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Evaluation of the project "Australia Balochistan Agribusiness Programme – Phase 2 (AusABBA II)"

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Abstract

FAO carried out the Australian Balochistan Agribusiness Programme (AusABBA II) from July 2017 until December 2020. This was a three-and-a-half year programme financed by the Australian Government, Department of Foreign Affairs and Trade (DFAT) with the objective to support and nurture value chain agribusinesses in six southwestern districts of Balochistan.

After project completion, a final evaluation was conducted by an independent team engaged by FAO to assess project outcomes. The evaluation used qualitative methods and secondary data sources and surveyed a selection of beneficiaries and other stakeholders in three of six of the project districts. The seven evaluation questions were based on the criteria of relevance, results and normative and transformative change, as defined by the FAO Office of Evaluation (OED). Key informant interviews were held with 24 beneficiaries, while focus group discussions took place with 15 farmer groups and 40 individual interviews were held with government officials at provincial and district levels, as well as FAO personnel and DFAT officials.

The study revealed very positive feedback on project outcomes and deliverables; these were felt to be relevant to the needs of beneficiaries and aligned with the priorities of the Government of Balochistan to eradicate poverty, enhance agricultural and livestock productivity, and promote income generation.

The evaluation found that 62 farmers' marketing collectives (FMCs) and that mutual marketing organizations (MMOs) specialized in dates, onion, grapes, cumin, tomato, alfalfa, carrot, pomegranate, sugar melon, livestock fattening and wool were working on 11 agribusinesses established by men and women farmers. Special efforts were made to ensure that women farmers benefited from project interventions. Overall, 7 285 farmers (1 768 women and 5 517 men) benefited from improved agricultural and livestock productivity and marketing and 5 440 female-headed households from the integrated household food system (IHFS).

The evaluation report is expected be useful reading for stakeholders, particularly the Planning and Development Department (P&D), agriculture and livestock departments of government, DFAT, FAO, WFP and other United Nations agencies, NGOs and business communities, who might wish to see project outcomes, policy recommendations and prospects for future programming in the region.

AusABBA II's inclusive market system development approach has enormous potential for replication by government departments and development actors in Balochistan. Further, linkages of small farmers and FMCs at initial level should be strengthened with markets and further process of collective marketing and transformation of remaining FMCs into MMOs.

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The evaluation team was composed of Dr Faiz Mohammad Kakar, Team Leader; Ms Moneeza Ahmed, Team Member, Mr Hameed Ullah, Team Member, Mr David Swete Kelly, International Technical Consultant, and Mr Mikal Khan, Evaluation Officer and Mr Bayryyev Serdar, Senior Evaluation Officer from OED.

Abbreviations and acronyms

AusABBA Australia Balochistan Agribusiness Programme
DFAT Australian Department of Foreign Affairs and Trade
FAO Food and Agriculture Organization of the United Nations

FMC Farmer marketing collective

GRASP Growth for Rural Advancement and Sustainable Progress

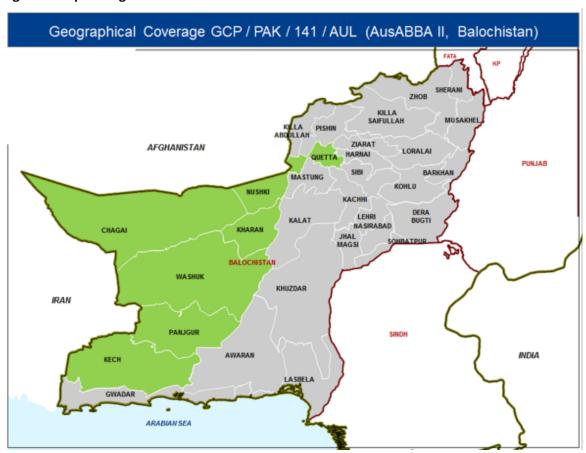
IHFS Integrated household food system MMO Mutual marketing organization

Figure 1. Map of Pakistan



Source: Adapted from UN. 2020. Map 4170, Rev. 19.

Figure 2 Map of target districts



Source: Adapted from UN. 2004. Map 4181, Rev. 1.

Executive summary

- 1. This report provides the results of an evaluation of the Australia Balochistan Agribusiness Programme Phase II (AusABBA II) (GCP/PAK/141/AUL). AusABBA II was implemented by the Food and Agriculture Organization of the United Nations (FAO) in collaboration with the Government of Balochistan in six, southwestern districts along the Afghan and Iranian borders, namely the Chaghai, Kech, Kharan, Nushki, Panjgur and Washuk districts. These districts are highly remote and are largely populated by an ethnic Baloch population.
- 2. The project started in July 2017 and ended in December 2020.¹ The total budget was AUD 11.45 million (USD 8.61 million) and was financed by the Australian Department of Foreign Affairs and Trade (DFAT).
- 3. The project's goal was to enable people in southwest Balochistan to live more prosperously, in a food-secure environment. The objective was to engage households in profitable agribusiness-based livelihoods to increase their incomes, food security and nutritional status. There were three intermediate outcomes:
 - i. **Immediate Outcome 1.** Women are empowered to beneficially engage with their livelihood systems.
 - ii. **Immediate Outcome 2.** Households engaged in agricultural livelihoods have enhanced their productivity, food security and nutritional status.
 - iii. **Immediate Outcome 3.** Commercial farmers operate as agribusinesses and cooperate profitably and sustainably within selected agriculture value chains with public and private (market) actors.
- 4. The project helped agricultural households in southwestern Balochistan to adopt sustainable, profitable and diversified strategies to increase their incomes and enhance their food security and nutritional status. The project:
 - i. trained men and women farmers;
 - ii. strengthened value chains and livelihoods systems;
 - iii. connected farmers with markets for collective marketing of commodities such as onions, goats, sheep, poultry, produce of kitchen gardens, wool and dates; and
 - iv. worked to enhance the overall enabling environment for agribusiness promotion.
- 5. AusABBA II worked in partnership with men and women in communities, potential commercial farmers, input suppliers, traders, middlemen and government service agencies.
- 6. The evaluation covers the period from July 2017 to December 2020. It focuses on relevance, results, and normative and transformative changes occurring during implementation. The evaluation covers all activities planned and implemented at field and community levels in the six target districts.
- 7. The COVID-19 pandemic and security restrictions limited the capacity of the evaluation team to visit the target districts. However, an alternative approach proved to be effective: the team

¹ AusABBA II was the second phase of a partnership between the Australian Department of Foreign Affairs and Trade (DFAT) and FAO. Phase I of AusABBA ran from August 2012 until June 2017 with a budget of AUD 12.88 million. Phase II began in July 2017 as a six-year engagement with a budget of AUD 11.45 million (USD 8.6 million) for the first three years. However, the Australian Government announced in August 2019 that its overall aid partnership with Pakistan would end on 30 June 2020 to accommodate a strategic shift of aid funding. As such, AusABBA II ran until December 2020 (3.5 years).

conducted district-based focus group discussions (FGDs) and key informant interviews (KIIs) through video conferencing and for a face-to-face individual interviews, invited the selected farmers, private agribusiness suppliers and agricultural and livestock department officers to Quetta to be interviewed in compliance with COVID-19 protocols.

Main findings

8. The main findings of the evaluation are presented below, grouped by evaluation questions.

Project design, approach and relevance

- 9. The project was judged to be very relevant and appropriate. It helped to address the immense development challenges facing Balochistan, particularly the critical needs of the population living in the six target districts. By improving agricultural productivity and farm incomes, the project helped to reduce poverty, enhance food security and improve dietary diversity.
- 10. FAO's market system development approach effectively addressed subsistence needs, while linking market-ready farmers with agribusinesses. This approach is significant and contributed to international, national and provincial development agendas, namely:
 - i. Sustainable Development Goals (SDGs) of the United Nations
 - ii. National Development Vision 2025
 - iii. National Food Security Policy
 - iv. National Nutrition Programme
 - v. Balochistan's Comprehensive Development Strategy
- 11. The direct implementation approach of FAO for AusABBA II built synergies and ensured effective partnerships with international and national development actors to accomplish the outcomes of the project
- 12. While the onset of COVID-19 brought a halt to many project activities, AusABBA II's managers quickly revised community engagement and capacity building plans in keeping with COVID-19 standard operating procedures (SOPs). Project activities were prioritized 30 percent of secondary or subsidiary activities were dropped, enabling the project team to implement the most important project activities while engaging the target farmers at various levels. Data collection and management at the field level was an issue due to the pandemic, however this was addressed through collection of data in extended intervals and using WhatsApp groups to gather necessary project information, including records of farmer marketing collectives and photos of various activities.
- 13. Women farmers dealing with kitchen gardening have had limited access to local markets during the pandemic, however most farmers have been able to sell their products in the villages. Kitchen gardens have played an important role in supplying fresh vegetables to households, reducing the impact of COVID-19 due to closure of markets, while maintaining availability of raw and staple food to their own households through integrated food systems interventions (vegetables, poultry, dairy, goats, etc.).
- 14. The main theory of change (TOCs) with two subsets of TOCs for crops and livestock productivity were found to be very well designed, providing sufficient information to enable stakeholders to understand the processes that are central and making a positive impact on the food security and nutrition of target farmers and communities.

Results

- 15. With regard to production improvements, farmers' marketing collectives (FMCs)² are functioning effectively and gaining experience in their respective value chains. AusABBA's mentoring, technologies and practices facilitated their contribution to improved productivity and increased production. This is particularly clear in the two major horticultural value chains for onions and dates.
- 16. Livestock farmers now have the skills and knowledge they need to improve the quality of their livestock production. Interventions, such as wool processing, animal fattening, improved varieties, and access to silage, have helped livestock farmers to improve their production and sell their products at better prices. Women farmers, in particular, have been trained to prepare sheep for shearing and hand wash, and grade the fleeces. Many have also been trained to spin and dye wool for carpet production. AusABBA also trained women in enterprise development and business skills with the result that that they are now able to successfully market their wool and woollen products.
- 17. Activities routinely managed by women, such as kitchen gardening, raising poultry and making wool, have provided opportunities for them to participate in mainstream markets. In growing crops, such as dates and onions, where women traditionally play a supporting role, they were engaged in value addition activities and selling in the market, but to a lesser extent.

Normative change

- 18. Most successful enterprises owned by women are still in the early stages of development. Ensuring their growth, improve benefit flows and confirm women in core leadership and decision-making roles will require a significant change in the attitudes and practices of both men and women. While AusABBA II has developed a firm foundation, additional efforts are needed to strengthen the role that women play in these businesses. Most women entrepreneurs aim for continued growth and to market their products directly.
- 19. Stakeholders confirm that AusABBA II has openly encouraged and facilitated the development of agribusiness partnerships in Balochistan.
- 20. AusABBA II has developed important synergies with many development partners including:
 - i. DFAT-Australia The Market Development Facility (MDF) with the aim to develop a range of private sector partnerships around e.g. silage, feed, medicines, dates and mulberry.
 - ii. ACIAR Australia The Aik Saath research portfolios develop research-based linkages and training in key areas, e.g. small ruminants and farmer's marketing collective models.
 - iii. The World Bank-supported Balochistan Nutrition Program for Mothers and Children (BNPMC) to disseminate behavioural change messages about nutrition for women engaged in kitchen gardening.
 - iv. Dow University of Health Sciences, Karachi, for behavioural change communication (BCC), nutrition collaboration and technical assistance.
 - v. Livestock and Dairy Development Department (LDDD) to develop the Balochistan Livestock Policy and Strategy 2020-2030.

² Farmer's marketing collectives (FMCs) are the groups of small growers who work together to sell their combined crops/fruits/vegetables on a cost sharing basis to receive better prices. They were supported by FAO through a value chain approach around providing of additional storage, processing or packaging of agricultural produce and better marketing strategies.

- vi. Department of Agriculture and Cooperatives (DoAC) to develop the Balochistan Agriculture Policy 2021-2030.
- vii. Livestock and Dairy Development Department (Provincial Government, Balochistan) (LDDD) to organize Livestock Expo 2019 and encourage the private sector to establish businesses in Balochistan.
- viii. The United States Agency for International Development's (USAID) Horticultural Advancement Activity (THAzA) programme to support apricot businesses.
- ix. The European Union's Growth for Rural Advancement and Sustainable Progress (GRASP) programme to connect with farmers and FMCs that work on dates, onion, grapes, poultry and small ruminants;
- x. The European Union's Revival of Balochistan Water Resources Programme (RBWRP) to provide insight from field experiences and facilitate the project formulation process.
- xi. Small and Medium Enterprises Development Authority (SMEDA) to conduct joint business sessions and connect FMCs with their services to the Bank of Pakistan, Agriculture Development Bank and other commercial banks to organize workshops for farmers to discuss options on access to finance for FMCs.
- xii. Balochistan University of Information Technology, Engineering and Management Sciences (BUITEMS), University of Balochistan (UoB), Sardar Bahadur Khan Women's University supported to conduct SDG 8 workshops, Innovation Summit for Farmers and developing proposal on wool sector development, which was approved. Research surveys on Kitchen Gardens were conducted through other universities.
- xiii. World Food Programme (WFP) (emergency relief) to undertake ground and vulnerability assessments, which led to the joint implementation of an International Fund for Agricultural Development (IFAD)-funded project on integrated household food systems (IHFS) in Gawadar and Lasbella districts.
- xiv. IFAD to complement a fisheries investment with ongoing work on IHFS interventions.
- xv. United Nations Technical Cooperation Programme (TCP) to develop and implement proposals to provide technical assistance on onion seed production, locusts and emergency relief to people affected by devastating snow and floods, etc..
- xvi. The close and effective partnership between DFAT and FAO allowed both partners to quickly respond to emerging opportunities at the policy level (i.e. the development of agricultural and livestock policies and high-level joint consultation with the Government of Balochistan for a major systems change in agriculture and livestock sectors) and to address key challenges (i.e. joint development of a AusABBA II exit plan and quick redirection of available project funds to address consequences of locust attack and COVID-19 health crisis).

Transformative change

- 21. It is evident that AusABBA II was able to successfully empower farmers' groups, developing their capacity, confidence, access and links to markets. Yet, the premature termination of the project limited the scale of achievement. Further support is needed to help men and women farmers become better organized and more capable of engaging with the provincial and national market systems.
- 22. Most FMCs were found to be market-ready and eager to explore new avenues for selling their products. Mature FMCs have demonstrated innovation and the capacity to produce products that reliably meet the quality, consistency and quantity requirements of their consumers. These highly functioning FMCs are able to provide inputs and services to their members as well.

- 23. On the policy front, AusABBA I and AusABBA II played a pivotal role to seek recognition from the Government of Balochistan, provincial bureaucracy and its allied line departments. In 2019, the project worked in consultation with the Livestock and Dairy Development Department and other stakeholders to develop the Balochistan Livestock Policy and Strategy (2020 to 2030), which was issued by the President of Pakistan on 18 November 2019. FAO also worked with the Department of Agriculture and Cooperatives and other stakeholders to develop the Balochistan Agriculture Policy and Strategy (2021-2030), which is being finalized by the Government of Balochistan for onward submission to the Chief Minister.
- 24. AusABBA II mentored and supported private sector actors (e.g. agri-input suppliers and marketing agents) to establish sustainable market relationships with the FMCs, enabling them to access reliable and affordable inputs, products and services. However, gaps still exist regarding the availability of certified hybrid seed varieties, packaging materials, and services for farmers.
- 25. AusABBA's 11 core business cases show that farmers' organizations can grow and sustain the relationships necessary for efficient service delivery and improved market competitiveness.
- 26. The success of AusABBA FMCs has had a spillover effect on non-member farmers who recognized the advantages of collective action. Positive outcomes could expand significantly as many non-member households choose to affiliate with FMCs and benefit from product supply, inputs, training and demonstration.
- 27. The most salient feature of AusABBA's collective action strategy was the establishment of groups around a single value chain. This allowed the FMC to specialize and excel. The delivery of real economic benefits increased farmer commitment and FMC sustainability.
- 28. The women's community organizations (COs) and FMCs are expected to gain further strength due to improved skills, the adoption of new technologies and better market linkages. All community organizations and FMCs are active and look forward to continuing their activities, even without FAO support. However, there were concerns about the scalability of the businesses without FAO support. This was mostly due to a lack of capital and the need to seek advanced training in business skills.

Conclusions

Conclusion 1. The design and objectives of AusABBA II were relevant to the needs of target groups and were aligned with the development priorities of the Governments of Pakistan and Balochistan. These included improving living standards through increased income and developing a more food-secure environment through access to sufficient nutritious food.

Conclusion 2. AusABBA II's approach to inclusive market system development is innovative, proving to be as one of FAO's flagship efforts in the region. AusABBA has already led to remarkable long-term changes in the target areas. However, further support is needed. Most importantly, more FMCs are needed, each of which needs to be closely mentored on their path to becoming mutual marketing organizations (MMOs).

Conclusion 3. While the agribusiness value chain approach is valuable, the concept requires further support and strengthening. The withdrawal by DFAT, the centralized and lengthy process of procurement in AusABBA, and the restrictions imposed by both the pandemic and the fragile security environment have hindered progress.

Recommendations

Recommendation 1. The continuation of the project is highly desirable. Mechanisms need to be put in place so that:

- i. The inclusive market systems approach is successfully taken to the next level.
- ii. Current and new FMCs are further supported on their journey to becoming formal mutual marketing organizations. The province lacks a strong private sector, and the fragile security environment limits the access of outside investors into southwest Balochistan. The FMCs have provided a platform for members to carry out business deals, but there are hundreds of other farmers who could benefit from the market connections of the FMCs. Further investments are needed to support entrepreneurs who have learned marketing techniques and who want to expand their businesses or to provide services such as knowledge on better farming techniques, use of hybrid seeds or better marketing strategies to the communities.

Recommendation 2. Linking women's community organizations, FMCs and MMOs to social service and infrastructure development programmes could enhance FAO efforts to accomplish its overall goal of improving the livelihoods of beneficiaries in target areas.

- 29. There is a need to build strong partnerships, particularly with civil society organizations and UN agencies that are working to provide social services to communities and to improve their access to health, hygiene and education.
- 30. The focus of the women's economic empowerment should be expanded beyond businesses led by women. While this is an important step in developing the skills and confidence of women (the focus of AusABBA outcome 1), it is also important that women be empowered to engage with broader livelihood systems at both household and village level.

Recommendation 3. Keeping the procurement of value chain inputs at the local level builds the local market system and strengthens market relationships. Centralizing procurement not only compromises market relationships but also discourages local distributers, especially in a fragile environment where the private sector strives to survive due to economic shocks and lack of resources. Experience also shows that centralized procurement of vital inputs is ineffective and slow, with critical resources (e.g. seed) often arriving too late to ensure optimum results. For much of AusABBA I and AusABBA II, the programme delegated responsibility for procurement to the provincial FAO Office with clear benefits. However, due to the intermittent adoption of centralized as well as local procurement, the project was unable to ensure the timely supply to beneficiary farmers. In future, it is recommended that decentralized procurement is prioritized in projects to strengthen value chains. The "procurement for development" approach to build capacity of local markets and service providers for delivery of quality goods and commodities to the target groups is therefore central to the programme success.

- 31. Some core approaches and activities need to be taken up by other development actors for replication at a larger scale. These include:
 - i. providing further support to strengthen nascent FMCs and their value chain businesses;
 - ii. adopting adaptive management throughout FAO programmes and avoiding prescriptive input/output approaches;
 - iii. strengthening of existing FMCs and target groups;
 - iv. improving members' income improvement by scaling up successful production interventions;
 - v. integrating IHFS and market system interventions.

Recommendation 4. Interventions targeting women have proved to be effective in addressing gender mainstreaming and economic empowerment. These should be replicated in all FAO projects.

1. Introduction

- 1. This report describes the results of an evaluation of the Australia Balochistan Agribusiness Programme Phase Two (AusABBA II) (GCP/PAK/141/AUL). AusABBA II was implemented by the Food and Agriculture Organization of the United Nations (FAO) in collaboration with the Government of Balochistan in six districts of southwest Balochistan, near the Afghan/Iranian border: Chaghai, Kech, Kharan, Nushki, Panjgur and Washuk districts. The second phase of the project started in July 2017 and ended in December 2020. The total budget was AUD 11.45 million(USD 8.61 million) over 3.5 years,³ and was financed by the Australian Department of Foreign Affairs and Trade (DFAT).
- 2. The project aimed to help households engaged in agriculture in southwestern Balochistan to adopt sustainable, profitable and diversified strategies in an enabling environment that allowed them to increase their incomes and enhance their food security and nutritional status. It trained men and women farmers, strengthened their supply chain and livelihoods systems and connected farmers with extension agents for marketing commodities such as onions, goats and sheep, wool and dates. AusABBA II targeted men and women farmers, input suppliers, traders and middlemen.

1.1 Purpose of the evaluation

3. The purpose of this evaluation is to provide useful information and insights to the Government of Balochistan, DFAT and FAO by assessing the contribution of AusABBA II to income improvement, food security and nutrition in the six districts targeted by the project. In addition, the evaluation draws lessons from the project that can inform the development of future development programmes around agribusiness, small and medium enterprises, and improving access to markets by poor farmers.

1.2 Evaluation criteria

4. The evaluation is based on the criteria of **relevance**, **results**, **and normative and transformative change** as defined by the FAO Office of Evaluation (OED). Assessing these criteria required answering the questions listed below.

Relevance

EQ1. To what extent were the project design and intended objectives relevant to the needs and priorities of the target areas? In this regard, consider:

- i. the priorities of the Government of Pakistan
- ii. the priorities of the Government of Balochistan
- iii. synergy with other development initiatives
- iv. One-UN priorities for Pakistan

EQ2. How did the project adapt to the onset of the COVID-19 pandemic and what lessons can be drawn for agriculture and food security programmes aiming to alleviate the impact of the pandemic?

³ AusABBA II was the second phase of a propose nine-year partnership (3+3+3 years) between the Australian Department of Foreign Affairs and Trade (DFAT) and FAO. The total budget for the AusABBA II programme was AUD 33 million (USD 25.4 million), however, the project was only implemented for six years, due to the reprioritization of DFAT aid to support new development initiatives in Australia's immediate Pacific region.

Results

EQ3. To what extent have the project's activities contributed to an increase in agricultural incomes, food security and nutrition?

Normative change

EQ4. To what extent has the project design and implementation used inclusive approaches and contributed to addressing gender mainstreaming and the needs of vulnerable groups (minorities, people with disabilities, others)?

EQ5. To what extent has the project demonstrated coherence with other FAO projects and other development activities in the target districts, as well as adherence to the 'One-UN' paradigm?

Transformative change

EQ6. To what extent has the project contributed to the development of capacities among communities, private sector actors and line departments in the involved government agencies at both individual and institutional levels?

EQ7. To what extent are the project's results sustainable and replicable?

1.3 Intended users

5. The evaluation has taken into account the feedback and perceptions of multiple stakeholders, including government departments, private sector organizations, United Nations agencies, non-governmental organizations (NGOs) and business communities. Table 1 explains how these stakeholders can make use of this report.

Table 1. Intended users

Stakeholders	Use of report
FAO project personnel (provincial and district), national staff, THAzA , GRASP , European Union Water and other provincial staff	Lessons learned, future programming, best practices, project outcomes, challenges faced
Department of Agriculture and Co-operatives (DoAC) and Directorates General of Agricultural Research and Agricultural Extension	Project ownership, roles and responsibilities, institutionalization, lessons learned, future prospects, farmers' expectations, best practices
Project steering committee members	Outcomes and achievements, beneficiary views, donor compliance, sustainability
Planning and Development Department (P&D)	Project outcomes, use of resources, integration with other projects, cross-cutting themes, infrastructure development
Livestock and Dairy Development Department (LDDD) and Directorates General of Livestock Research, Extension, Livestock Research and Supplies and Animal Health and Production	Livestock farming and growth, introduction of new breeds in local areas, rangeland management, livestock market prospects
District agriculture and livestock offices in Chagai, Kech, Kharan, Nushki, Panjgur and Washuk	Farmers' views, grievances and expectations, future programme planning, support required by FMCs, strengthening women's groups, areas of concerns
Quetta and district chambers of commerce and industry, Quetta Women's Chamber of Commerce	Roles of private agri-input suppliers, marketing agents, local markets, and certification of seeds
Small and Medium Enterprises Development Authority (SMEDA)	FMCs role as enterprises, areas for support, cross-cutting issues and challenges, future programming for integration
Balochistan Nutrition Directorate (BNPMC)	Nutrition and domestic food security
WFP provincial staff	Food security, income, empowerment and role of women, project integration and overlap, areas for future support
Department of Foreign Affairs and Trade (DFAT) , Australian Government	Project outcomes, findings and compliances, sustainability, role of stakeholders, policy recommendations, issues and challenges, lessons learned

Stakeholders	Use of report
Community organizations, farmers' marketing collectives	Stakeholder roles, future plans of FMCs, linkages with government
(FMCs), mutual marketing organizations (MMOs)	line departments for institutional strengthening

Source: Evaluation team.

1.4 Scope and objectives of the evaluation

6. The following provides a summary of the terms of reference (TOR) for the evaluation. The full TOR can be found in Annex 1.

1.4.1 Scope

7. This evaluation assesses project implementation from July 2017 to December 2020. It covers all key activities described in the project documents. The focus is on key achievements, progress around selected business objectives, and lessons and recommendations for the future programming of FAO and the Government of Balochistan.

1.4.2 The objectives of the evaluation

- 8. The evaluation aims to:
 - i. assess the appropriateness and effectiveness of the project's design and approach;
 - ii. assess the project's achievements and contributions to meeting its objectives;
 - iii. assess the actual and potential impact of the project and its contribution to agriculture-based incomes, food security and nutrition;
 - iv. assess the project's contribution to the development of individual and institutional capacities;
 - v. identify success areas, gaps and lessons learned, and make recommendations to the project team, the donor and other stakeholders to guide decision-making and planning for future projects in Pakistan.

1.5 Evaluation questions

- 9. The evaluation is results-oriented and its main purpose is to assess progress in the implementation of the project as per its objectives and strategic intent, and to identify strengths, weaknesses, gaps/challenges, opportunities, best practices and lessons learned. The questions outlined in the evaluation matrix were the main tools used to analyse project performance and key recommendations to improve future programming in Balochistan.
- 10. The evaluation matrix includes elements of analysis and possible indicators and provides information on the key sources of data. The questions focus on results and are cross-cutting in nature.

1.6 Methodology

- 11. This evaluation used qualitative methods and secondary data sources. Subsidiary questions and specific methodological approaches have been included in the evaluation matrix in order to answer the main questions. Stakeholder mapping was done with the support of the project team to identify key informants for this evaluation.
- 12. The evaluation adheres to the United Nations Evaluation Group (UNEG) norms and standards and is in line with the FAO Office of Evaluation (OED) manual and methodological guidelines and practices for conducting project evaluations.

- 13. The evaluation used a consultative, participatory and transparent approach to triangulate evaluation findings and promote understanding among the main actors, with the idea that such findings could be useful for future interventions.
- 14. The evaluation emphasized collective learning, based on an analysis of the project process, activities and indicators to determine what worked well and what didn't. In particular, the evaluation processes were implemented with effective support provided by the FAO Office in Quetta, and the project partners line departments.

Figure 3. Beneficiary interview



Image credit ©FAO/Faiz Kakar

- 15. The evaluation considered the project's contribution to the five objectives presented in the FAO Policy on Gender Equality.
- 16. Due to security restrictions, the evaluation team was not able to visit the project sites. Instead, the team, with support from the FAO Office in Quetta, invited a representative number of government officials, commercial farmers, marketing agents, agri-input suppliers and men and women farmers for interviews. Other interviews and focus group discussions (FGDs) were held through online video meetings with respondents, with support from district team leaders. Individual interviews with district team leaders and online FGDs were held with selected farmer's marketing collectives (FMCs) in three target districts, namely Chagai, Kharan and Kech. The complete sampling frame can be found in Annex 3.

Table 2. Respondents and sites for data collection

#	Respondents	Total	Men	Women
1	Beneficiaries (key informant interviews)	24	13	11
4	Focus group discussions	15	8	7
5	Interviews with government officials at district level	10	10	0
6	Interviews with government officials at provincial level	4	4	0
2	DFAT (individual interviews)	1	1	0
3	FAO staff and other projects (individual interviews)	16	11	5
7	Stakeholders interviews	9	6	3
	Grand total	79	53	26

Source: Evaluation team.

1.7 Challenges

- 17. The major challenges faced by the evaluation team were:
 - COVID-19 restrictions had the potential to disrupt focus group discussions.
 Mitigation measure: COVID-19 protocols were followed during all evaluation activities. For FGDs, participants were required to follow social distancing measures and were limited to
 - fewer than ten per group.ii. Security restrictions limited the evaluation team's capacity to visit the target districts.
 - **Mitigation measure:** A representative sample of FMC officers and members, men and women farmers, women managing kitchen gardens and poultry operations, private sector marketing and service providers and district officers were brought to the provincial capital FAO for faceto-face interviews.
 - iii. Frequent changes in the methodology and sampling frame were required due to security restrictions.
 - **Mitigation measure:** Regular interaction and communication with the Office of Evaluation (OED) Evaluation Manager and international consultant were maintained.
 - iv. Poor or low internet connectivity in the districts made it difficult to hold proper online interviews and FGDs.
 - **Mitigation measure:** The FAO team coordinators at the district level were briefed on how to continue discussions if internet connectivity failed during the FGD proceedings. All discussions were recorded.
 - v. Community members had to travel long distances to visit district field offices and Quetta for interviews and focus group discussions.
 - **Mitigation measure:** Distances and travel time was considered for the community members travel to Quetta. Additionally, the community members were given ample time to rest after reaching Quetta
 - vi. Farmers were sometimes reluctant to participate in online discussions.
 - **Mitigation measure:** The team tried to maintain a frank and healthy environment to encourage fruitful discussion during key informant interviews and focus group discussions.
 - vii. Some respondents did not complete the self-filling questionnaires.
 - **Mitigation measure:** Questionnaires were confined to critical questions only. The team followed-up on the incomplete questionnaires by phone.

1.8 Structure of the report

- i. Following this introductions, Chapter 2 describes the background and context of the project and presents the theory of change. Chapter 3 provides a brief description of the evaluation questions and their relevance to the evaluation criteria. Chapter 4 deals with the cross-cutting issues, including gender, climate change and governance. Chapter 5 describes lessons learned and Chapter 6 presents final conclusion and recommendations.
- 18. The report includes the following annexes:
 - i. Annex 1. Terms of reference of the evaluation
 - ii. Annex 2. Evaluation matrix
 - iii. Annex 3. Sampling frame
 - iv. Annex 4. Theory of change
 - v. Annex 5. Evaluation instruments

2. Background and context for the project

2.1 Background

- 19. The Australia Balochistan Agribusiness Programme Phase Two (AusABBA II) started in July 2017 and ended in December 2020. The project had a total budget of AUD 11.45 million (USD 8.61 million). The Australian Department of Foreign Affairs and Trade funded the project. The overall goal was to improve income, food security and the nutrition status of rural households in six districts of southwest Balochistan: Chagai, Kech, Kharan, Nushki, Pangjur and Washuk. AusABBA II aimed to contribute to women's economic empowerment in line with Australia's development policy. The policy recognizes gender equality and empowerment of women and girls as one of Australia's six aid investment priorities, as expressed in its Gender Equality and Women's Empowerment Strategy (2015–16).
- 20. The design of AusABBA II was based on previous FAO engagements in Balochistan, such as the AusABBA phase I project, funded by <u>DFAT and</u> implemented by FAO from 2012 to 2017, and the Balochistan Agriculture Project (BAP), funded by USAID and implemented by FAO from 2009 to 2016.
- 21. The AusABBA II project was intended to enrich FAO's Country Programming Framework (CPF) 2018–22, Priority Area 2: "Support to Pakistan's New Growth Strategy for Sustainable Agricultural Economic Growth including support for provincial agricultural investment projects and programmes linking small farmers to markets; raising productivity of crops, livestock, fisheries, aquaculture and forestry through sustainable intensified production using ecosystem services to reduce fossil fuel dependence; promoting productive and decent rural employment through value addition and market linkages; facilitating more Food for Cities actions; and encouraging public/private partnerships for strengthening value chains." In summary, the project aimed to ensure that sustainable agricultural investment programmes were developed and implemented effectively in provinces and districts, and that public and private sector agricultural service providers could support sustainable intensification.
- 22. Initially, the project was planned for six years, however, in January 2020, the life of the project was reduced from six to three years and the budget was cut nearly in half by the DFAT. The decision was taken in line with Australia's Foreign Policy White Paper, whereby aid funding was reprioritized to support new development initiatives in Australia's immediate Pacific region. Australia's bilateral aid programme to Pakistan was to cease by 30 June 2020. To minimize disruption and maximize AusABBA's legacy, DFAT and FAO jointly developed an exit plan, granting an additional six months to allow the project to operate until the end of 2020. DFAT also provided an additional AUD 450 000 to allow long-term work to come to a smooth close and to increase the prospects of ongoing support from the government, other donors and the private sector for project activities.
- 23. AusABBA II was built on the foundation of AusABBA I, which was implemented in the same target districts. The goal of AusABBA I was to make a significant contribution to reducing poverty and economic inequalities of 175 000 people from 340 rural communities in six districts through sustainable agricultural development. The project sought to increase the average annual income

⁵ In addition, DFAT's Gender and Development Initiative supported AusABBA II by funding women's economic empowerment.

⁴ Australia's 2014 development policy for Pakistan identified six investment priorities, including agriculture, fisheries and water; and gender equality and empowering women and girls.

of direct beneficiary households (relative to baseline) by 20 percent. The project also worked to reduce food insecurity by 25 percent in the target communities, and to increase horticultural crop and livestock productivity by 20 percent each.

2.2 Context

- 24. AusABBA beneficiaries were resource-poor men and women farmers and livestock farmers from Chaghai, Kech, Kharan, Nushki, Panjgur and Washuk who are members of community organizations, informal FMCs and/or registered mutual marketing organizations (MMOs). Other beneficiaries were traders, exporters, processors, wholesalers and local buyers in modern and traditional retail markets; suppliers of seed, fertilizer, packaging materials, pesticides and other inputs for the agriculture sector; and logistic and service providers.
- 25. In close consultation with men and women's community organizations, FMCs and MMOs, AusABBA II worked in the following areas:
 - i. crop productivity (horticultural crops);
 - ii. livestock development and productivity (sheep and goat fattening, poultry rearing, egg hatching, dairy development);
 - iii. wool value chains (shearing, processing, wool quality and marketing);
 - iv. water resources management (on farm water management, efficient irrigation systems);
 - v. activities mostly undertaken by women;
 - vi. market linkages, and agribusiness and supply chain development (including post-harvest management).
- 26. Line departments of the Government of Balochistan (in particular for livestock and dairy development, and agriculture and cooperatives) were strengthened in certain areas as beneficiaries of AusABBA.
- 27. Particular efforts were made to ensure that women would benefit from AusABBA II. Twenty percent of direct and indirect programme beneficiaries were expected to be women.
- 28. AusABBA organized 62 FMCs dealing with 11 primary value chain businesses during the life of the project. These FMCs have completed their business cycles. According to an assessment by the project's monitoring and assessment activity, 34 percent of the FMCs are mature, 21 percent are semi-mature, 37 percent are at an initial stage and 8 percent are dormant. About 7 285 farmers, including 1 768 women and 5 517 men, are associated with the FMCs and benefit from improved agricultural and livestock productivity and marketing.
- 29. The project was also supposed to register FMCs as registered MMOs; it was able to complete the registration process of 21 MMOs through the Agriculture & Cooperatives Department of the Government of Balochistan.

3. Theory of change

- Three theories of change (TOCs) were developed for the project: the main theory of change, the 30. livestock theory of change, and the crops theory of change. The systematic theory of change explains the change process and its integration horizontally and vertically with higher level of change that are expected when households engage in agricultural and livelihood activities that provide greater food security, when women have the capacity to engage in agricultural activities and businesses, and local commercial farmers can provide value chain services. The activities that trigger change are well integrated through the building various chains of activities as per the project log frame. The systematic theory of change is designed to provide sufficient information for the audience to understand the processes and activities that are critical to making a positive impact in the food security and nutrition of target communities. During the evaluation, it was revealed that women's groups and FMCs continue to face challenges in accessing agricultural inputs and supplies. While critically looking at the theory of change, commercial farmers are seen as having various pathways supporting the activities of women farmers and groups; however the connections and chain of results with the households engaged in key agricultural and livestock activities are unclear.
- 31. The theory of change for livestock explains the outputs and outcome frameworks for this specific intervention. The inputs, outputs and outcomes activities are well defined in line with the project's logical framework. The role of commercial farmers at both output and outcomes level is to provide and sustain the availability of quality livestock inputs to non-commercial farmers.
- 32. The theory of change crops provides meaningful insights on the various pathways and their corelationships in supporting the chain of results. The institutionalization of farmers' collective groups was not part of the theory of change, although it became a major focus of the project.
- 33. The theories of change were regularly assessed in programme reviews and adjusted as needed, and were also included in presentations to government stakeholders by the project team.
- 34. The project's theories of change are found in Annex 4.

4. Evaluation questions

4.1 EQ1. Relevance. To what extent were the project design and intended objectives relevant to the needs and priorities of the target areas?

4.1.1 Selection of target districts

35. The decision to focus AusABBA I and AusABBA II on the six southwestern districts of Balochistan was based on the aim to balance development between the northern (Pashtun-dominated) and southern (Baloch-dominated) parts of rural Balochistan. Phase 1 of the project was an extension of the USAID-funded USABBA 'model' (later called the Balochistan Agriculture Project), which aimed to support community development, technology transfer and value chain development in the predominantly ethnic Pashtun majority districts of northeastern Balochistan. As a result, the Provincial Government of Balochistan agreed that AusABBA would operate in the districts of Chagai, Kech, Kharan, Nushki, Panjgur and Washuk to tap the enormous potential of agriculture and livestock development in the predominantly ethnic Baloch majority districts in southwestern Balochistan. AusABBA II reached over 7 200 men and women farmers from 2017 until the end of 2020.

4.1.2 Policy, strategic, institutional and programmatic alignment

- 36. AusABBA II was found to complement and support a wide array of policy, strategic, institutional and programmatic priorities related to international, country and provincial development around livelihoods, food security and nutrition.
 - i. The project was aligned with livestock and agriculture policies, as well as the Comprehensive Growth and Development Strategy of Balochistan (CGDS) for agricultural and livestock production and income generation. The project was also aligned with the key objectives of the Balochistan Agriculture Sector Policy and Strategy (BASPS), which aims to address the need of farmers and to improve the participation of women and other vulnerable groups in economic and social life, and to ensure the food security of the population. It also took into consideration the Balochistan Comprehensive Growth and Development Strategy (2013-2020) in promoting high value products focusing on women farmers through community empowerment programmes.
 - ii. AusABBA II complemented the intent of the Pakistan Vision 2025 in three areas: achieving sustained, indigenous and inclusive growth; private sector and entrepreneurship-led growth; and growth driven primarily by mobilizing indigenous resources (e.g. land, water and rangelands).
 - iii. The project was consistent with beneficiary requirements, FAO strategic objectives, the National Nutrition Survey Report from 2018, ⁶ Balochistan Agriculture Project⁷ and AusABBA I

⁶ The 2018 Pakistan National Nutrition Survey (NNS 2018), the largest national nutrition survey in Pakistan. It is designed to provide policymakers, programme managers and academicians with a unique set of nutrition-related data including environmental, anthropometric and biochemical indicators. The study group included children, women of reproductive age (WRA) and adolescent boys and girls. NNS 2018 is the fifth national nutrition survey since 1965 in Pakistan.

⁷ Between 2004 and 2012, FAO implemented the 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 Balochistan northeastern districts of Killa Saifullah, Loralai, Mastung, Quetta and Zhob. FAO, USAID, which next phase was then implemented as USABBA Project (i.e. the "Balochistan Agriculture Project (BAP)"), which included three new districts (Musakhel, Pishin and Sherani), and implemented during 2012 to 2015 with an objective to produce marketing and value chain development.

- project evaluation reports, global priorities, government and UN policies, government commitments to meeting the food security and nutrition targets of SDG 2 by 2030 and FAO CPF 2018-22.8
- iv. The evaluation found that AusABBA II aligned well with livelihoods support models and approaches in Pakistan, including rural support programmes such as Balochistan Rural Support Programme (BRSP), National Rural Support Programme (NRSP), Aga Khan Rural Support Programme (AKRSP); social safety net programmes such as the Benazir Income Support Programme (BISP) and poverty reduction programmes such as *EHSAAS* of the Federal Government of Pakistan. AusABBA II introduced inclusive market systems development⁹ (MSD) approaches into agricultural markets. The aim was to 'market ready' women and men farmers move into more viable and sustainable businesses.

4.1.3 Coherence with donor policies

37. The AusABBA II design was aligned with agriculture, fisheries and water, gender equality, and empowering women and girls among six investment priority areas under Australia's 2014 development policy for Pakistan. In addition, DFAT's Gender and Development Initiative supported AusABBA II by funding women's economic empowerment.

4.1.4 Priority on women's engagement

38. The project helped women increase their income and decision-making in business using a value chain approach, basing the approach on lessons learned from AusABBA I. The project worked with 1 768 women farmers and entrepreneurs and trained 5 636 women through a parallel project funded by DFAT, the Women's Economic Empowerment (WEE) in Balochistan through agrientrepreneurship. A significant finding in the design of women-centric businesses was that women farmers have to own assets to gain a direct income from them. As an enabling policy, FAO chose to only work in villages where community organizations for women, as well as for men, could be established and nurtured.

4.2 EQ2. Relevance. How did the project adapt to the COVID-19 pandemic and what lessons can be drawn for agriculture and food security programmes aiming to alleviate the negative impacts of the pandemic?

4.2.1 Shift in programme approach

39. The COVID-19 pandemic caused some project activities to come to a halt at the start of 2020. However, the project team continued to undertake soft interventions such as training and capacity building activities in compliance with COVID-19 standard operating procedures (SOPs), together with participatory approaches to keep the communities engaged with the project. District level staff were mobilized to conduct the activities ensuring strict compliance to the SOPs. Development interventions were temporarily discontinued and a sustainable emergency programme was introduced through integrated household Interventions, which included the establishment of kitchen gardens and backyard poultry production (later, these interventions were upgraded and packaged as integrated household food systems, IHFS). The project interventions

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⁸ The FAO Country Programming Framework (2018-22) sat out three priority areas of the Government of Pakistan to guide FAO partnership with the government and other key stakeholders on the principles of international best practices and global standards with national and regional expertise focusing on agriculture sector, food security and nutrition.

⁹ The term M4P, now more commonly known as Market Systems Development, refers to an approach in aid and development known as 'Making Markets Work for the Poor'. It seeks to change the way that markets work, so that poor people are included in the benefits of growth and economic development.

- were adapted to include such emergency measures without making major changes to the agreed development actions.
- 40. In addition, after careful assessment the project helped the Home and Tribal Affairs Department of the Government of Balochistan to take back some of the restrictions imposed on the productive sector businesses during the COVID-19 lockdown, which not only benefitted the agriculture and livestock markets, but also helped the larger UN community to continue their field operations.

4.2.2 Impact on food security

41. At the outset of the pandemic, FAO scaled-up its efforts to reduce the impact of COVID-19 on food security and in the target districts by ensuring regular access to high-quality food. In this regard, the IHFS, coupled with nutrition education, proved critical for keeping supplies of fresh vegetables, eggs and milk available to households when markets were closed or the supply of vegetables from farms to markets was interrupted. The approach helped to reduce the impact of COVID-19; however, it will take time to upscale IHFS interventions with the support of future FAO programmes. IHFS was especially important for empowering marginalized people and women, who were provided with poultry keeping, kitchen gardening and other wage opportunities.

4.2.3 Impact on women's businesses

42. In some areas, farmers experienced challenges in accessing markets and transportation services. Most adapted by selling produce in their own villages, however many were unable to sell their entire production and experienced lower margins. Through individual interviews and focus group discussions, it was learned that the incomes of women farmers were often used to increase food diversity for the families. In many cases, women bought food such as eggs, milk and meat for the family either from the village shops or from other women living in their communities in exchange for vegetables produced in their kitchen gardens.

4.2.4 Access to markets by farmers

43. Discussions with FMC members revealed that the pandemic devastated small-scale farmers, who were already struggling due to recent locust attacks on their crops. With the gradual reopening of markets, they were able to start selling their agricultural and livestock products gain. However, the returns were initially quite low. Farmers producing grapes, onions and wool sustained tolerable losses during 2020. Market closures also meant that farmers found it difficult to purchase agricultural inputs, feed and fodder, which restricted their farming activities as did a lack of transport facilities and the limited availability of labour for sowing and harvesting.

4.3 EQ3. Results. To what extent have project activities contributed to increasing agricultural income, food security and nutrition?

4.3.1 Increased agricultural income

- 44. At the outcome level, indicators for increased agricultural income among project beneficiaries (175 000 impoverished people) were used to measure project achievements. A 41 percent increase in household agricultural income, against a target of 50 percent, was recorded, according to data collected through an internal survey on incremental sales by FMCs, conducted in 2018.
- 45. The AusABBA II programme proposal tentatively projected 5 000 households (45 000 persons), comprising about 50 FMCs (including MMOs). According to the final project report, AusABBA II worked with over 7 200 beneficiaries (1 768 women), who increased their agricultural income from

agriculture and livestock. These numbers exclude the 5 636 women, including IHFS beneficiaries trained and facilitated, and the 500 women trained on poultry farming and agribusinesses through the DFAT's WEE project.

4.3.2 Agricultural productivity

46. 5 047 poor women and men adopted innovative agricultural practices due to the project, against a target of 3 000.

WITH PROJECT

**Expenses **Income **Net Profit

999'605

999'605

WITH PROJECT

Figure 4. Increase in income from onions (2018)

Source: Summary - Technical Note Assessment of Onion- 2018 (FAO Pakistan AusABBA II Project Report).

- 47. The project focused on increasing the productivity of the main products in the target districts, such as dates, onions, small ruminants, poultry, grapes, vegetable seedlings, and wool. To maximize impact, each year the interventions focused on different points in the value chain (e.g. seed, training, processing equipment, market linkages, etc.). The project also carried out internal surveys on FMCs to capture the income earned by members as compared to non-FMC members, resulting in a 34 percent increase in FMCs' income. A survey of 60 households also revealed a 67 percent increase in the income of onion farmers in 2018. Figure 4 shows that without the project, the average net profit of a farmer from onions was PKR 101 475 (USD 819.16), while with project support, the net profit was elevated to PKR 169 913 (USD 1371.63), with an increase in profits of PKR 68 438 (USD 552.47).
- 48. The evaluation found that almost all participating FMCs were aware of the qualities of high-yielding seed varieties, particularly onion and other vegetables, the volume required for sowing, germination rates, irrigation requirements, pest and disease control, yields, etc. Most farmers expressed satisfaction with the high-yielding seed varieties, land-levelling techniques (associated with certain business cases), post-harvest techniques and market linkages that were introduced with FAO support. Farmers reported that agricultural productivity and income increased after project interventions, which was confirmed by the FAO internal survey mentioned above. Onion turned out to be a promising commodity for most FMCs in participating districts. Dates is yet another potential business case whereby the farmers of Makran division have seen enormous improvements in the quality aspects and investment in processing centres in Kech and Panjgoor. In discussions with farmers during individual interviews and focus group discussions and a review of FMC records, it was found that the agricultural productivity and income of farmers was supposed to raise through project interventions as compared to the non-FMC members.

4.3.3 Livestock productivity

- 49. The livestock (small ruminants and poultry) FMCs mainly focused on meat production, although the wool business was also considered important. Most of the AusABBA II interventions designed for women (wool making, poultry, fattening of animals, marketing of live animals) required a financial contribution of 25 to 50 percent from women. According to project data, 792 women participated in these activities and contributed about 25 percent of the investment. An internal survey conducted by the project at the end of 2019 found that participating women farmers sold their sheep and goats at a profit of approximately PKR 7 000 (USD 44.87) per animal. The animals are fattened within two months before *Eid-Ul-Az*ha celebration, requiring adult eligible Muslims to sacrifice animals on the occasion).
- 50. According to the evaluation, providing sheep and goats to the women on a 25 percent cost share basis to generate income has enabled them to invest their profits in household assets. Due to the training and inputs received from FAO, many FMC farmers chose to adopt better goat breeds such as Kamori, Pateri and Burbari, which are suitable for the hot and arid climate of the southern districts of Balochistan. Most livestock FMCs found it difficult to invest their financial resources, due to the strict restrictions imposed by the State Bank of Pakistan on the opening of new bank accounts by such institutions.
- 51. FAO initiated interventions on poultry production, provision of goats and feed, animal fattening and introducing solar egg incubators to increase the overall productivity of the livestock sector. FAO supported government efforts on vaccination campaigns, demonstration of feeding, animal markets, deworming and other interventions to improve animal health. It also provided animal medicines and silage to farmers, linked to the private sector for timely provision of veterinary medicines, and introduced diverse breeds of goats. Support for vaccination camps and annual animal mandis are some key FAO contributions that have now been picked up either by the private sector or by the government itself through farmers' investments.

4.3.4 Effectiveness of the value chain approach

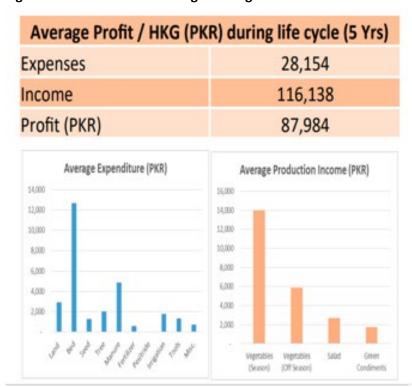
52. A value chain approach was adapted to address inefficiencies in post-harvest activities, quality improvements (grading, processing and packaging), market diversification, niche markets, and local employment generation for men and women. Food security was enhanced by providing opportunities for fruit and vegetable cultivation to meet growing nutritional needs of the families.

4.3.5 Enhanced food security

53. At the outcome level, percentage increase in caloric intake and/or dietary diversity at the household level¹⁰ was used as proxy indicator of increased food security. In this regard, a 28 percent increase was found in food security, compared to the project target of a 5 percent increase among households in target communities up to 2018.¹¹

¹⁰ The indicator 'increase in food consumption score' was dropped from the project log frame, because of poor experiences in using this indicator at the end of AusABBA I. Instead, 'enhanced nutritional status' was measured as a means of dietary diversity.

Figure 5. Income from kitchen gardening



Source: Summary - Technical Note Assessment of Homestead Kitchen Garden- 2018 (FAO Pakistan AusABBA II Project Report).

- 54. The introduction of kitchen gardens brought multiple advantages to women, such as increased household income through sales of excess produce. IHFS interventions, coupled with nutrition education, proved to be critical to ensuring that supplies of fresh vegetables, eggs and milk were available to farmer households. On average, a garden consisted of 12 beds with an area of 2 000 square feet according to a study of kitchen gardens in six districts, conducted in 2018. The study found that about 16 percent of the produce grown in kitchen gardens is sold or bartered with the village shop or neighbours. The survey also revealed that the economic benefits of a kitchen garden over a period of five years is PKR 87 984 (USD 710.25), or PKR 17 597 (USD 142) per year. According to final project data, 76 percent of beneficiaries (340 households) (trainees and participants in farmer field schools) started their own integrated homestead gardens.
- 55. FAO's programme to promote kitchen gardening and poultry under the IHFS helped to fill the food security gap. It provided women farmers with poultry, goats and kitchen gardening kits, which greatly improved the availability of fresh vegetables at critical times. During the COVID-19 pandemic, further resources were diverted to this programme, which grew to become a full-scale IHFS intervention. However, it will take time to achieve the complete upscaling of IHFS interventions in Balochistan.

4.3.6 Improved nutrition and nutrition practices

56. The nutrition interventions by AusABBA II promoted the IHFS approach among farming families. The project collaborated with the Balochistan Nutrition Program for Mothers and Children, supported by the World Bank and implemented by the Provincial Nutrition Directorate of the

¹² AusABBA has conducted a survey at the start of 2018 to assess the impact of Homestead Kitchen Garden in its six districts of southwest Balochistan. The objective of this assessment was to evaluate the overall performance and contribution of these homestead gardens to dietary diversity and nutrition and the additional income generated. This assessment only covers the specific/direct benefits of vegetable production on a household.

Health Department. The aim was to improve BNPMC's nutrition sensitivity and impact in Nushki and Kharan and to use its kitchen garden initiatives to improve nutrition in the target households. Table 3 shows the range of vegetables grown by women in the kitchen gardens. Almost all are important sources of essential minerals, vitamins and proteins, particularly with regard to fulfilling the nutritional requirements of pregnant and lactating women. The collaboration continued until 2019, focusing on behavioural change communications. It is, however, premature to expect significant changes in the behaviour of community members around better nutrition practices. In 2020, adhering to COVID-19 standard operating procedures, training of trainers in Quetta and field locations was provided on basic nutrition education, including cooking nutritious meals based on the traditional local foods. This task was subcontracted to White Rice, a behavioural change company. An impact study on this collaboration is being carried out by an international consultant. Results are expected in the second quarter of 2021 and will be used for future investments.

Table 3. Various vegetables produced in kg

Vegetables	Market Prices (PKR)	Vegetables	Market Prices (PKR)	Vegetables	Market Prices (PKR)
Spinach	50	Spinach	50	Zucchini	50
Brinjal	140	Reddish	60	Green Onion	80
Tomato	40	Chili	120	Salad	100
Okra	140	Bitter Melon	60	Lettuce	40
Onion	60	Cabbage	60	Olive	100
Pumpkin	40	Turnip	50	Red Chili	80
Cucumber	80	Mint	100	Corn	40
Coriander	100	carrot	30	Broad Bean	140

Source: Summary - Technical Note Assessment of Homestead Kitchen Garden- 2018 (FAO Pakistan AusABBA II Project Report).

4.3.7 Performance of farmers' marketing collectives

57. The success of FMCs in improving production and increasing income through effective marketing is clear to the evaluation team. The assessment of the maturity of various FMCs and their business cases can be found under EO7.

4.4 EQ4. Normative change. To what extent has project design and implementation incorporated inclusive programming approaches and contributed to addressing gender mainstreaming and the needs of vulnerable groups (e.g. minorities, people with disabilities)?

4.4.1 Women's engagement

58. Forty percent of project participants were women – twice the 20 percent target set by the project. Interventions such as poultry keeping, food processing, wool processing and dying, rug-making and kitchen gardening were specifically designed to augment existing livelihood opportunities for women. The One-UN initiative, co-chaired by FAO and the Additional Chief Secretary for Development of the Government of Balochistan, promoted the policy and institutional support needed to empower women. Helping young women establish agribusinesses and provide services

in their communities contributed to achieving FAO's objective to increase the income of women farmers.

4.4.2 Creating links

59. Linking women with Engro, ¹³ wool shearing and poultry production ventures, markets and IHFS interventions made a substantial contribution to their empowerment. Developing links between women and the private sector facilitated the purchase of inputs and sale of products, helping to raise incomes. The project's adaptive management strategy put women at the centre of all development interventions, keeping in view their real needs. At the end of each business cycle, this helped to determine what worked well, what worked less well and what changes were needed.

4.4.3 Focus on vulnerable groups

60. The project assisted marginalized and poor smallholders to increase their income and access new markets to receive better returns. AusABBA II did not only work for people with special needs, however, where possible, particularly vulnerable groups were supported through project interventions.

4.4.4 Policy formulation and resource mobilization

- 61. The project made significant investments in strengthening the agricultural and livestock sectors by building partnerships with government livestock and agriculture departments, and contributing to the livestock sector policy and strategy and the agriculture sector policy and strategy. Using the AusABBA II platform, FAO played a critical role in mobilizing resources for the USAID-funded THAzA and the European Union's Growth for Rural Advancement and Sustainable Progress (GRASP) and Revival of Balochistan Water Resources Programme projects. These investments will pave the way to the sustainable development of the province and expand opportunities for the government and people of Balochistan in terms of programmes, resources and economic opportunities.
- 62. FAO's technical assistance projects in areas such as onion seed production, locusts, underutilized foods and organizational support have made an important contribution to the development of the province, making AusABBA II a flagship project that has already had cascading positive effects on other FAO programmes.

4.4.5 Private sector engagement

63. In addition to the engagement of input suppliers in the province, there have been enormous opportunities for linking to merchants, particularly in Punjab and Sindh, for dates and small ruminants as well as other products. However, due to the COVID-19 pandemic and internal FAO procedures, 'procurement for development investments' were somewhat interrupted.

4.4.6 Sustainability and the importance of partnerships

64. A major success of AusABBA II has been its openness to sharing and its encouragement and facilitation of development partnerships in Balochistan. This has not only demonstrated the

¹³ The Engro Corporation is a conglomerate headquartered in Karachi. Founded as a fertilizer business in 1965, it is one of the largest companies in the country. Engro has operations covering a diverse range of businesses.

- benefit of open collaboration, but it has paved the way for a host of working relationships, some of which are still evolving.
- 65. As the project came to an end, the transition of AusABBA II interventions was made easier due to a recent increase in donor interest in Balochistan, and the central role that FAO plays in most new initiatives in the province. Hence, many of AusABBA II's major interventions have links that can carry them to a new stage, providing considerable reassurance to both farmers and delivery partners.

4.5 EQ5. Normative. To what extent has the project demonstrated coherence with other FAO and DFAT projects and development activities in the target districts, as well as adherence to the 'One-UN' paradigm?

4.5.1 Programme coherence with FAO

66. The project was well aligned with other FAO initiatives in the area. According to the GRASP project representative, AusABBA II's management shared strategies and regular progress reports to ensure the complementarity of the two programmes. The programmes had the shared goal of gender empowerment and, together, they provided 10 500 poultry birds to 2 000 households in the target districts. The AusABBA II project also shared data, satellite imagery (through FAO investments in Islamabad), brochures and training materials and FMC modules with the government, development partners and other FAO programmes such as THAZA and GRASP.

4.5.2 Programme coherence with the United Nations

67. AusABBA II worked closely with a host of United Nations entities. The project's priority areas were closely aligned with the objectives of the One-UN Programme, as agreed by the United Nations and Pakistan's federal and provincial governments. The project also collaborated with the UN agencies networking forum and shared training materials, brochures and other information about the movement, breeding and control of locusts. Supporting Livestock Expo was an example of alignment with UN agencies and NGOs of the programme approach of FAO. AusABBA II has shared its experiences through the One-UN forum. The United Nations High Commissioner for Refugees (UNHCR) and AusABBA II have jointly implemented IHFS interventions in refugee communities, and WFP is gearing up to supplement FAO investments in nutrition-sensitive agriculture. FAO worked closely with UN Women in celebrating international women's day, gender mainstreaming, exchange of ideas and similar investments.

4.5.3 Programme coherence with other development partners

68. FAO worked with NGOs such as the National Rural Support Programme, Balochistan Rural Support Programme and Taraqee Foundation and other project partners in the target areas to host awareness raising programmes, training, and capacity building for farmers line department staff and other stakeholders. FAO collaborated with Market Development Facility to support women's businesses, provide silage and connect farmers, and implement the DFAT-supported WEE programme, lessons from which were incorporated into AusABBA Phase II design.

4.5.4 Partnership development

69. The project developed synergies and utilized enormous business opportunities through the Australian Government investments such as Market Development Facility, Aik-Saath and others. The project also established partnerships with the World Bank-funded Balochistan Nutrition

Program for Mothers and Children to develop and disseminate communications material. The second phase of this initiative is being conducted by the White Rice company under the close supervision of an international consultant. An impact study of the Nutrition Education Programme is underway and will provide guiding principles for all future investments. FAO is the co-lead, along with the Additional Chief Secretary, Development, Government of Balochistan in the context of the One-UN initiative in the province and has used the platform of AusABBA II to interact with all UN agencies, donors, government operatives and the UN system to ensure a holistic approach to the sustainable development of the province. The One-UN Provincial Team met on fortnightly basis with policy guidelines which fed into the project Steering Committee meeting, held on a biannual basis. The most important programmatic, institutional and policy level partnerships developed by AusABBA II are shown in Table 4.

Table 4. Partnership development during implementation of AusABBA II

#	Partnerships	Partnership focus areas
1	Market Development Facility	Silage, dates and mulberry demonstrations
2	Aik-Sath (ACIAR)	Small ruminants, FMC model developing
3	THAzA	Apricot drying and social mobilization
4	SMEDA	Joint business training sessions for farmers
5	State Bank of Pakistan	Access to finance (events, e.g. access to bank credits by farmers)
6	Livestock Department	Livestock policy & Expo
7	Agriculture Department	Agricultural policy and strategy
8	EU GRASP, Water	Facilitation, connecting farmers
9	BNPMC, Balochistan Nutrition Directorate	Joint implementation of behavioural change communications
10	Dow University of Health Sciences, Karachi	Behavioural change communications on nutrition
11	BUITEMS, University of Balochistan, Sardar Bahadur Khan Women's University	SDGs, innovation summit, kitchen gardens

Source: Evaluation team.

4.6 EQ6. Transformative change. To what extent has the project contributed to the development of capacities among communities, private sector actors and line departments of government agencies, at both individual and institutional level?

4.6.1 Institutional transformation of FMCs

70. AusABBA II support transformed most of the community organizations established under Phase I of the project into functional FMCs, which are now picking up active members. Both community organizations and FMCs were encouraged to start new businesses (with inputs and asset transfers from FAO) to focus on enhancing production and building direct market relationships. Most FMCs remain informal groups made up of farmers with a common interest in boosting productivity and raising incomes by sharing ideas and information, pooling financial and material resources, and collective marketing. For example, the grape FMC, Ghazi Khan, has started to share agricultural machinery and labour to support members. Only a few of these FMCs have made the transition to formal MMOs. Most face challenges in becoming formally registered, such as the lack of proper office space for holding meetings, the absence of literate members to record minutes and maintain financial records (particularly among the livestock FMCs), and institutional barriers to opening bank accounts. Still, there is a good chance that these institutions will continue to function effectively.

Figure 6. A view of an FMC record of business



Image credit ©FAO/Faiz Kakar

4.6.2 Strengthening market linkages to FMCs

- 71. AusABBA II activities helped FMCs to productively engage with producers at internal and external markets as well as with the private sector (e.g. commission agents, middlemen, transporters, input suppliers, etc.) and development partners. FMCs and community organizations were strengthened through aggregation, training on recordkeeping and business skills.
- 72. The project evaluation revealed that the FMCs have gained access to various markets, have collected information on market actors, have used market and price information to devise diversified market strategies and have increased the prices their members receive for agricultural and livestock products. The FMCs have provided a platform for local vendors to connect with the large number of input suppliers outside Balochistan. These linkages have been made possible in an environment where the private sector still struggles to invest resources in the provinces due to insecurity and insurgency issues, mostly in the past.
- 73. FAO facilitated visits by provincial farmers to other markets in the country, enabling them to develop business connections with private marketing agents, agricultural input suppliers and other key players. Farmers and FMCs use WhatsApp to share information about market prices, new knowledge and farming practices.
- 74. Most FMCs share information with each other, a very positive development. Many send their members to markets around the country to gain first-hand information about market prices, market trends and rates of competitive products. They focus on reducing the role of middle persons by accessing markets directly, building direct links with vendors and buyers, and taking products to outside markets (local city markets, big urban markets, etc.).

4.6.3 Readiness of local markets

75. The availability of agricultural and livestock inputs improved in most districts when a list of input providers (one agricultural and one livestock provider in each target district) was shared by the FAO Office in Quetta. Inputs include seeds, pesticides, insecticides, veterinary medicines and fertilizers, etc. The date-based FMC, Soghat and Kech, explained that farmers purchase packaging materials and cartons from Karachi, while other materials are locally available. Similarly, local feed (*Shukrana*) is now available to livestock farmers in most cases. In a few instances, farmers

complained that the price is not controlled by the local authorities. The availability of certified hybrid seeds was raised as a major issue. For example, in Chagai district, hybrid onion seed was either not available or was too expensive. The sale of fake, mixed or expired hybrid seed in the local market was also a common problem faced by farmers. The district agricultural department has no mechanism for checking the availability and quality of certified seed in the local market. Sales of fake fertilizers and insecticides were also a major concern of farmers.

- 76. While AusABBA II was often able to connect local vendors with input suppliers, it seems that more purchases are being made outside the province, bypassing some local vendors. This situation needs to be carefully monitored to assess the sustainability of local supply chains.
- 77. AusABBA II also promoted sustainability by building the capacity of local suppliers to service the needs of new enterprises. For example, the distribution of poultry incubators has been associated with capacity building for local mechanics who can now repair and upgrade the incubators. Two repair shops have been established in the project's target areas.

4.6.4 Quality of service provided by line departments

- 78. Most of the FMCs that have requested support from the district agricultural departments held that department services require improvement and that regular interaction and interface with the farmers is essential. However, the farmer field schools approach supported by both the agriculture departments and FAO is much appreciated by farmers as a vehicle for capacity building, skills enhancement and knowledge enhancement.
- 79. The role of livestock departments was termed satisfactory by most of the livestock farmers that were interviewed. The farmers verified that department officials provide them with information, and treat and vaccinate their animals regularly. However, while FAO, in collaboration with the livestock departments, has increased the visibility of livestock investments, much remains to be done: Balochistan is a large province with accessibility issues for the private sector.

4.6.5 Transformation of women's groups

80. Through the WEE project, FAO strengthened the capacities of women's community organizations and nine women's FMCs in business skills, organizational development and marketing. Key informant interviews and focus group discussions showed that this training has had a positive impact. More than half of the respondents felt they had benefited from learning the concepts of margins, better business and product planning, and understanding risk. For example, poultry farmers reduced egg wastage and mortality as a result of training they received on business skills.

4.6.6 Capacity building of line departments

- 81. AusABBA II aimed to engage all participants in capacity building through district, provincial and national level training. Agriculture and livestock extension workers received substantial capacity building in delivering FFS training and business management skills such as marketing, financial management, decision-making and building linkages.
- 82. Key line department staff were engaged in delivering technical training. The staff of the cooperative department provided backstopping support to FMCs seeking to convert to MMOs. Livestock and agricultural departments coordinated their efforts to verify the quality of inputs, to conduct capacity building interventions and develop synergies at district and provincial levels.
- 83. The capacity and skills of departmental staff themselves were enhanced through training supported by FAO. Medical camps and animal markets were organized with the help of

government officials. Regular meetings took place between farmers and development actors and systems, such as ORIC University of Balochistan, market information systems, traders and market agents, private investors (attracted through the livestock expo), UN Women, GRASP, THAZA, the European Union water project, United Nations Development Programme (UNDP), Provincial Disaster Management Authority (PDMA), National Rural Support Programme and market committees.

4.6.7 Enhancing the capacity of women farmers

- 84. FAO worked with 1 161 rural women farmers to increase their capacity to undertake new business opportunities, improve their technical business knowledge, and link them to markets. Through the WEE programme, FAO has also trained 500 farmers on business planning and marketing skills; this has had a transformational impact on community organizations and FMC members.
- 85. During the individual interviews and focus group discussions, it was observed that women farmers viewed working together as an opportunity to learn new skills and pass on knowledge, particularly around market access. Some women's community organizations carried out complementary businesses, such as one group selling eggs to another group, which reared chicks and then sold them to poultry farmers.

4.6.8 Women's social empowerment

- 86. The activities of AusABBA II have helped to empower women in Balochistan. This can be seen in the following aspects:
 - i. **Confidence.** Most women who received training reported improved knowledge (e.g. about vaccinations, business skills), proficiencies and confidence.
 - ii. **Economic independence.** Most women respondents indicated that the money they earned from their businesses had changed their life in multiple ways. They primarily spend their money on their children's education, health (e.g. medicines and reproductive health items) or personal items like clothes. One transformational impact that was seen is that women community organizations and FMCs started seeing their business activities as something that they can call their own. They work together in their FMCs and community organizations, and approach the markets collectively, especially in the case of eggs, wool and carpets, which provides them with additional bargaining power.
 - iii. Agency and social status. Women respondents agreed that earning their own money improved their independence and decision-making power. Formerly dependent on men for money, they are now independent and can decide how to spend the money they have made. Several respondents claimed that they receive more positive attention from their male partners and have an improved status in their homes; they participate more in family decision-making and receive more respect from their in-laws.
 - iv. **Marketing.** According to respondents, the attitude of market players towards women producers has changed: now, they buy directly from the women and offer them fair market rates. Market linkages and visits have greatly helped. Because women's FMCs and community organizations provide quality produce to markets, the market uptake of their products has been strong.

4.6.9 Support for women entrepreneurs by line departments

87. Previously, women's FMCs and community organizations did not feel supported by the district or provincial governments and government extension services as women were considered inadequate. Gender plays a key role in this neglect. Often, members of the livestock department

don't interact directly with women. There are no women officers or staff in the districts and women community organizations and FMCs have to rely on their men counterparts for information. The coverage of government services like vaccinations is limited as district staff have few funds for travel. Women are not a priority for these services even where they are available. FAO has made an attempt to train some farmers to give vaccinations and care for their animals, but the lack of government attention to the needs of women farmers challenges the capacity of their newly-established businesses to grow in the future.

4.6.10 National-level policy influence for agribusinesses

88. Project potential and replication in national level poverty eradication programmes is seen in the development of "financial inclusive agriculture value chain for poverty alleviation" under the "Ehsaas Programme" of the Government of Pakistan in late 2019. AusABBA II is in fact a very relevant on-the-ground example of an approach that has worked remarkably well over the years and is slowly becoming more inclusive and aware of WEE opportunities. The AusABBA II programme sets an example for the government to think through its broader agenda for rural economic development.

4.7 EQ7. Transformative change. To what extent are project results sustainable and replicable?

4.7.1 Value chain product approach

89. Onion and dates are the key crops supporting the livelihoods and income generation activities of most farming families in the project areas. The single value chain product approach taken by the FMCs is an important feature of the collective farming strategy which worked for most of the FMCs, given the low literacy level among farmers, poverty and limited capacity to handle multiple agricultural products. This approach has a potential to keep building the livelihoods of farmers and it also ensures the sustainability of FAO outcomes.

4.7.2 Institutional performance and sustainability of FMCs

- 90. FMCs played a central role in the implementation of AusABBA II by achieving economies of scale, building the confidence of farmers to interact with each other and with market players, and encouraging them to invest in value added facilities and agribusiness development. Mature FMCs are a starting point for agribusiness and, most importantly, given the limited role of private sector in the province, to build and sustain linkages with markets.
- 91. According to evaluation findings, the key activities recognized by farmers and key district stakeholders as contributing to institutional strengthening and long-term growth included training and linkages, FFS, and the transformation of 21 of 62 FMCs into MMOs, collective marketing support and the establishment of their businesses. The project identified business services support providers (BSSP), built linkages with market agents, and encouraged young people to initiate businesses in service delivery. Linking services providers with markets and building their capacity were seen as key activities. Some FMCs are now self-sustaining without need for external support.
- 92. International exposure visits of farmers were attended by the FMC members through their own investment. A market system development approach was found to be most effective way of gaining sustainability after farmers learned through the exposure visits.

93. Without the project, the FMCs would not have gained access to additional markets. They would face fluctuating market prices as they could store their products, particularly onions, for a period of weeks since there are no simple ventilated storage facilities available. Onions coming from other countries have substantial impacts on farming communities, reducing sales of their own onions.

4.7.3 Policy formulation and enabling environment

- 94. FAO assisted the Government of Balochistan to formulate livestock and agriculture policies, provided skill enhancement training to government staff, and facilitated the government's review of cooperative laws.
- 95. The Livestock Policy and Strategy was launched by the President of Pakistan and is now being implemented, which should boost the overall economy of the province. Interviews with FAO management revealed that the Governments' Planning and Development Department have also adopted the approach of 'agribusiness' and are assessing the potential of business cases, which can provide support to the FMCs (backed by community organizations) from the government counterparts in the future. The agricultural policy is in the final stages of approval.
- 96. AusABBA II supported the Livestock Department in organizing the first-ever Livestock Expo in Quetta and helped the department to update livestock population data and information systems. The Expo attracted enormous business opportunities in the sector through the private investments. As a result, the Government is now establishing a disease-free zone which would open up export opportunities for the small ruminant herders. The dairy city is yet another outcome of the livestock policy which is under consideration.

4.7.4 Acceptance and ownership of FMCs

97. FMCs are recognized as active and collective marketing entities by many stakeholders, institutions and communities. The evaluation learned that farmers had grown to trust the FMCs and had no complaints about the conduct of FMC officials. Beneficiaries feel true ownership of the successful FMCs, which are expected to continue beyond the life of the project.

4.7.5 Sustainability and scalability of women's businesses

- 98. The project has transformed the lives of many rural women farmers. The women, who previously had no income, now earn around PKR 10 000 to PKR 12 000 (USD 80.72 to USD 96.87) especially from wool and poultry businesses. The project supported women's community organizations and FMCs by building their skills, introducing new technologies and developing links with markets. All of the community organizations and FMCs were interviewed for the evaluation were operational and looked forward to continuing their activities without outside assistance. However, there were concerns about the scalability of the FMCs without external support. This was mostly due to the need for investment in new businesses and intensive training on business operations.
- 99. The women participating in AusABBA II were eager to engage in wool production and poultry and goat keeping, as they could derive a direct income from these activities. Seedling production also has potential as a livelihood activity for women. Scaling these business activities will require capital to purchase inputs, which could be difficult for women to arrange.
- 100. The women that have have economically benefited from new businesses have used the income for their own needs to improve the nutritional status of their families and to cover their children's expenses. These are major incentives for women to continue their business activities.

4.7.6 Family nutrition and food security

101. Integrated household food systems interventions (including kitchen gardening) have a significant potential to be scaled-up and made sustainable. Respondents believed that this component of the project has had a positive impact on women farmers, including on their nutrition. They affirmed that they would continue these interventions and looked forward to their expansion without external support.

4.7.7 Value chain marketing

- 102. The evaluation found that most value chain-focused FMCs (e.g. for onions, dates and livestock) have developed productive linkages with local, provincial and national markets. Mature FMCs are market-ready, trustworthy, organized and prepared to effectively engage members with the formal private sector. The FMCs have become more innovative and entrepreneurial as the project helped them to gain confidence and experience with marketing agents and service providers, enabling them to receive services and sell products at reasonable rates.
- 103. Women were found to engage in production, value addition activities and sales of crops, such as dates and onions. Although the scale of these activities was small, women were able to receive a direct income when supported by project interventions.

4.7.8 Maturity of FMCs

- 104. AusABBA II aimed to strengthen FMCs through a range of value chain activities, enabling farmers to achieve higher returns on their investments. In 2020, according to the project plan, the focus was on developing stronger market linkages between the FMCs and private marketing agents and input suppliers. However, the evaluation found that the FMCs are still at different levels of maturity and function.
- 105. The analysis of final data provided by FAO about the FMCs and its business cases revealed that altogether there are 62 FMC/MMOs at various level of maturity working across 11 business cases in the six target districts of the project. Among these, 53 business cases are of men's FMCs, and nine are of women's FMCs as shown in Table 6 below.
- 106. The top three business cases are in the dates value chain, accounting for 15 men and 2 women's FMCs, or 27 percent of all FMCs, followed by onion with 17 men's FMCs or 27 percent of all FMCs. Twelve FMCs, or 19 percent, are concerned with wool, with seven FMCs managed by women and five by men. It is noticeable that women's FMCs focus on two products: wool and dates.
- 107. The project envisaged working with women's community organizations to help, support, coach and nurture them into becoming FMCs. This approach was adapted due to the social restrictions and norms that hinder women from accessing market and tapping resources directly. In 2020, the project shifted to engaging women in IHFS interventions because of COVID-19 restrictions.

Table 5. Number of product-based FMCs in target districts as reported by FAO (end of December 2020)

Men FMCs

#	Product	Chagai	Kech	Kharan	Nushki	Panjgur	Washuk	Total
1	Dates	1	6	1		6	1	15
2	Onion	4		7	2	1	3	17
3	Wool	1		2	1	1		5
4	Grapes	1			2	1		4

5	Cumin			2	1			3
6	Tomato				3			3
7	Livestock	1			1			2
8	Alfalfa					1		1
9	Carrot	1						1
10	Pomegranate				1			1
11	Sugar melon	1						1
	Grand total	10	6	12	11	10	4	53

Source: Evaluation team.

Women FMCs

#	Product	Chagai	Kech	Kharan	Nushki	Panjgur	Washuk	Total
1	Dates			2				2
2	Onion							0
3	Wool		1	4			2	7
4	Grapes							0
5	Cumin							0
6	Tomato							0
7	Livestock							0
8	Alfalfa							0
9	Carrot							0
10	Pomegranate							0
11	Sugar melon							0
	Grand total	0	1	6	0	0	2	9

Source: Evaluation team.

Men and women total

#	Product	Grand Total	%
1	Dates	17	27
2	Onion	17	27
3	Wool	12	19
4	Grapes	4	6
5	Cumin	3	5
6	Tomato	3	5
7	Livestock	2	3
8	Alfalfa	1	2
9	Carrot	1	2
10	Pomegranate	1	2
11	Sugar melon	1	2
	Grand total	62	100

Source: Evaluation team.

- 108. The evaluation team analysed the FMC maturity level data provided by FAO. It is essential to note that FAO has done the maturity assessment of the FMCs in different time frames. Due to limitation of the scope of evaluation, the evaluation team did not undertake the maturity assessment of FMCs. The analysis primarily focused on prospects for FMCs growth, market linkages and strategies, and relationships with input suppliers, commission agents and middlemen.
- 109. The maturity data analysis revealed that 45 percent of the 11 FMCs were mature, 31 percent were semi-mature, 16 percent were at the initial level, while 8 percent were dormant. The dormant FMCs were run by men and mostly dealt with tomato and date businesses. There were no dormant women's FMCs.

Table 6. Maturity of FMCs - Number

Product/FMC	Dormant	Initial	Mature	Semi-mature	Product/FMC
Women		3	2	4	9
Dates			1	1	2
Wool		3	1	3	7
Men	5	7	26	15	53
Alfalfa				1	1
Carrot				1	1
Cumin			2	1	3
Dates	3	1	9	2	15
Grapes		1	2	1	4
Livestock				2	2
Onion		1	12	4	17
Pomegranate		1			1
Sugar melon		1			1
Tomato	2		1		3
Wool		2		3	5
Total	5	10	28	19	62

Source: Evaluation team.

Table 7. Maturity of FMCs - Percentage

Product/FMC	Dormant	Initial	Mature	Semi-mature
Women		33	22	44
Dates			50	50
Wool		43	14	43
Men	9	13	49	28
Alfalfa				100
Carrot				100
Cumin			6	33
Dates	20	7	60	13
Grapes		25	50	25
Livestock				100
Onion		6	71	24
Pomegranate		100		
Sugar melon		100		
Tomato	67		33	
Wool		40		60
Total	8	16	45	31

Source: Evaluation team.

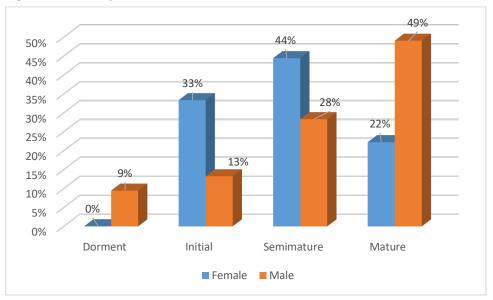


Figure 7. Maturity of FMCs

Source: FMC maturity Assessment Report of AuABBA -II project of FAO Pakistan.

- 110. Figure 8 shows that although there are no dormant women's FMCs (while 9 percent of men's FMCs are dormant), 77 percent of women's FMCs are at the initial or semi-mature stages, and only 22 percent are mature, while 49 percent of men's FMCs have reached maturity. This indicates that the majority of women's FMCs could struggle to survive, let alone thrive, without the long-term support of the project.
- 111. The evaluation team further assessed key FMCs concerned with onion, dates, wool and grapes by conducting key informant interviews with agribusiness suppliers, marketing agents, FMC officials, farmers and staff of government agriculture and livestock departments. The aim was to understand prospects for further growth and the various challenges and opportunities facing the FMCs.

4.7.9 Men's FMCs

Onion

- 112. Onion proved to be the most promising business commodity for most FMCs.
- 113. A 2018 FAO assessment of 14 FMCs and 144 farmers concluded that AusABBA onion farmers earned 67 percent more income than onion farmers working without the support of the project. During the evaluation, the farmers interviewed individually and during the focus group discussions confirmed their understanding of the different stages involved in raising onions.
- 114. The onion-based FMCs have established good linkages with local marketing agents and, due to visits to markets in Karachi, Lahore, Faisalabad and Multan with support from FAO, they now know many input suppliers and the commission agents who provide them with information and services. Many of the FMCs were found to be sharing information with each other.
- 115. The FMCs intend to continue beyond the life of the project but they lack concrete plans for value chain development, marketing and business expansion. Agribusiness is complex and, given the literacy level of farmers, consistent and long-term programme support will be needed. There are opportunities for further development of the onion sector, and private seed companies should extend their networks to Balochistan, engaging local vendors to provide onion seed to farmers at

affordable prices. The FMCs should also be encouraged to produce seed under certified conditions for the local market.

Dates

116. Most of the date-based FMCs have successfully adopted good agricultural and post-harvest practices. The FMCs grade the dates produced by their farmers as top-quality, medium- quality and low-quality. The FMCs also develop consumer packaging with half and one kg of small packaging. Baloch Hamza, Soghat e Makran and Yousaf and Brothers are the main date-based FMCs and these are are now promoting their own brands. Most date businesses are still based on informal marketing systems whereby contractors buy the fruit while still in the trees. Now, the Soghat and Kech and Yousaf and Brothers FMCs are trying to standardize prices for various varieties of dates for marketing through the engagement of other FMCs working on dates. Shortages in irrigation water in Kech and Panjgur pose a threat to date farming in those districts. There is a need for long-term planning and promotion of efficient irrigation systems for date orchards.

Figure 8. Post-harvest techniques are key measures for income improvement



Image credit ©FAO

Wool

117. Conventionally, livestock farmers have not considered producing wool and FAO has made considerable efforts to tap the market potential by equipping farmers with wool shearing machines and helping them to link to markets where they can sell their products at reasonable prices. Farmers, mainly women, were trained to prepare sheep for shearing and to hand wash the sheared fleeces and grade, sort, spin and dye the wool. AusABBA II conducted training on enterprise development and business skills for these women. In 2019, the members of the livestock FMC Aminabad of Chagai received an income of PKR 35 000 each from selling wool, which they considered to be a substantial amount. Market potential has inspired some FMCs to repair and expand the animal sheds themselves. But challenges remain as drought tends to recur every four to five years, which causes the spread of diseases, high mortality and reduced weight in animals and higher fodder costs for the farmers. Most livestock farmers are illiterate, and the FMCs lack institutional records of finances, meetings and market reports. Sub-standard or fake veterinary medicines are a big problem in Chagai and Kharan districts. Farmers need to learn to grade and tag their animals. They also need more training on marketing wool and rug making.

Figure 9. Enhancing women's skills in wool shearing and carpet making







Images credit ©FAO

Grapes

118. At the end of the project, four grape businesses were gaining momentum in the districts. However, due to the abrupt closure of the project, minimal support has been provided to grape-based FMCs by FAO. A focus group discussion with the Ghazi Khan FMC of Chagai confirmed that the group was at a satisfactory level of maturity, as previously reported by FAO. The FMC has been in contact with major growers and marketing agents to improve sales, however members lack the skills they need to meet packaging requirements for their products. Institutional support is required to further develop the FMC, particularly in the areas of post-harvest management, strengthening linkages with markets outside of the province, and improving packaging and transportation to avoid losses.

4.7.10 Women's FMCs

Wool

- 119. FAO conducted training on wool shearing for men and yarn, and carpet making for women. The project supplied inputs such as yarn making machines and carpet khaddis to women. It linked women to markets through exhibitions and introduced them to buyers in Quetta and Lahore.
- 120. During individual interviews and through focus group discussions, respondents indicated that the yarn-making machines were a great success, noting that it takes up to a day to produce one kg of handmade yard, while the machine can produce the same amount in an hour. The introduction of the machines and training on yarn-making led to women scaling-up their businesses, colouring their yarn, and selling yarn to urban markets. The wool-based FMCs were also linked to yarn buyers in Lahore and Karachi, and a continuous supply was maintained as revealed after interviewing the farmers. FAO also trained the FMCs to make and design carpets, and linked them to markets in Quetta and outside the province.

Poultry farming

121. FAO provided chicks and hens to farmers, and provided chicken feed and incubators to FMCs. Again, this was a business that had a highly positive response from farmers. Interviews with individual respondents showed that farmers could produce about one egg per hen per day in winter, and about a half egg per hen per day in the summer. Most respondents said they would sell eggs at a rate of PKR 10 per egg in the summer and about PKR 15 per egg in the winter. All respondents claimed that this activity was profitable, noting that with the incubator and training they are able to reduce chick mortality, and increase egg and hen production. The business carries a high risk of mortality and morbidity in hens and chicks, however, during interviews it was found that most farmers are using chicken feed and vaccinations and focusing on reducing this risk. The poultry business can be scaled-up and a more commercial model can be adopted where farmers collectively engage in the business.

Kitchen gardening and seeds

122. FAO provided training on kitchen gardening and seeds to women farmers, community organizations and FMCs. This was met with an overwhelmingly positive response from women farmers, who asserted that the gardens had improved their food security since they now have fresh vegetables to consume, greatly diversifying their food options. Most respondents stated that they would like to increase the size of their kitchen gardens. This intervention had a major impact on the nutritional status of women farmers. Some respondents also sold surplus vegetables within their village or in the local market, however the scale of activity wasn't large enough to be seen as a commercial business. There are several FMCs in the Kech and Chagai district, which were engaged in the seedling business and were profitably selling seedlings.

Dates

123. FAO conducted training on date production, packaging and value addition, which greatly improved production. FMCs engaged in date production and packaging are also producing value added items, such as date syrup, date halwa, etc. More time, more effort and investment will be needed to scale-up these activities. It was observed that in Kech and Panjgur districts, some women owned date trees, which were given to them as wedding gifts.

Access to markets

124. Gaining and maintaining direct access to markets is a challenge for women. Although some respondents sell their produce to markets either collectively or on their own, they more commonly engage an older woman in the village or a male household member to manage the sale. Many women claimed that, although they were allowed to go to the market, they weren't able to go every day, posing a challenge for poultry farmers, where sales are regular and frequent. Many women farmers largely relied on male relatives to market their products. If they weren't able to sell their produce like chicks and eggs in the local markets, they sold it in their own villages, where prices, and thus profits, were lower. It was observed that many women respondents had met the vendors and buyers who were buying from them. Women claimed that although they had sporadic contact with the vendors either through market visits, linkages made by FAO or through telephone (mostly men members dialled the number), they were able to communicate with them more effectively than before.

5. Cross-cutting issues

5.1 Gender

- 125. Gender development and mainstreaming were very strong components of the project. The aim was to promote the equal participation of women in decision-making, and equal access and control over resources and the benefits of development and other aspects of their livelihoods. AusABBA II paid particular attention to women's economic empowerment, promoting integrated homestead farming and agricultural practices. Lessons learned of the DFAT-supported WEE programme were also incorporated in the AusABBA II programme design. According to project reports, there was a 40 percent representation of women in project interventions, twice the target set by the project. FAO worked closely with UN Women on a number of activities, including the celebration of International Women's Day, gender mainstreaming, and the exchange of ideas and investments. FAO also worked with Balochistan Rural Support Programme and National Rural Support Programme on awareness raising programmes, training and capacity building. FAO collaborated with the Market Development Facility to support women's businesses and regularly shared progress reports to ensure complementarity. To support the continuing growth of successful women's enterprises, many AusABBA II interventions have now been integrated into GRASP proposals or taken up by THAzA (e.g. apricot drying).
- 126. Interventions to raise the profile of women and appreciation for the key role that women can play in agriculture should be integrated into all future work by FAO.

5.2 Nutrition

127. According to project documentation, nutrition-sensitive agricultural approaches were to be seen as intermediate outcomes of the project. However, an increase in food production was not expected to necessarily lead to improved nutrition outcomes as AusABBA II lacked the capacity to deliver the demand-side interventions, such as behavioural change communications, that are necessary to dramatically improve nutrition. However, AusABBA II collaborated with the World Bank-supported the Balochistan Nutrition Program for Mothers and Children programme to improve the programme's nutrition sensitivity and impact in Nushki and Kharan and to link its kitchen garden initiatives with nutrition. BNPMC mostly focused on nutritional health and food consumption, including through a behavioural change communication process to carry key nutritional messaging to families. The communications work was eventually enhanced through additional funding, which enabled FAO to link with the Dow University of Health Sciences in Karachi to help BNPMC develop a range of communication products. The collaboration continued until 2019. It is still premature to expect significant changes in nutritional outcomes among target families. Hence, the future programmes of FAO will need to focus on gauging changes in knowledge, attitudes and practices of families, and to work with the government and donors to disseminate the IHFS initiative throughout the province.

5.3 Climate-smart agriculture

128. The project was implemented in the tropical and sub-tropical, arid and mountainous agroecological zones of Balochistan. FAO identified new and improved on-farm climate-smart agriculture (CSA) technologies and practices, introducing the following measures during project implementation:

- i. improved animal breeding, integrated crop/livestock farming systems (including hay and silage production), conservation agriculture/minimum tillage; improved crop varieties and seed/planting material quality;
- ii. integrated homestead farming (i.e. horticulture, small livestock, food processing and food-based nutrition);
- iii. on-farm water management, raised-bed horticultural production and better water harvesting mechanisms.
- 129. It was observed that FAO should develop links, in particular with GRASP and the China-Pakistan Economic Corridor (CPEC) Initiative, to leverage opportunities in the future.

5.4 Governance

130. The relationship between FAO and the Government of Balochistan is recognized as a model for delivering effective partnerships and initiating and strengthening agribusinesses in the province. This recognition has increased FAO's portfolio of work in Balochistan and therefore the project approach was transformed into a programmatic approach by its country management in 2019. In the same year, FAO and DFAT worked to develop the Balochistan Livestock Policy and Strategy (2020-2030) in consultation with the Livestock and Dairy Development Department and other stakeholders. The Policy was officially released by the President of Pakistan on 18 November 2019. At the request of Balochistan's Chief Minister, FAO also worked with the Department of Agriculture and Cooperatives and other stakeholders to develop the Balochistan Agriculture Policy and Strategy (2021-2030), the final draft of which is with the Government of Balochistan for presentation to the Chief Minister. FAO now finds itself a central player in Balochistan, having developed essential relationships with almost all relevant stakeholders in the province. Yet the programmatic approach may need structural, institutional and policy level adjustments to strengthen the sustainability of Australia's investment in AusABBA II and other projects in the future.

5.5 Lessons learned

- 131. The establishment and promotion of agribusinesses is an effective and sustainable approach to raising income and enhancing food security in rural communities in Balochistan. Strong advocacy and policy measures to promote this model among men and women farmers would produce effective results.
- 132. The evaluation team found that farmers are receptive to new ideas and willing to take calculated risks if they have reason to believe they can achieve a better outcome from a specific product. Farmers will change their behaviour if the change is appropriate, affordable, manageable and makes a positive difference. Training farmers to consider different degrees of risk is very essential and more should have been done to teach them how to calculate, track and mitigate certain risks with their product choice. Through a multifaceted farmer training and support system led by buyer-linked local private sector and departmental extension service providers, farmers participating in AusABBA II learned that investing in a particular value chain would improve their income, living conditions and food security.
- 133. Centralizing procurement not only compromises market relationships but also undermines the capacity and growth of local distributers. Experience also shows that centralized procurement is cumbersome and slow with vital inputs (e.g. seed) often arriving too late to optimize growth. In this regard, FAO's complicated and lengthy procurement system was not effective for addressing the needs of the beneficiaries. Since project interventions were season-specific, timing was critical

in this regard. During the evaluation, most respondents emphasized the importance of local arrangements for procurement, particularly of agriculture and livestock inputs. Respondents reported having received seed very late on one occasion, which resulted in poor germination and production. Likewise, the delivery of poultry birds was once delayed until the winter, resulting in the higher mortality of birds in Kharan district.

- 134. The IHFS model has been customized and replicated by beneficiaries on a large scale. For example, in Chaghai, with FAO support, farmers established 28 kitchen gardens in a number of villages. The selection of communal land for cultivation and the allotment of the land to farmers for kitchen gardens introduced farmers, particularly women farmers, to collective farming. This approach also provided an opportunity to farmers to get together on a regular basis, as well as supporting women farmers and their community organizations.
- 135. Selecting agricultural and livestock varieties, technologies and capacity building measures that are appropriate to the local climate, environment and culture is of upmost important. Some evaluation respondents highlighted a few cases of inappropriate species selection, particularly within the context of the climate and soil of the target areas.
- 136. Bridging the gap between commercial banks and smallholder farmers has been a critical issue since banks are hesitant to provide credit and loans to farmers. And while microfinance banks are embedded in the rural economy and can better adapt to the requirements of agricultural finance, their products do not always meet the needs of smallholder farmers. It is therefore important that the farmers are linked to appropriate lending institutions such as the National Rural Support Programme Microfinance Bank, the Khushhali Microfinance Bank and the Zarai Taraqiati Bank, a state-owned agricultural development bank.
- 137. Private sector involvement is also critical to sustainable market systems development, however due to the limited presence of the private sector in the target districts and time constraints, this involvement was suboptimal. However, a few medium-level entrepreneurs were mobilized and linked with project beneficiaries.
- 138. The project made a significant effort to understand cultural, religious and tribal factors and restrictions in the area. It employed female staff, consultants, trainers and extension workers, and worked closely with women who were receptive to learning and wanted to improve their access to markets, particularly through value chains that were more accessible and feasible for women, such as wool, kitchen gardens, sheep fattening and creating small-scale processing and trading agribusinesses.
- 139. The evaluation team observed that mostly older people were engaged in farming and associated marketing businesses. The perception seems to be that older people resort to farming when they cannot do anything else, while younger people see farming as requiring too much effort for too little reward. These perceptions must be addressed in education and training programmes specifically targeting young people to show the benefits and opportunities that exist for them in agribusinesses. Keeping educated youth in rural areas will increasingly demand mechanization and the use of technology, a connection to the outside world, and evidence that agriculture can be a profitable for young farmers and service providers alike.
- 140. The team learned that the foremost challenge to women-led businesses was resistance from their homes and communities. However, this improved greatly during the project, mostly due to three reasons:

- i. FAO interacted with the men in the villages and sensitized them to the need to support women in agribusinesses;
- ii. many women's businesses were conducted at home, making it easier for men to accept them;
- iii. the fact that the women were earning enough money to contribute to household, food and education expenses was obviously welcomed.
- 141. Many women had problems accessing capital and did not know how to access banks or microfinance institutions Although FAO introduced some women to banks, they complained that the banks would not give them loans, mostly due to the lack of collateral.
- 142. The lessons learned from AusABBA can benefit other FAO programmes; for example:
 - i. In the USAID-funded THAzA programme, greater attention should be given to emerging farmer collectives rather than to individual entrepreneurs.
 - ii. GRASP should focus on strengthening village-based capacity for production and collaboration.
 - iii. The European Union-funded Revival of Balochistan Water Resources Programme should use a farmer field school approach to build farmers' capacity in agrotechnology, hydrology, rangeland/livestock management, land management, water use efficiency and cropping systems.

6. Conclusions and recommendations

6.1 Conclusions

Conclusion 1. The design, objectives and implementation strategy of AusABBA II were relevant to the needs of target groups and were aligned with the development priorities of the Government of Pakistan and Balochistan, such as improving living standards through livelihood improvements and developing a more food-secure environment by improving access to sufficient nutritious food.

- 143. Overall, interviews with stakeholders, project staff and farmers revealed very positive reactions to project outcomes and deliverables. The evaluation team concluded that the general level of satisfaction of beneficiaries with the project was high.
- 144. Lessons learned from AusABBA Phase I and Balochistan Agriculture Project greatly informed the design of the Phase II project. Furthermore, since the project was designed with inputs from a number of relevant stakeholders, it was aligned with the agricultural, livestock and nutrition priorities, policies and strategies of DFAT and the Governments of Pakistan and Balochistan. Key subsectors and areas of intervention were well defined during the initial stages. The evaluation team observed that the strong foundation provided by AusABBA I made it difficult to evaluate the outcomes and successes of only Phase II of the project in isolation from Phase I.
- 145. The AusABBA project serves as a model, based on its agribusiness model, innovative adaptive management approach, efforts to engage women to lead their businesses independently and development of links with markets. However, efforts to replicate the model in other districts of Balochistan have not been successful due to the fact that funding for Phase III of the project was withdrawn by DFAT.

Conclusion 2. AusABBA II's adaptive management approach to inclusive market system development is innovative, and has proved to be a flagship for FAO in the region. AusABBA II has created opportunities for remarkable change in the target areas, yet these results need to be sustained through continued interventions and longer-term support. Most importantly, additional FMCs are needed, and each needs to be closely mentored on their path to become MMOs.

- 146. According to the evaluation findings, the FMCs are at various stages of maturity, with the onion-and date-producing FMCs exhibiting better prospects for survival given their more advanced farming practices, well established linkages with markets, better profit margins, educated farmers and sophisticated marketing strategies. The unexpected termination of the project caused challenges for some FMCs, almost half of which are still in the early stages of development. Factors threatening the sustainability of FMCs may include the lack of organized office space and bank accounts, irregular meetings and collaboration among members. At the same time, FMC members are highly motivated by the common objective of agribusiness promotion and income generation.
- 147. The project has been important to farmers for a number of reasons, including its flexibility (adaptive management and learning by doing), attention to the needs of beneficiaries, multiple training activities, exposure visits and support actions, and the provision of hybrid seeds and varieties, farming methods and post-harvest techniques.
- 148. While AusABBA II experienced no real failures, there were some weaknesses in the project. For example, the particular needs of poor farmers and people with disabilities were not taken adequately into account in the design and implementation of the project. In many cases, it was not possible to open bank accounts for the FMCs (bearing in mind that FAO has no direct control

- over bank policies). The objective to transform the FMCs into MMOs was understood at the end of Phase I, but it needed more clarity so that the farmers who did not get much interaction with the project are not exploited.
- 149. Although FAO's direct involvement in project activities increased project expenses, due to the cost of security, it ensured the efficiency and effectiveness of project deliverables. The project emphasized capacity building and institution strengthening in agriculture, livestock and cooperative departments, which enabled them to be continuously involved throughout project implementation, both at provincial and district level. This contributed to the long-term sustainability of project actions. In addition, FAO's direct control over financial resources and field operations overcame gaps and delays in the project's successful implementation.

Conclusion 3. While the value chain approach is valuable, the concept requires further support and strengthening. The early pull out by DFAT, the centralized and lengthy process of procurement within AusABBA, and the restrictions imposed by both the pandemic and the fragile security environment hindered this process.

- 150. Improving the agriculture and livestock sectors in Balochistan depends on the continued availability of irrigation water in the province. However, the project lacked a strategic focus on water conservation and availability, which the evaluation team perceived as a missing link in AusABBA II's value chain approach.
- 151. Establishing successful agribusinesses takes a long time, which is why FAO originally envisaged AusABBA as a nine-year project. The decision of the donor to terminate the project halfway through, due to changed priorities, has had implications for the target groups and made it necessary to determine alternative options for supporting activities that were already underway.
- 152. The AusABBA project worked in southern districts of Balochistan and provides ample evidence to the development agencies for replication of the project approach, that is income improvement through agribusinesses in other areas of the province.
- 153. Linking small farmers to markets and combining collective marketing with the adoption of effective post-harvest techniques increased the incomes of beneficiaries while upscaling improved agriculture practices in the target districts.
- 154. Market system development is a long-term approach which requires more time to reach maturity than was available in the foreshortened AusABBA II project.
- 155. The last stage of the project was implemented during a global pandemic and a period of locust attacks on crops, which obviously affected the outcomes. Nevertheless, most anticipated targets were achieved. In this regard, coping strategies, such as the IHFS, were able to reduce the impacts of these crises on target beneficiaries.

6.2 Recommendations

Recommendation 1. FAO and national partners should design and implement the next phase of the project, taking into consideration the need to ensure an enabling environment for continued and effective functioning of FMCs.

- 156. Continuing AusABBA II-type interventions is highly desirable. The links between small farmers, new FMCs and markets need further strengthening and the FMCs themselves need reinforcement and, eventually, transformation into MMOs. It is recommended that FAO explore other opportunities to extend project activities for an additional three years, as originally anticipated. This agribusiness model could then become easy to assess, replicate and upscale by other development institutions as well.
- 157. Building the capacity of farmers through farmer field schools has been very effective and it is recommended to use the approach in future FAO programmes, and to recommend its use to other development actors for replication.

Recommendation 2. Interventions that focus on income generation and food security should be better integrated with other programmes addressing community development needs.

- 158. Efforts to establish agribusinesses and promote entrepreneurship among farmers with the aim to improve income and food security should be closely linked with social sector services such as education, health and hygiene, to support overall community development.
- 159. It is recommended that an agribusiness model that emphasizes market systems development be implemented in other districts of Balochistan in collaboration with development agencies and donors. This should be integrated with community mobilization models being implemented by other development agencies in the province.

Recommendation 3. The value chain-based agribusiness model needs further design improvements to enhance efficiency and ensure better outcomes.

- 160. The evaluation team observed that the sustainability of the small farmers with small businesses depends on medium-size businesses, since these have better resources and strong linkages with the markets. Their linkages with each other will promote the survival of newly established business institutions in the province and will promote sustainable market systems development approaches. In this context, the success of FMC Kharan, which has brought together hundreds of small farmers for collective marketing, could be replicated in other districts of Balochistan.
- 161. Water scarcity is a major challenge for agriculture across the province. The evaluation team recommends a strong focus on the water conservation and management through adoption of an integrated water resources management (IWRM) approach, the introduction of micro-irrigation systems, and the cultivation of low delta-high commercial value crops in all future programmes.
- 162. When using an agriproduct approach in future projects, a clear distinction should be made between project failure and commodity failure in drawing specific lessons. Project failure may result from lack of proper support, gaps in capacity building for farmers, institutional issues hindering the smooth functioning of FMCs and marketing issues; while commodity failure may result from the fact that the commodity is not suited to the local climate, low production and demand, low profitability, etc.

- 163. Consistency in the application of the procurement for development model is needed to ensure the purchase of local inputs to build the local market system and promote market relationships. This model is an essential part of an effective value chain approach.
- 164. There is a need to clarify the synergies between the IHFS approach and an inclusive market system development approach that enables women to lead profitable businesses and develop productive links with markets.

Recommendation 4. Interventions targeting women have proved to be effective in addressing gender mainstreaming and economic empowerment. These should be replicated in all FAO projects.

- 165. Gender empowerment through promoting women-led businesses and mainstreaming them in a market system was an effective approach of AusABBA II with great potential for replication elsewhere in the province. While it is important to develop the skills and confidence of women, it is crucial that they are empowered to conduct their own businesses.
- 166. It is recommended that women and young people are central to all development interventions targeting agriculture, since a gender- and youth-balanced approach might be the recipe for more equitable agricultural and economic growth.
- 167. The three most successful women's FMCs were dedicated to wool, poultry and seedlings. In the wool business, women were able to create efficiencies and to effectively market good products. With more training and inputs, these businesses have room to grow. In poultry, women were able to expand their businesses and increase their incomes. Like wool making, poultry raising can be scaled into a large level commercial business through future projects. Although only a small number of women were engaged in the seedling business, they were making high returns and had plans to expand, based on growing demand, especially by women buying seedlings for their kitchen gardens.
- 168. It is recommended that FAO work with women's FMCs and community organizations to create better branding and improve the packaging of products for greater marketability. In this regard, the GRASP project looks to scale and support women's community organizations and FMCs by providing on business concepts, branding and group management to enable them to become registered and sustainable farmers' groups.

References

Australian Aid, Australian Government. 2013. *South Asia regional development program, 2013-2017*. (also available at https://www.dfat.gov.au/sites/default/files/south-asia-regional-dev-prog-strat-2013-17.docx)

Department of Foreign Affairs and Trade (DFAT), Australian Government. 2014. *Australian aid: promoting prosperity, reducing poverty enhancing stability.* Barton, Australia. 41 pp.

(also available at

https://www.jcs.mil/Portals/36/Documents/Doctrine/Interorganizational_Documents/aus_australian_aid2_014.pdf)

DFAT. n.d.. *Australia's aid investment plan, 2015-2016 to 2018-2019*. Barton, Australia. (also available at https://www.dfat.gov.au/about-us/publications/Pages/aid-investment-plan-aip-pakistan-2015-16-to-2018-19)

FAO. 2006. *Policy brief: food security.* Rome. 4 pp. (also available at http://www.fao.org/forestry/13128-0e6f36f27e0091055bec28ebe830f46b3.pdf)

FAO. 2008. *An introduction to the basic concepts of food security.* Rome. (also available at: http://www.fao.org/3/al936e/al936e.pdf)

FAO. 2018. 2018-22 Country programme framework for Pakistan. Rome. (also available at http://www.fao.org/fileadmin/user-upload/FAO-countries/Pakistan/docs/FAOPK CPF-2018-2022.pdf)

Government of Pakistan & United Nations Children's Fund (UNICEF). 2019. *National nutrition survey report – Pakistan*. (also available at https://www.unicef.org/pakistan/reports/national-nutrition-survey-2018-key-findings-report)

Ministry of Planning, Development and Reform, Government of Pakistan. n.d. Pakistan vision 2025: one nation – one vision. 110 pages. (also available at https://www.pc.gov.pk/uploads/vision2025/Pakistan-Vision-2025.pdf)

Planning and Development Department, Government of Balochistan. n.d. Draft Balochistan comprehensive development strategy 2013-2020. 157 pp. (also available at https://www.undp.org/content/dam/pakistan/docs/PROCUREMENT/2018/July%202018/2)%20BCDS%20Revised%20Final%20Draft%20August%2027%202013.pdf)

Bibliography

Brunelli, C. & Viviani, S. 2014. Exploring gender-based disparities with the FAO Food Insecurity Experience Scale [online]. Paper presented at the "2014 Global Forum on Gender Statistics" 3-5 November 2014, Aguascalientes, Mexico. Rome, FAO. (also available at https://unstats.un.org/unsd/gender/mexico nov2014/Session%201%20FAO%20paper.pdf)

Castell, G., de la Cruz, J., Pérez Rodrigo, C., Aranceta, J. 2015. Escalas de evaluación de la inseguridad alimentaria en el hogar [online]. Madrid, Revista Española de Nutrición Comunitaria. (also available at http://www.renc.es/imagenes/auxiliar/files/RENC2015supl1INSEGURALIMENT.pdf)

Del Castillo, S. Patiño, G., Herrán, O.. 2012. Inseguridad alimentaria: variables asociadas y elementos para la política social. *Revista Biomédica*, 32, 4. (also available at https://www.revistabiomedica.org/index.php/biomedica/article/view/766)

Food and Agriculture Organization of the United Nations (FAO). 2012. *Global strategic framework for food security and nutrition, Committee on Food Security. First version.* Rome. (also available at http://www.fao.org/docrep/meeting/026/ME498E.pdf)

Appendix 1. People interviewed

Last name	First name	Affiliation /Institution	Gender	Position/ Location
Bell	Rebekah	FAO	Female	FAOR
Essa	Ahmed	FAO	Male	Project Head
Atif	Mohammad	FAO	Male	M&E Officer
Raza	Qasim	FAO	Male	Livestock Specialist
Ashraf	Mohammad	FAO	Male	Agriculture Specialist
Iqbal	Nasir	FAO	Male	National Expert
Saleem	Rabia	FAO	Female	Finance Officer
Gulistan	Asma	FAO	Female	Gender Expert
Raza	Rashid	FAO	Male	Team leader Kech
Ahmed	Aftab	FAO	Male	Team Leader Chaghai
Ullah	Sana	FAO	Male	Team Leader Kharan
Ahmed	Noor	FAO	Male	CDM Kech
Rehman	Abdul	FAO	Male	CDM Kharan
Bibi	Fazeela	FAO	Female	CDM
Bibi	Shakira	FAO	Female	CDM
Toirov	Farrukh	FAO	Male	Deputy FAOR
Ahmed	Munir	District Kharan Agriculture	Male	Deputy Director
Haleemi		Department		. ,
-	Dr. Pannah	District Kharan Livestock	Male	Veterinary Officer
		Department		
Ur Rehman	Dr. Majeeb	District Kharan Livestock	Male	Veterinary Officer
		Department		
Shah	Nadil	District Kech Agriculture Officer	Male	Agriculture Officer
Ali	Dr. Shoaib	District Kech Livestock Department	Male	Veterinary Officer
Ahmed	Nazeer	District Chagai Agriculture	Male	Agriculture Officer
		Department		
Khan	Dr. Alamgir	District Chagai Livestock	Male	Veterinary Officer
		Department		
Sahibzad	Saeed	District Chagai Livestock	Male	Deputy Director
		Department		
Ullah	Asad	District Chagai Agriculture	Male	Agriculture Officer
		Department		
Shah	Zahoor	District Chagai Agriculture	Male	Deputy Director
		Department		
Rehman	Fazal	District Chagai Malik Khwasti	Male FMC	President
Ullah	Aman	District Chagai Angoor	Male FMC	General Secretary
Khan	Behram	District Chagai Gidan	Male FMC	President
Shakoor	Abdul	District Chagai	Male FMC	Inputs Supplier
Mohammad	Haji Gul	District Chagai Zakariya 1	Male FMC	
Saleh	Ishaq	District Kech Ginnah FMukran Dates	Male FMC	President
		and Sweet		
Farooq	Ghulam	District Kech Soughat Kech FMC	Male FMC	President
Bijjar	Hafiz	District Kech Menaz FMC	Male FMC	President
Ahmed	Bashir	District Kharan Sopak	Male FMC	
Ahmed	Bashir	District Kharan Nali	Male FMC	President
Rehman	Abdul	District Kharan	Male FMC	Owner Wool Business
Shakoor	Abdul	District Chagai	Male FMC	Inputs Supplier
Khan	Behram	District Chagai Gidan FMC	Male FMC	Inputs Supplier
Khatoon	Noor	CO Zakirya-1, Aminabad	Female CO	District Chagai
Khatoon	Sultana	CO Zakirya-1, Aminabad	Female CO	District Chagai
Bibi	Jameela	CO Malik Khawasti	Female CO	District Chagai
Khatoon	Jannat	CO Bazgas/ CO Abdul Kareem	Female CO	District Chagai
Zakria	Nazia	CO president Zakriya 2	Female CO	District Chagai
Peerio Baksh	Rasheeda	Kech Village Meero Bazar	Female FMC	District Kech

Last name	First name Affiliation /Institution		Gender	Position/ Location
	Peerani Junubi zorbazar		Female FMC	District Kech
Najma	Fazila (procident)	Kech Village Absor (FMC name:	Female FMC	District Kech
Fazila (president)		baloch bazar)		
Bakht	Aziz (President)	Qandeel FMC in village jangal	Female FMC	District Kharan
Aziz (President)		rehmutllah		
Bakht	Ganj	Nali Village in Jodi Kalat	СО	District Kharan
Afroze	Gul	Zorabad Village	СО	District Kharan
	Sherbaz	Tamulk	Female FMC	District Kharan

Focus group discussions

Affiliation /Institution	Gender	Position/ Location
Gowash, Askani, Soopak, Jamak	Participants	District Kharan
	of 4 Male	
	FMC	
Nigot, Miskan, Qandeel	Participants	District Kharan
	of 3 Female	
	FMCs	
Yousaf and Brothers, Sougghat-e-	Participants	District Kech
Kech	of 2 Male	
	FMCs	
Janobi Bazar, Mero Bazae	Participants	District Kech
	of 2 Female	
	FMCs	
Ghazi Khan, Zerala	Participants	District Chagai
	of 2 Male	
	FMCs	
Zakerya 1, Malak Ghwasti	Participants	District Chagai
	of 2 Female	
	FMCs	

Stakeholders

Last name	First name	Affiliation /Institution	Gender	Position/ Location
Saman	Miss	GRASP	Female	Value Chain Expert
Razaq	Abdul	TAhza FAO	Male	Value Chain Specialist
Baqi	Abdul	Cooperative	Male	Inspector
Ahmed	Shakoor	SAMEDA	Male	Provincial Chief
Zehri	Asif	TAhZa FAO	Male	Value Chain Specialist
Marri	Mohammad	UNDP	Male	Communication Specialist
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Annexes

Annex 1. Terms of reference http://www.fao.org/3/cb5234en/cb5234en.pdf

Annex 2. Evaluation matrix http://www.fao.org/3/cb5235en/cb5235en.pdf

Annex 3. Sampling frame http://www.fao.org/3/cb5236en/cb5236en.pdf

Annex 4. Theory of change http://www.fao.org/3/cb5237en/cb5237en.pdf

Annex 5. Evaluation instruments http://www.fao.org/3/cb5238en/cb5238en.pdf