Balochistan and international research centres and/or input suppliers and buyers, MDF, PACCD and FIRMS Projects, etc

*The Project's Results Framework would be finalised during the Inception Phase of the Project and presented for ratification at the Stakeholders' Inception Workshop