Final Evaluation of the Project “Capacity Development of the Irrigation Department of the Ministry of Agriculture, Irrigation and Livestock of the Islamic Republic of Afghanistan”

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Final Evaluation of the Project “Capacity Development of the Irrigation Department of the Ministry of Agriculture, Irrigation and Livestock of the Islamic Republic of Afghanistan”

GCP/AFG/078/JICA
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Acronyms and abbreviations

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
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<tbody>
<tr>
<td>CBRF</td>
<td>Capacity Building for Results Facility</td>
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<tr>
<td>CDIS</td>
<td>Capacity Development and Institutional Strengthening</td>
</tr>
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<td>DAILs</td>
<td>MAIL's provincial departments</td>
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<tr>
<td>FAO</td>
<td>Food and Agriculture Organization of the United Nations</td>
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<tr>
<td>IACAR</td>
<td>Institutional Analysis and Capacity Assessment Report</td>
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<tr>
<td>JICA</td>
<td>Japanese International Cooperation Agency</td>
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<tr>
<td>NGO</td>
<td>Non-governmental Organization</td>
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<td>SCLoW</td>
<td>Supreme Council of Land and Water</td>
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This report presents the findings, conclusions and recommendations of the final evaluation of the project "Capacity Development of the Irrigation Department of the Ministry of Agriculture, Irrigation and Livestock of the Islamic Republic of Afghanistan" (GCP/AFG/078/JCA). The project was implemented by the Food and Agriculture Organization of the United Nations (FAO) and funded by the Japanese Cooperation Agency (JICA). The main counterpart was the Irrigation Directorate of the Ministry of Agriculture, Irrigation and Livestock (MAIL). The project was designed to improve the capacity of the Irrigation Department to formulate, implement, monitor and evaluate agriculture irrigation development projects. Although it had an initial duration of two years (December 2013-September 2015), an extension was approved in September 2015. The first phase of the project had an original budget of USD 3.31 million and the extension received additional funding of USD 1.95 million, totalling USD 5.26 million for both phases. The second phase started in October 2015 and ended on 30 May 2017.

The purpose of the final evaluation is to assess the project’s results with regard to its objectives, outcomes and outputs, providing evidence-based conclusions and recommendations. The evaluation also intends to provide advice and guidance for similar future interventions in the country, as well as identify key priority areas to be addressed. The intended users of the evaluation include JICA (the donor), the Project Task Force and FAO Field Office, the Government of the Islamic Republic of Afghanistan (particularly the Irrigation Department), and other key donors working in the sector.

The final evaluation assessed the full implementation period of the project (December 2013 through May 2017). The evaluation answers the following key evaluation questions (EQs):

- EQ1: To what extent has the project responded to pre-existing needs and capitalized on existing capacities?
- EQ2: To what extent did the project target beneficiaries to enhance their skills and knowledge?
- EQ3: To what extent has the project improved the performance of the Irrigation Department and DAILs of the Ministry of Agriculture, irrigation and Livestock in formulating, managing, monitoring and evaluating irrigation management systems development projects?
- EQ4: What are the outcomes of political and technical consultations, conducted within the project framework, at policymaking level?
- EQ5: How sustainable are the project’s achieved results at the enabling environment, organizational and individual levels?
- EQ6: What lessons learned can inform similar future FAO and/or JICA projects?

As part of the methodology, the evaluation constructed the project’s Theory of Change based on its logical framework. The Theory of Change also captured elements such as the linkages between activities or actors of change, as well as assumptions of conflict and fragility not addressed in the project design. The Theory of Change was tested though the different interviews and focus groups. The evaluation utilized several methods to gather and analyse information, including a literature review, stakeholder consultations and field visits to on-the-job training sites in April 2017, which included participatory meetings with project communities.

The main evaluation findings presented below are grouped according to the three levels of the FAO Capacity Development Framework, plus design and sustainability.
Design

EQ1: To what extent has the project responded to pre-existing needs and capitalized on existing capacities?

6 The project was aligned with national needs and priorities on irrigation systems and management. Moreover, the project design and activities responded to the capacity development need of the Irrigation Department. However, the absence of a needs assessment prior to project design affected the quality of the risk matrix, which did not consider institutional constraints such as the absorptive capacity\(^1\) of the Irrigation Department and the need to expand the scope of beneficiaries. This need was addressed in the second phase of the project by the Steering Committee, which decided to include DAILs and irrigation project staff among the targeted beneficiaries. However, the selection of beneficiaries at institutional and individual levels in the second phase did not follow rigorous criteria nor the institutional needs identified in the Capacity Needs Assessment. Furthermore, the project document did not include a results matrix tailored to specific project outcomes (as the donor preferred the project team to adopt the overall Capacity Development and Institutional Strengthening (CDIS) framework), and no specific baselines were established.

7 Gender and youth were not mainstreamed in the project design; no analysis or strategy was mentioned in the project document, and more importantly, no gender equity or youth promotion activities were carried out during implementation. During the implementation, a group of female farmers participated in some field days but it was more of an ad hoc activity than a concerted effort to target female beneficiaries. Cultural and sector issues also affected the participation of women. Given the cultural implications of gender issues in Afghanistan and its many nuances, a well-developed strategy would have been useful to address gender equality and empowerment issues.

8 The project addressed the three dimensions of capacity development, namely the enabling environment, organizations and individuals. However, it did not provide a strategy to strengthen the impact of activities across each dimension, such as ensuring that the skills acquired at individual level could trigger a positive change at organizational level. This objective could have been reached through, for example, a greater involvement of trained staff in the management of the project pipeline phase, as well as monitoring and evaluation frameworks at departmental level. Such planning would have resulted in the acquired capacities being applied to improve the quality of Irrigation Directorate performance.

9 The project design included support for the creation and operation of Irrigation Association. Although other donors were in a better position to scale-up the support to Irrigation Associations (with more funding), the potential for collaboration was not reflected in the project design or addressed during the project implementation. Finally, the project did not clearly capitalize on other irrigation or irrigation-related capacity development interventions. Notably, staff from other projects were involved in the trainings delivered by this project.

Individual level

EQ2: To what extent did the project target beneficiaries to enhance their skills and knowledge?

10 The training responded to clear knowledge and skill gaps in the Irrigation Department in a number of technical areas, including design, operation, policies, regulations and the use of geographic information systems. In-class and on-the-job trainings effectively transferred these capabilities to beneficiaries. On-the-job-trainings were highly valued by both Irrigation Department and DAIL staff, as well as by Irrigation Associations. Nevertheless, the potential impact of the training, and of the overall institutional integration, planning and oversight, was undermined by the lack of communication systems at the provincial level aimed at ensuring coordination with the Irrigation Department.

\(^1\) The absorptive capacity of an organization can be defined as the ability to recognize the value of new knowledge and skills, assimilate it and apply it to commercial or economic growth ends.
Organizational level

EQ3: To what extent has the project improved the performance of the Irrigation Department and DAILs of the Ministry of Agriculture, Irrigation and Livestock in formulating, managing, monitoring and evaluating irrigation management systems development projects?

11 The project performed well regarding the number and scope of outputs delivered, particularly in training-related activity pillars and working groups meetings. By training individual staff, the project helped to improve the overall capabilities of the institution. Moreover, it has had positive effects on the overall perception of other institutions, within and outside Ministry of Agriculture, Irrigation and Livestock, on the role and relevance of the Irrigation Department. Trainings have also facilitated internal coordination and, in general, a higher interaction between the central and provincial levels, despite the lack of staff. Nevertheless, there is scope to further support major changes at the organizational level.

12 Although the project established a partnership with Kabul University to prepare some of the training manuals, there are few partnerships with other organizations such as non-governmental organizations (NGOs) or the private sector.

13 The pilot projects were successful in building canals, rehabilitating old systems and modernizing others as part of on-the-job-training in pilot sites. Furthermore, the creation of Irrigation Associations in the two districts has been successful and fully aligned with the Water Law provisions.

Enabling Environment

EQ4: What were the outcomes of the political and technical consultations, conducted within the project framework, at policymaking level?

14 The project supported the consultation process through the different working groups by providing indirect support to discussions on coordination, policy and planning. The aim of this activity was to improve the policy environment addressing inter-institutional issues in the water sector, and to make the Irrigation Department capable of understanding and translating national policies and strategies into programmes. The donor and sub-sector dialogue facilitated by the project supported two working groups to facilitate policy dialogue and coordination. FAO’s role was to support this policy dialogue, and it did so by providing inputs to the discussions as well as administrative support. However, in the framework of a possible extension of this project or future similar ones, there is scope to enhance FAO’s facilitating role in supporting the Government by leading the policy dialogue with all involved stakeholders (including the donor community), to the extent requested by the Government itself.

15 As a result of project activities, the Irrigation Department is more empowered to request support for training and to address its specific needs. This was the case with the Irrigation Department requesting support to draft the National Irrigation Programme and the Irrigation Sector Reform document. At the enabling environment level, there is still some scope to support the Government in clarifying accountability schemes of each concerned institution active in the water management sector, for specific sub-sector results.

Sustainability and lessons learned

EQ5: How sustainable are the project’s achieved results at enabling environment, organization and individual level?

16 Considering the current national financial situation, the sustainability of project results is at risk. Nevertheless, the Irrigation Department is gaining some momentum due to more stable leadership and will likely receive further support from the donor community given the importance of irrigation and agriculture in the country. The Project Task Force could
continue providing expertise and support to the sector at policy and inter-ministerial levels in order to increase the sustainability of project results.

17 The project design (including the risk matrix) did not capture significant constraints that could affect the sustainability of project results, such as political volatility, staffing constraints and absorptive capacity. Finally, the evaluation team identified the need to fully develop a monitoring and evaluation system, at both project and institutional levels to guide decision-making and day-to-day management.

EQ6: What are the key lessons that can be learned from the project’s implementation?

There are eight key lessons that can be learned from implementation of this project:

- FAO’s expertise and experience in irrigated agriculture plays a key role in creating capacities at the institutional level. It has fostered a holistic and comprehensive training programme addressing the fundamental aspects of irrigation.
- The training, fulfilling technical and skills gaps in Ministry of Agriculture, Irrigation and Livestock, addressed too many beneficiaries some of which did not have a clear professional status within the Ministry of Agriculture, Irrigation and Livestock (e.g. interns). The authorities and the managers of donor-funded projects should aim at targeting training for those staff with clear functions.
- Considering the difficulties faced by projects in addressing capacity development activities at the enabling environment level in conflict countries, the Project Task Force could plan to take on a clear leadership role in supporting policy dialogue in the irrigation sector.
- The achievement of capacity development outcomes (in particular at the environment and organizational levels) takes longer in conflict countries than in others. It is fundamental to reflect this in the capacity needs assessment, project design and risk matrix.
- It is also important to reflect the above in solid monitoring and evaluation frameworks in order to increase the project’s ability to adapt to changing needs and constraints.
- Gender issues are difficult to address in conflict and culturally complex environments. The project would have benefited from a dedicated FAO strategy on how to mainstream gender in similar contexts.
- The mix of classroom-based and on-the job training ensures a higher degree of adoption of knowledge and techniques.
- The introduction of systems and processes such as coordination groups or databases can be instrumental in moving towards evidenced-based policymaking and implementation.
- Capitalizing on rehabilitation work financed by other development partners and coordinating on-the job-training with existing efforts at field level may bring more tangible results for local communities, foster coordination mechanisms, the creation of multi-stakeholder platforms and reduce the financial cost of designing/implementing on-the-job-trainings themselves.

Conclusions and recommendations

18 Based on the evidence gathered during the evaluation, the country and sector context, and the identified lessons learned, the team has prepared the below conclusions and recommendations. At the time of the mission (21-28 April 2017) there was an ongoing discussion on the possibility of extending the project, reducing the number of activities and adding and/or emphasizing others. The following conclusions and recommendations are aimed at improving the impact of the project in the event of an extension.

Conclusion 1. The project responded clearly to national capacity development needs in its two main areas of work: policy and skills development. Overall, institutional transformation and governance development – in this case, support for the development of good governance of the water sector – can only be achieved in the long-term. Thus, the project objective of contributing to better governance of the sector, as well as improving staff capacities, was very ambitious considering the two-year project duration and the country and sector context.
Conclusion 2. Targeting capacity development of the Irrigation Department was found relevant to country needs given the capacity development needs of the institution. Interviews with the authorities, donors and beneficiaries, as well as the data on the sub-sector challenges, clearly indicate the need to continue supporting the irrigation sub-sector across the board.

Conclusion 3. Widespread organizational change was not yet achieved due in part to the frequent changes in leadership. The political and administrative environment has impacted the initiatives at the policy and enabling environment levels. Nevertheless, there is a general consensus that the current leadership has the potential to enact change, including reforms of the sector. The current President is supporting the restructuring of the sector, in particular the water sector reform prepared for the Ministry of Energy and Water, and has requested the Ministry of Agriculture, Irrigation and Livestock to conduct a similar reform at the irrigation sub-sector level. Therefore, it is important to take advantage of the existing momentum to clarify policies, competences and scope to improve inter-ministerial coordination.

Conclusion 4. Despite the time constraints and difficulties in mobilizing staff, the project was effective in conducting training activities and workshops, and raising awareness among the participants. However, the evaluation team considers that the project has not been strategic enough when broadening the scope of beneficiaries; although knowledge and skills have been widely diffused, there were beneficiaries who play no clear role in the delivery of irrigation activities or projects. Pilot Projects at the two districts have been very well received by the respective targeted beneficiary Irrigation Associations and have contributed to increasing the irrigated land surface and efficiency in water use.

Conclusion 5. Few women have benefited from the project activities. IACAR did not include a gender assessment and the project lacked a gender analysis or gender strategy. Considering the role of women in agriculture, this was a missed opportunity. Nevertheless, in one of the pilot projects, women farmers benefited from several trainings in the research centre. Continued support for the women who benefited from the previous FAO project helped to sustain their learning progress.

Conclusion 6. The Irrigation Department has not used resources such as the Irrigation Database even though it is easily accessible and could be of great use to support the decision making process (planning and prioritizing interventions). Considering that Irrigation Department does not yet have a strong monitoring and evaluation framework, this tool could support a strict monitoring activity that can help identify gaps and actions being implemented, and could facilitate management within the ministry and inter-ministerial coordination.

Recommendations

In the conclusion and recommendations section of the evaluation report, the evaluation team provides suggested actions under each recommendation.

Recommendation 1. In order to create an environment conducive to the efficient functioning of Irrigation Department and Ministry of Agriculture, irrigation and Livestock, the Project Task Force should support the Ministry in clarifying the roles and responsibilities for all water management-related institutions. The Project Task Force should also help to promote inter-ministerial coordination and to strengthen DAILs. This will in turn have a positive impact on the sustainability of project results, agricultural productivity and job opportunities. The current context is now more adequate to move this agenda forward, in coalition with key donors and under Government leadership.

Recommendation 2. In order to ensure the sustainability of capacity development activities, the Ministry of Agriculture, Irrigation and Livestock should establish a unit responsible for the design and implementation of a capacity development plan as well as for the overall management of training activities.

Recommendation 3. To ensure a positive impact and the sustainability of project results, it is recommended to the Project Task Force and JICA to build on and coordinate with other
donors’ projects in supporting a long-term change process within Irrigation Department, Ministry of Agriculture, irrigation and Livestock and other ministries. This would also include the coordination of support to Irrigation Associations.

Recommendation 4. It is recommended to the Project task Force to address in its capacity development activities the knowledge and skills needed to manage a larger sector, due to the addition of the private sector or NGO participation. Both sectors would benefit from each actor’s respective strengths, resulting in improved public sector delivery and the development of the private sector itself.

Recommendation 5. It is recommended to the Project Task Force to strongly promote gender equality and empowerment issues, in collaboration with the Government and Ministry of Agriculture, Irrigation and Livestock in particular. It will be important to align specific future project activities with the recent National Women’s Economic Empowerment Programme and Plan³ and the FAO Gender Policy.³

Recommendation 6. It is recommended to the Project Task Force, to ensure that future projects contributing to a larger programme (i.e. the possible extension of this project) include a specific results framework and risk matrix, tailored to the project specific objectives, outcomes and country features. This will enable effective project monitoring, including a causal chain between the activities and the outcomes and impact.

Recommendation 7. The project and Ministry of Agriculture, Irrigation and Livestock/Irrigation Department should set clear criteria to strategically select target beneficiaries at individual level. The targeted beneficiaries should be those who are in the position to generate an impact within a given institution or sector after the training is completed.

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³ The document is available at http://www.fao.org/docrep/017/i3205e/i3205e.pdf
1. Introduction

This report presents the final evaluation of the project "Capacity Development of the Irrigation Department of the Ministry of Agriculture, Irrigation and Livestock of the Islamic Republic of Afghanistan" (GCP/AFG/078/JCA). The project was implemented by the Food and Agriculture Organization of the United Nations (FAO) and financially supported by the Japanese Cooperation Agency (JICA). The main counterpart was the Irrigation Directorate of the Ministry of Agriculture, Irrigation and Livestock (MAIL).

The project, designed to improve the capacity of the Irrigation Department to formulate, implement, monitor and evaluate agriculture irrigation development projects, was initially slated to last two years (December 2013-June 2015), but an extension was approved in September 2015. The first phase of the project had an original budget of USD 3.31 million, while the extension benefited from additional funds of USD 1.56 million, amounting to a total of USD 5.267 million for both phases. The second phase started in October 2015 and ended on 30 May 2017. As per the extension phase objectives, no major changes occurred in the project logical framework, as the original project document had already established a vision, background and activities for a possible extension. However, the eight main activity areas were revised with the approval of the Joint Technical Working Group (JTCG) at a meeting held on 22 July 2015.

The project agreement included provisions for an evaluation at project completion. Additionally, the donor requested this Final Evaluation for both accountability and learning purposes. In particular, recommendations and suggestions will inform the Japanese International Cooperation Agency’s (JICA’s) ongoing decision-making process on another potential extension of this project or other follow-up activities.

1.1 Purpose of the evaluation

The evaluation aims to assess project results and contribute to its objectives, outcomes and outputs by providing evidence-based conclusions and recommendations. It also intends to provide advice and guidance for future similar interventions in the country and identify key priority areas to address. In addition, conclusions and recommendations were geared towards the potential extension, which was being discussed at the time of the evaluation.

The primary intended users of the evaluation are JICA (the donor), the Government of the Islamic Republic of Afghanistan, the FAO Country Office and the project team, which could make informed decisions to prioritize and implement modalities based on the evaluation findings and conclusions. Secondary users include: i) other FAO staff working in Afghanistan or elsewhere on similar projects; and ii) other key donors and development agencies active in the irrigation sub-sector in Afghanistan who can use this evaluation to identify collaboration spaces with Irrigation Department, JICA and/or FAO.

1.2 Scope and objective of the evaluation

The final evaluation assessed the full implementation period of the project (December 2013 through May 2017). It also paid attention to the inception and project design phases, particularly how these responded to the needs of the country and targeted institutions as well as to JICA, FAO and the Afghan water management sector’s identified priorities.

The evaluation objectives have been identified by the FAO Office of Evaluation (OED) in consultation with the Project Task Force, donor and national counterpart’s representatives in order to address needs and priorities identified by the primary users of the evaluation. The main objective of the evaluation was to assess project results and their value to identified stakeholders at both ministerial (Irrigation Directorate and Directorate of Agriculture, Irrigation and Livestock at provincial level) and community level (farmers living...
in the command areas of the Pilot Projects). The evaluation also documented important lessons for a possible extension or future projects that may use similar approaches, (e.g. targeting beneficiaries, tools and programme design elements). Finally, this evaluation will also inform the ongoing drafting process of FAO’s Office of Evaluation (OED) Evaluation Framework.

8 To the extent possible, the evaluation examined project achievements at both ministerial and local levels based on evidence from the field. It especially focused on the soundness of the capacity development intervention framework, results and their replicability, and on identifying lessons learned.

9 The evaluation sought to answer different Evaluation Questions (EQ) (see below) related to: i) project objectives before and after the revision; ii) documents produced during project implementation; and iii) the particular context of Afghanistan, which was identified as fragile and in conflict (see Section 2).

**Design**

EQ1: To what extent has the project responded to pre-existing needs and capitalized on existing capacities?

**Results**

**Individual level**

EQ2: To what extent did project target beneficiaries enhance their skills and knowledge?

**Organization level**

EQ3: To what extent has the project improved the performance of the Irrigation Department and DAILs of the Ministry of Agriculture, Irrigation and Livestock in formulating, managing, monitoring and evaluating irrigation management systems development projects?

**Enabling environment**

EQ4: What are the outcomes of political and technical consultations conducted within the project framework?

**Sustainability and lessons learned**

EQ5: How sustainable are the project’s achieved results at the enabling environment, organizational and individual levels?

EQ6: What lessons learned can inform future similar FAO and/or JICA projects?

10 Through dedicated evaluation sub-questions and related tools, the evaluation also assessed cross-cutting issues such as gender, partnerships and quality of key project outputs (see Appendix 1).

**1.3 Methodology**

11 The evaluation adhered to the United Nations Evaluation Group (UNEG) Norms and Standards and followed the Office of Evaluation (OED) manual and methodological

guidelines and practices. The evaluation was results-oriented but also considered the implementation approach and challenges to the achievement of stated outcomes.

12 The evaluation was conducted between April and June 2017 with the overall guidance and support of the Office of Evaluation (OED). It comprised two missions: the first to Rome to discuss the evaluation methodology and approach (early April) and the second to Kabul for data collection (21-28 April).

13 A theory-based approach was applied to develop key evaluation questions and guide the assessment. The evaluation team formulated a Theory of Change to assess how the project intended to achieve its objectives and impacts. This Theory of Change (Appendix 3) was discussed with the project team and based on the project’s logical framework. It also captured other elements not initially considered in the project design. The evaluation team carried out a documentation review and took into consideration approaches to conflict and fragile countries to elaborate assumptions and draw a set of hypotheses. The main assumption was the need to consider capacity development as a longer term change process than in low- and certain middle-income countries. From a theoretical perspective, the evaluation team also took into account the situation in Afghanistan since 2001, the volume of aid and the overall advancement of the country.

14 FAO’s Office of Evaluation (OED) is currently developing a framework to evaluate capacity development projects and programmes. The evaluation approach used in this evaluation is based on the draft Office of Evaluation (OED) capacity development framework that looks at several interconnected dimensions, namely enabling environment, organizational and individual levels plus project design and sustainability. This evaluation offered the possibility to test the framework approach in a complex context and therefore provided useful inputs to adjust the structure of the capacity development framework and identify connections among its different dimensions.

15 The evaluation matrix, which has been developed by the evaluation team in consultation with the Evaluation Manager, guided the overall assessment. It lists evaluation main and sub-questions, related methods, tools and sources of information selected to collect data/evidence. The evaluation matrix also identifies the evaluation criteria addressed by each question (see Appendix 1).

16 Primary information from stakeholders was obtained using four main methods: i) face-to-face interviews with project staff during the mission; ii) focus group discussions with participants (trainees) from different departments and provinces; iii) telephone/Skype and email communication after the mission; and iv) direct observation and pilot sites visits. The evaluation team used an interview guide based on the desk review to structure individual interviews and focus groups.

17 Stakeholder consultations to obtain primary data were conducted during visits to Afghanistan between 21 and 28 April. Interviews were conducted with project staff in FAO Afghanistan and Irrigation Department of the Ministry of Agriculture, Irrigation and Livestock. The evaluation team also interviewed civil servants (Tashkeel), other project staff, representatives of JICA and other donors and research, private sector and civil society organizations (Irrigation Associations and Farmers) at both national and provincial/local levels in the project pilot sites. See Appendices 2 and 4 for the full mission schedule and list of people interviewed.

18 Field visits were conducted in the three pilot project sites including one in the research centre and two in the districts:

- Badam Bagh Research Farm – piloting of precast parabolic segments (PCPS) canal lining;
- Shaheedullah Irrigation Canal, Mir Bachakot – piloting of plain cement concrete (PCC) canal lining;
- Zir Darak Irrigation Canal, Deh Sabz – piloting of boulder masonry canal lining.

Secondary information and project data/products were provided by the project team and assessed as part of the desk-based work completed by the evaluation team prior to and after the mission to Kabul. The list of documents consulted and data analysed is provided in Appendix 6. It includes: i) background reports such as the project document; ii) technical, socio-economic reports, a capacity development roadmap and plans produced in the framework of the project; iii) documents related to the irrigation policy and the irrigation sector reform; iv) training outputs and technical manuals; v) annual project implementation review reports and semi-annual progress reports; vi) project back to office reports; vii) meetings minutes of the working groups; and viii) project financial data and data on trainings and participants.

Beyond the desk review of all project-related documents the evaluation team also conducted a thorough desk review of the country’s political and economic situation, in relation to the ongoing conflict and the country’s fragile status. The evaluation team also reviewed sector assessments and diagnoses developed by FAO and other donors. The objective of this desk review was to reach a broader understanding of the institutional gaps at organizational and individual levels, as in the socio-political environment, and how these affect the management of the water sector and the irrigation sub-sector. This assessment has been integrated and triangulated with the Institutional Analysis and Capacity Assessment Report (IACAR) conducted under Activity 1 of this project. The evaluation provides an overview of the Irrigation Department institutional and organizational framework and capacity development needs to be addressed. The evidence provided in the assessment has been further triangulated with other sector diagnostics prepared by other institutions present in the country.

The variety of evaluation tools and primary and secondary data, both quantitative and qualitative, enabled good triangulation of the evaluation findings.

1.4 Limitations

The evaluation faced several limitations and constraints:

- The security situation in Afghanistan and the difficulties of travelling to the country limited the in situ assessment of the provincial directorates’ capacities.
- The project monitoring set-up was insufficient. The project had a Project Results Matrix but it was only updated once. Baselines were not included nor was the Project Results Matrix updated with the information from the IACAR and other documents. Therefore, it was not possible to clearly identify potential impacts at field level and/or establish any correlation between these and the activities implemented under the three capacity development dimensions (e.g. whether the enhancement of skills and knowledge in the areas identified in the needs assessment turned into an increase of irrigated areas).
- The short duration of the mission, which was also affected by security and travel constraints, impeded the visit to beneficiaries from other institutions such as the Ministry of Energy and Water or Ministry of Rural Rehabilitation and Development; beneficiaries or staff from other donor-funded projects, such as Community Livestock and Agriculture Project by the International Fund for Agricultural Development (IFAD) or On-Farm Water Management at provincial level; or in Kabul to gather direct information on the skills and perceptions on the project.
- While the evaluation team expected to conduct two focus groups, only one was organized because of the complex travel arrangements and last minute notice. While this group provided significant information validating some of the assumptions and initial findings, it would have been better to have two groups to deepen the analysis. Additionally, due to travel constraints, some of the participants arrived halfway through the focus group session, thus making it difficult to gather all views during the discussion.
- The evaluation team could only interview one woman who benefited from three trainings and was in the process of being recruited under the Capacity Building for Results Facility (CBRF). The evaluation team also briefly met the coordinator of a previous project targeting female farmers who also benefited from the project evaluated here.
- Language: while the evaluation team included a national consultant, who was an expert on irrigation, communication was not always fluid as follow-up questions were difficult to address. The evaluation team considers that this negatively impacted the quality of the dialogue during the meetings, particularly during the focus group discussion.
1.5 Structure of the report

The report is structured as follows: Chapter 1 introduces the purpose, scope, objectives and methodology of the evaluation; Chapter 2 describes the context as per its relevance to the evaluation; Chapter 3 provides the main findings under each main evaluation question; Chapter 4 consists of an analysis of cross-cutting and sustainability issues; and Chapter 5 presents the main lessons learned. Finally, Chapter 6 includes conclusions and overall recommendations.
2. **Background and context**

2.1 **Afghanistan institutional and sector context**

Afghanistan has long been one of the poorest countries in the world, affected by conflict and political upheaval. In the last five decades, Afghanistan has suffered a history of war with different levels of conflict and violence. This situation began with internal conflicts (1973-1979) followed by the anti-Soviet insurgency backed by the United States in coalition with the Islamic Conference (1979-1989); post-Soviet and anti-communist conflict backed by foreign powers (1989-1992); the pre-Taliban internal conflict (1992-1994) and anti-Taliban war (1994-2001); the latter resulted in a persistent state of “economic war”.

The period under the Taliban, starting in 1996, and the 11 September attacks on the United States led to the beginning of American foreign intervention in 2001. With the election of Hamid Karzai as interim head of state by the grand council (Loya Jirga), the country adopted a new constitution in 2004, holding its first presidential elections. That same year, NATO assumed responsibility of security across Afghanistan and in 2010 agreed to hand over control of security to Afghan forces; this took place between 2012 and 2014. This decision led to what is now known as the Transition Phase. The withdrawal of the International Security Assistance Forces has had a substantial impact on Afghanistan’s economy and security situation.

Gross domestic product (GDP) growth slowed down from 1.3 percent in 2014 to 8 percent in 2015 and projections indicate that growth will likely remain slow over the coming years. Poverty rates in Afghanistan have increased in recent years since foreign governments announced the progressive decrease of military forces on the ground. The decline in aid negatively impacted jobs through less demand for goods and services, and the escalation of conflict has increased the vulnerability of the population. The number of Afghans in poverty increased from 36 percent in 2011-2012 to 39 percent in 2013-2014. Poverty in rural areas also has increased to 44 percent. Since 2012, past gains are being eroded, resulting in greater poverty and unemployment rates, violence levels, educational attainments and gaps between boys and girls. There has also been a negative effect on private investment, migration and internal displacement, putting a great deal of pressure on urban areas. At the macro-fiscal level, the Government budget heavily depends on foreign aid as security commitments absorb half of the revenue; the country relies on aid to cover recurrent government expenditures. Still, only 50 percent of aid is on-budget, making it fundamental to channel off-budget support using country systems, in line with the Paris Declaration, to ensure consistency with government priorities. On the governance front, the governance deficit relative to other South Asian countries is still very large. Reforms in areas to strengthen the rule of law and decrease corruption had a small impact.

Agriculture accounts for about a quarter of the national GDP (excluding opium production) with more than 80 percent of the population living in rural areas of which 90 percent are poor. Agriculture employs 40 percent of the total workforce although not through full employment. Most of Afghanistan’s manufacturing industry and exports depend on agricultural production. Only 12 out of Afghanistan’s 65 million hectares of land are arable, as major parts of the country include mountains and deserts. Due to the dry continental climate and maximum of 400 mm of rain per year, irrigation is obtained from snowmelt over spring and summer. The irrigation potential is of 4.4 million hectares. Prior to the

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7 For an easy account of Afghanistan’s history since 1700 see https://www.thecairoreview.com/timelines/afghanistan-since-1700/?platform=hoostsuite (last accessed August 2017).
8 However, in 2011 Karzai ensure a ten-year military partnership with the United States to have US troops remain after 2014, when foreign troops are due to leave the country.
9 According to the Economist Intelligence Unit “The domestic political situation will be increasingly fragile in 2017-18 due to tensions between the president, Ashraf Ghani, and the chief executive officer, Abdullah Abdullah, and growing concerns over delays to the reform process. Insurgent groups will likely expand their territorial reach, leading to a further deterioration in the security situation. Economic growth prospects will continue to be dampened by the difficult situation on the ground, high unemployment and political uncertainty.” (last accessed June 2017; http://country.eiu.com/afghanistan).
conflict the irrigation system infrastructure could irrigate around 3 million hectares, but currently only 2 million hectares of arable land are irrigated while the remaining 10 million hectares of arable land are rain-fed and left fallow.12

Some studies13 have shown that by using farm budgets or crop/livestock production, the expansion of irrigated areas and associated productivity could foster job creation (which is a big challenge with a population growing by 3 percent per year). For example, expanding the irrigated area for cereal production by 100 000 ha could produce and additional 80 000 to 90 000 full-time equivalent jobs.

The Government of Afghanistan has prepared the Afghanistan National Peace and Development Framework (ANPDF), which is the country’s five-year development plan and the key document of Ministry of Agriculture, Irrigation and Livestock. One of the priority areas in the agricultural sector is the rehabilitation and modernization of all aspects of the irrigation sector. Smallholder farming dominates the sector with farm sizes ranging from 0.4 to 1.0 ha for small-scale producers and from one to two hectares for large-scale producers. The total irrigable area is 2.4 million hectares, and more than 95 percent of Afghanistan’s water is consumed by the irrigation sub-sector.

As stated in the irrigation sub-sector reform paper prepared by this project, the emerging needs in Afghanistan are the development of irrigation and governance. The National Irrigation Programme (2016-2025) developed by the Government plans to invest a total of USD 1.58 billion over ten years to rehabilitate and develop the irrigation infrastructure, irrigated agricultural enhancement and strengthen institutions to increase the total irrigation command area from the current 2.1 million hectares to 3.1 million hectares.

Although Afghanistan is relatively rich in water resources and land, three decades of war and drought have negatively affected access to water and the modernization of pre-existing irrigation systems. The World Bank estimates that during the past 30 years of conflict almost 5 000 networks were destroyed.14 There is a lack of efficient institutions, organizational capabilities of staff and effective rules and regulations regarding water use. Centralized structures of water management and overlapping mandates between institutions have created poor coordination within the water sector and a general lack of information and data sharing for planning. The institutional framework of the water management and irrigation sector is complex with competences split between the Ministry of Energy and Water, Ministry of Rural Rehabilitation and Development and Ministry of Agriculture, Irrigation and Livestock. The Water Law, which came into force on 26 April 2009 did not help to clarify the competences and roles of different institutions.15

The Water Law regulates ownership, fees, rights, permits, and usage with respect to water. The Law states in its Article 8(5) that the “Determination of irrigation norms in different rivers basins, irrigation drainage systems and other related research for water use for agriculture and irrigation are the main responsibility of the Ministry of Agriculture, Irrigation and Livestock’s mandate (Art. 11 of the Water Law) includes, among others: i) maintenance and fair distribution of water; ii) establishment of Irrigation Associations, iii) introduction of technologies to minimize water losses; and iv) conducting research to enhance the economic effectiveness of water use. The Government of Afghanistan also approved two National Priority Programmes providing programmatic priorities in the irrigation sub-sector: i) the National Comprehensive Agricultural Development Priority Programme (2016 to 2021); and ii) the National Infrastructure Plan (2017-2021). Both are aimed at addressing institutional needs and investment priorities until the end of the current five-year strategic plan.

12 Id. p.34.
13 Id. p.7.
14 World Bank, 2014.
15 Other laws and regulations include: the Civil Code, the Islamic Law, traditional customs and practices. The Water Sector Strategy is also in place (2009). The full text of the Water Law: http://www.cawater-info.net/bk/water_law/pdf/afghan_water_law_2009_e.pdf
Afghanistan is organized into 34 provinces, with one provincial directorate of the Ministry of Agriculture, Irrigation and Livestock in each (DAILs). However, only 27 DAILs have an irrigation staff and other staff (such as extension workers) also perform part of the work. Most of this staff belongs to the Tashkeel structure. Following an assessment of Irrigation Department staffing needs and profiles, the World Bank Trust Fund “Capacity Building for Results Facility” is funding several positions to strengthen the Irrigation Department. In addition, the World Bank’s “On-Farm Water Management Project,” which began in 2010 and was restructured and downsized in 2013, approved additional financing of USD 45 million after the 2014 changes in leadership in Irrigation Department.

Box 1: Irrigation Systems

What is irrigation? Irrigation focuses on investments to improve livelihoods in rural and peri-urban areas. Irrigation’s role is fundamental as it supplements rainfall to meet crops’ needs and mitigates water security risks derived from irregular rainfall. Strong policy, planning and implementation ensures supply, which has a directly impact on crop production and contributes to a more balance revenue source and better overall performance of the agricultural sector.

Surface Irrigation

- Headworks - The tapping of water resources (rivers, lakes, streams) sometimes involves storage (dam or reservoir) and distribution.
- Primary system - Consists of conveying water from headworks to a main canal or pipeline (distribution system) as well as the corresponding structures and management.
- Secondary and Tertiary Channels - The delivery of water to farmers through channels based on water rights, quotas and other arrangements. Gate structures are utilized to divert a regulated discharge from one canal level to the next lower level.
- On-farm water management – Refers to smaller field channels and related structures that distribute water to farm fields as wells as to smaller drainage systems (to prevent salinization and waterlogging).
- System operation, maintenance, and rehabilitation - Includes i) water allocation management (assessing water demand and availability, managing water scarcity, and delivering the agreed water services in terms of quantity, timeliness, and quality); ii) water services (canal operation, water monitoring, operation of farm gates and hydraulic devices, billing and collecting service fees, and contract management); iii) system maintenance (preventive, reactive, and daily upkeep); and iv) rehabilitation (replacement/repair of structures, pumps and motors, control valves, gated outlets and other facilities to restore system performance).

Groundwater Irrigation: Consists of extracting the water from aquifers under the earth’s surface and providing more flexibility to farmers to apply water as needed. The use of groundwater irrigation has increased over recent years due to the availability of affordable pumps sets and because of increasing problems with surface irrigation.

2.2 Public administration in Afghanistan

The Afghan public sector is centralized with limited reach outside Kabul. Therefore, improving governance and service delivery across the board has proven extremely difficult, particularly with regular changes in government and increasing insecurity. Basic needs across the country, ministries, and at provincial and local levels include training, offices, information technology equipment and communications.

When discussing capacity development in Afghanistan it is important to consider the large aid inflows into the country since 2001 and the approach of aid agencies. While many agencies provide on-budget support, the volume of off-budget support is very significant. Well-qualified civil servants and newcomers (well-educated diaspora retuning to the country) prefer to join projects than to work for the administration, as economic conditions are much better in the former. This is a loss of human capital for the administration that impacts the sustainability of projects as staff is not really incorporated into the government structure. The government sometimes “competes” for qualified staff with donors active in the country to lead project-level activities.

This has negatively impacted the Government’s capacity to attract good human capital, which would strengthen institutions. A few measures have been taken recently to avoid this situation. First, the ongoing World Bank Capacity Building for Results Facility will help the Government recruit staff to join the civil service structure with more competitive salaries. This includes the Irrigation Department, which is understaffed and has numerous vacancies. Second, the government and the donors have agreed to create a new salary framework for project staff. The objective is to avoid their high mobility across projects and local institutions, as high turnover rates and associated transaction costs negatively impact project performance. Projects will also benefit from institutional knowledge and skills likely remaining in the same department for much longer.

The Irrigation Associations are a recent actor in the governance and management of water resources and are composed of irrigation users. The 2009 Afghan Water Law includes provisions for supporting the creation of Irrigation Associations to strengthen on-farm water management (e.g. to operate and maintain irrigation systems and limit irrigation overdose, which is common in Afghanistan). Previously, Mirabs performed the traditional water management role. The change from the Mirab to the Irrigation Association structure is based on the assessment that Mirabs were not capable of performing their duties efficiently in times of water scarcity (DAI, 2006). Irrigation Associations are considered more efficient than Mirabs as they have proven to be more efficient in reducing water conflicts and inequities in water access between upstream and downstream water users.

As per the Water Law, Irrigation Associations must be established before any intervention is implemented. By 2013, 170 of the 175 of the initial Irrigation Associations to be established were already registered under Irrigation Department/Ministry of Agriculture, Irrigation and Livestock. However, Irrigation Associations need support and training to carry out their responsibilities (water distribution and operation and maintenance) as a new structure. This can help the modernization processes of moving away from the traditional Mirab structure while taking good care to preserve the social fabric. A free election system is used to create the Irrigation Associations: i) signing of agreement by at least 50+1 shareholders; ii) selection of Irrigation Association Executive Committee; iii) deposit of membership by the shareholders; iv) formal registration of the Irrigation Association with Irrigation Department/Ministry of Agriculture, Irrigation and Livestock; and v) opening of Irrigation Association bank account.

Last but not least, Afghan women and girls still face discrimination and marginalization due to conservative views on the role and position of women in society. There are significant gender gaps in health, education, access to and control of resources, political power and economic empowerment. In 2016, the Government presented an National Priority Programme on Women's Economic Empowerment that shows commitment but should be contextualized within Afghanistan's cultural framework. It includes six components:

- increasing the availability and analysis of gender statistics;
- removing legal barriers to participation;
- training in literacy, business management and labour skills;
- ensuring inclusive access to finance, and;
- improving access to agricultural inputs, extension services and markets.

### 2.3 Description of the project

The project “Capacity Development of the Irrigation Directorate of the Ministry of Agriculture, Irrigation and Livestock of the Islamic Republic of Afghanistan” (from now on “The Project”) officially started on 15 December 2013 with an initial closing date of

17 Mirab is an overall system management led by a senior representative called wakil or mirab bashi who is well-respected by the community member and a landowner with experience and knowledge of the system as well as influence with the local government. He also has the broader responsibility of liaising with adjacent irrigation communities, in particular over customary rights. Through a mirab or a village committee, the recipient community is responsible for the management of operation and maintenance of all canals and structures downstream of the secondary canals to farms. Some Irrigation Associations heads are mirabs (mirab bashi). Mirabs and Irrigation Associations are closely linked.

18 Amarkhail and Kakar, 2011

19 Irrigation Associations have been created in countries like India or Turkey.

30 September 2015. JICA supported the project with USD 3.31 million which was later extended up to May 2017 with additional USD 1.95 million making the total project budget of USD 5.26 million. This project was implemented in the framework of a larger project, fully funded and implemented by JICA, the “Capacity Development and Institutional Strengthening (CDIS)”. CDIS, whose goal is “Agricultural support service delivery to farmers is improved in the target areas”, has four components:

1. “The capacity of MAIL is improved policy setting, programme/project formulation and coordination through enhancement of the partnership with development partners and consultation with advisers”.

2. “The capacity of the Irrigation Directorate is improved in formulating irrigated agricultural development projects and their implementation”.

3. “The capacity of developing and disseminating appropriate cultivation and farming techniques considering local needs and development potential is improved through better collaboration between the Agriculture Research Directorate and the Agriculture Extension General Directorate”.

4. “The capacity of DAILs in the project area is improved in extension service delivery regarding farming and irrigation management to farmers based on local needs and development potential”.

The AFG/078/JICA project it is meant to contribute to CDIS’s Output 2 “The capacity of the ID of MAIL is improved in formulating irrigated agricultural development projects and in their implementation”. The project was designed to support and strengthen the Irrigation Department in developing the required technical and administrative capacity to manage irrigation sector as per its mandate. In particular, the project aims at addressing the capacity gaps related to: i) irrigation systems management; and ii) national water resources management. The second component (Output 2) of the CDIS project corresponds to the project evaluated here. JICA partnered with FAO to implement the activities envisaged in Component 2 for which the main and only counterpart is the Irrigation Department of the Ministry of Agriculture, Irrigation and Livestock. The specific outcome for the project is “The capacity of the ID of MAIL is improved in formulating, implementing, and monitoring and evaluating irrigated agricultural development projects”. The first phase of the project had an original budget of USD 3.31 million. In 2015, the project was extended until May 2017 with new funds (USD 1.95 million), amounting to a total of USD 5.26 million. FAO and JICA prepared a concept note for Phase II activities, which details the expansion of the target groups and changes in activities.

The team responsible for project implementation has been hosted in the Irrigation Department while the project financed all of the additional human and material resources to make the project operative (e.g. office material, computers, video conference technology, cars).

The components of the project, as per the 2013 project document, are as follow:

1. conduct institutional analysis and capacity assessment of the Irrigation Department;
2. prepare a roadmap for institutional strengthening of the Irrigation Department and the capacity development plan for the Irrigation Directorate;
3. hold political and technical consultation regarding policies and upper level plans of the Irrigation Department;
4. implementation of pilot projects, aiming to train staff of the Irrigation Department in formulating, managing, monitoring and evaluation of irrigated agriculture development projects through on-the-job-trainings with conducting rehabilitation of existing irrigation facilities and extension of on-farm water management technologies;
5. conduct training in Japan and/or in third countries to complement the on-the-job-training;
6. formulate a strategy to establish a database regarding irrigated agriculture based on the experience of the on-the-job-training and relevant training programmes;
7. formulate, accumulate and share technical manuals on irrigated agriculture for the Irrigation Department staff and farmers based on lessons learned through the on-the-job-training and relevant training programmes;
8. conduct training to newly recruited staff of the Irrigation Department, provincial DAILs and farmers in the targeted areas.
In Phase I, the Irrigation Department staff was the primary focus. In Phase II, the project expanded its scope to include irrigation staff of provincial DAILs, other government staff of relevant agencies, project staff of other irrigation projects and interns who may join the Irrigation Department. It also included irrigation staff at provincial level as potential beneficiaries of on-the-job-trainings. Irrigation Associations were already included in Phase I. Two Irrigation Associations in two of the pilot projects also benefited from the project. In summary, beneficiaries can be grouped into six categories: i) Irrigation Department staff (central); ii) DAILs staff; iii) staff of other agencies; iv) staff of other projects; v) Irrigation Associations; and vi) farmers. The total number of ‘users’ is 1,800 but actual participants amounted to 476 when taking into consideration that participants could benefit from up to eight trainings.

Box 2: Project activities - comparison between 2013 and 2015

<table>
<thead>
<tr>
<th>Project activities (2013)</th>
<th>Main project activities revised in 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Institutional analysis and capacity assessment of the Irrigation Directorate.</td>
<td>Continued updating of the institutional and capacity status of the irrigation staff under the Irrigation Directorate and the DAIL offices.</td>
</tr>
<tr>
<td>2. Roadmap for institutional strengthening and capacity development plan for the Irrigation Department.</td>
<td>Organization of and participation in national and regional level consultations on irrigation policies, plans and programmes.</td>
</tr>
<tr>
<td>3. Political and technical consultation regarding policies and upper level plans of the Irrigation Department.</td>
<td>Implementation of pilot projects, aiming to train irrigation staff on formulating, implementing, managing, monitoring and evaluating irrigation sub-projects through on-the-job trainings; Practical demonstration of appropriate on-farm water management (OFWM) technologies and best agricultural practices through conduction of pilot demonstrations. Conduction of formal and informal trainings to irrigation staff of Irrigation Department and provincial DAIL offices for their knowledge and skill enhancement in English language, computer skill as well as in all relevant topics related to irrigated agriculture.</td>
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<tr>
<td>4. Implement pilot project(s), mainly rehabilitating existing irrigation facilities, aiming to train trainers in formulating, managing, monitoring and evaluation of irrigated agricultural development projects through on-the-job-training.</td>
<td></td>
</tr>
<tr>
<td>5. Trainings in Japan and/or in third countries to complement the on-the-job-training.</td>
<td>Conduction of trainings and observation tours related to modern irrigation technologies and irrigation planning and policy formulation in Japan and third countries to complement the on-the-job-training.</td>
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<tr>
<td>6. Formulate a strategy to establish a database regarding irrigated agriculture based on experience of the on-the-job-training and relevant training programmes.</td>
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</tr>
<tr>
<td>7. Formulate, accumulate and share technical manuals on irrigated agriculture for the Irrigation Department’s officers and farmers based on lessons learned through the on-the-job-training and relevant training programmes.</td>
<td>Preparation of technical manuals on irrigation sub-project implementation procedure, technical specifications and training manuals on various relevant topics of irrigated agriculture.</td>
</tr>
<tr>
<td>8. Conduct training to the officers of the Irrigation Department, provincial DAIL(s) and farmers in the target areas (the trained trainers through Training of Trainers).</td>
<td>Establishment of a Resource Centre that is equipped with a database, documents, reports and books on irrigated agriculture in general and with more focus on irrigated agriculture in Afghanistan.</td>
</tr>
</tbody>
</table>

The initial time frame of only two years coincided with that of the Capacity Development and Institutional Strengthening as well as the results matrix of the project, which basically takes its content from the overall results matrix of CDIS. Although this will be discussed further on in the section related to project design, the stated goal of the project is equivalent to the overall goal of CDIS which poses some challenges since it does not refer to the impact of capacity development activities per se, as stated in Component 2, but of all the components as a whole which places its emphasis on agricultural productivity.

Therefore, the focus of the project is on creating capacities (hard and soft skills) to design, plan and implement irrigation projects as well as on the strengthening of sector collaboration through working groups. The following sections review the impact of the activities implemented under each sub-component at organizational and individual level rather than reviewing every single activity implemented.
3. Evaluation findings

3.1 Assessment of project’s concept and design

EQ1: To what extent has the project responded to pre-existing needs and capitalized on existing capacities?

Finding 1: The project was aligned with national needs and priorities on irrigation systems and management. Moreover, the project design and activities responded to the capacity development need of the Irrigation Department. However, the absence of a needs assessment prior to project design affected the quality of the risk matrix, which did not consider institutional constraints such as the absorptive capacity21 of Irrigation Department and the need to expand the scope of beneficiaries. This need was addressed in the second phase of the project by the Steering Committee, which decided to include DAILs and irrigation project staff among the targeted beneficiaries. However, the selection of beneficiaries at institutional and individual levels in the second phase did not follow rigorous criteria nor the institutional needs identified in the Capacity Needs Assessment. Furthermore, the project document did not include a results matrix tailored to specific project outcomes (as the donor preferred the project team to adopt the overall Capacity Development and Institutional Strengthening framework), and no specific baselines were established.

Finding 2: Gender and youth were not mainstreamed in the project design; no analysis or strategy was mentioned in the project document, and more importantly, no gender equity or youth promotion activities were carried out during implementation. During the implementation, a group of female farmers participated in some field days but it was more of an ad hoc activity than a concerted effort to target female beneficiaries. Cultural and sector issues also affected the participation of women. Given the cultural implications of gender issues in Afghanistan and its many nuances, a well-developed strategy would have been useful to address gender equality and empowerment issues.

Finding 3: The project addressed the three dimensions of capacity development, namely the enabling environment, organizations and individuals. However, it did not provide a strategy to strengthen the impact of activities across each dimension, such as ensuring that the skills acquired at individual level could trigger a positive change at organizational level. This objective could have been reached through, for example, a greater involvement of trained staff in the management of the projects pipeline phase, monitoring and evaluation frameworks at departmental level. Such planning would have resulted in the acquired capacities being applied to improve the quality of Irrigation Department performance.

Finding 4: The project design included support for the creation and operation of Irrigation Associations. Although other donors were in a better position to scale-up (with more funding) the support to Irrigation Associations, the potential for collaboration was not reflected in the project design or addressed during project implementation. Finally, the project did not clearly capitalize on other irrigation or irrigation-related capacity development interventions. Notably, staff from other projects were involved in the trainings delivered by this project.

Finding 5: The project did not clearly extend the required technical and administrative capacity to manage the irrigation sector (including changes in policies, regulations, formal and informal rules and behaviours) – was overambitious considering the short initial project duration of only two years. This generally takes longer than the life-cycle of a single project, while conflicts and political change further slowdown the process. Policy-level results can only be achieved in the long-term and with a continuous and steady support from government leaders, donors and concerned partners. For these reasons, the evaluation team considered the project extension in 2015 as a natural consequence and an excellent decision by JICA and FAO. In terms of progress towards stated outcomes, the extension offered a great opportunity to continue the implementation of activities and the institutional support positively supporting the Irrigation Department (see sections 3.2, 3.3 and 3.4).

21 The absorptive capacity of an organization can be defined as the ability to recognize the value of new knowledge and skills, assimilate it and apply it to commercial or economic growth ends.
The project design responds to clearly identified needs in the Irrigation Department which are common to many other departments in the administration. However, the project design did not properly identify the actors of change (e.g. managers, section heads, managers in other ministries), their profiles, how steady their positions were in the institution and risks (overlap in roles and responsibilities). This is particularly important given that volatility at political and managerial level has affected not only this project but also many of the ongoing projects in support of the sub-sector financed by other donors.

The activities of the project responded to the needs of the Irrigation Department in terms of necessary project design skills, implementation (from construction to operation and maintenance), and monitoring irrigation systems. This was also confirmed by the partners who highlighted in interviews that the design of projects, information systems, modern irrigation techniques, socio-economic survey skills, and operation and maintenance skills were very important across the country. The project addressed the three dimensions of capacity development, namely individuals, enabling environment and organizations. It also addressed some of the needs of the Irrigation Department and the irrigation sub-sector, mainly the need to develop capacities to plan, monitor and implement irrigation projects as well as the skills needed to support Irrigation Associations. However, activities across the three dimensions appeared to be conceived independently from one another. Although the project did not develop a strategy to strengthen the impact of project activities, the evaluation team identified interesting efforts in this direction that could be further explored (see section on Organization).

There were many staff limitations during project implementation. Civil servants in the Irrigation Department and DAILs are limited in number and capacities. The project team and regional officer acknowledged this, indicating that while provincial offices are responsible for the implementation, the central level would hold this function while capacity was being built across the territory and the administration.

Irrigation Department staff were identified as priority beneficiaries for the first phase of the project. During the project revision for the second phase and in order to address the above staff limitations, the list was extended to include staff from provincial and other departments. These included other donor-funded projects and hosted in the Irrigation Department and Ministry of Agriculture, Irrigation and Livestock, as well as other institutions and universities. However, in doing so, the project did not establish clear criteria (such as level of education, specialized education and responsibilities) for the selection of beneficiaries, thus affecting the effectiveness of capacity development interventions, their sustainability and upscale at organizational level. Some beneficiaries who had just arrived from a two-year programme in Japan also qualified to receive the training; these participants, however, were overqualified for the training and actually could have taught it themselves in order to avoid overreliance on project staff for implementing project activities.

Even though the project did not carry out an analysis or develop a strategy to mainstream gender and youth, young staff (mainly male) from the administrations and students benefited from the project activities. Only two women who benefitted from the training were interviewed during the mission. One is a project staff member who will soon join the Irrigation Department under the Capacity Building for Results Fund, and the second is a team member on another project. No additional direct feedback could be gathered on gender. However, in one of the pilot projects, women farmers benefited from some training in the Badam Bagh Research Farm and the evaluation team met the previous project coordinator. This group benefited from a previous FAO-funded project, now closed (see section on findings at individual level). The evaluation team highly values the project team's decision to continue supporting and working with the women who benefited from the previous project, as it helped sustain their learning progress. In terms of coordination with the Capacity Development and Institutional Strengthening programme, this project had little interconnection with the other components of CDIS even though the evaluation team expected to identify some connection, at least within Component 1, “The capacity of MAIL is improved in policy setting, program/project formulation, and coordination through enhancement of the partnership with DPs and consultation with Advisors”. The implementation of CDIS suffered from a lack of continuous staff and management presence in the country, which made it difficult to create linkages with this programme and other donor-funded initiatives. This affected, *inter alia*, the support the programme could have provided insights to the Government in clarifying the different roles and responsibilities among concerned institutions.
Similarly, the project did not clearly capitalize on other irrigation or irrigation-related capacity development interventions. However, staff from other projects (on-farm water management, Community Livestock and Agriculture project and institutional analysis and capacity assessment report) benefited from the trainings (e.g. on-farm water management staff participated on the training on the creation of Irrigation Associations). Beyond the groups that focus on collaboration at project level between the project and development partners’ projects.

As mentioned in the limitations section, no project-specific Project Results Matrix was developed detailing the contribution and impact pathways to the overall CDIS goal. The Project Results Matrix is an extract of the CDIS, which does not adequately relate to the complexity of this specific project. For these reasons, the impact pathway is misleading as it refers to an impact that this project is not directly contributing to in the short-term. In fact, CDIS’ overall goal of “Agricultural productivity of main crops is increased in target areas” also depends on the other CDIS components and on many other variables beyond the CDIS project itself. Furthermore, the progress reports repeatedly refer to the matrix, but this was not updated in the progress reports and therefore is not a strong reference point. Even though abundant, reporting is confusing at times with no clear timelines and more of a narrative than analytical approach. In any case, the evaluation team acknowledges the efforts to capture the detail of the activities.

The project Risk Management Matrix covers important issues but, at the same time, is not exhaustive in including all the significant ones. The key issues clearly addressed are security challenges due to increased violence and some staffing issues. On the latter, the Risk Matrix states that the “project may have difficulty to achieve because it cannot pay salaries, supplements, or incentives” and adds that “capacity building should be for regular staff in the department”. The risks are weak in their formulation and do not help in the design of mitigating actions. While this cannot be detected at once and ex ante, it is possible to update the matrix during project implementation. It did not capture the actual absorptive capacity of funds by the Irrigation Department at the central level, which eventually led to the expansion of the scope of beneficiaries. Therefore, there was not enough anticipation to prepare the criteria for the selection of additional beneficiaries at both institutional and individual levels. On the political side, it did not anticipate the instability at political level that can affect training activities and actions geared towards the approval of policies.

Given the complexity of the context in the country, it would have been more efficient to separate political challenges and risks from security ones as changes in government leadership have a different impact than security issues on the ground. Security concerns can hinder pilot project sites, project implementation speed and travel of participants, while political issues such as changes in institutional leaders (e.g. deputy ministers or Irrigation Directors) could have either a positive or negative impact. The matrix could have reflected this political instability in the institutions relevant to the project. In terms of risk management, separating politics from security is relevant since security cannot be addressed by the project, but attempts to mitigate political concerns are possible.

Alignment with FAO’s Strategic Framework

This section outlines linkages between the project and FAO’s Country Programming Framework (CPF), Regional Strategy and corporate goals. While there is a strong alignment across the several layers of results within FAO from the corporate to the country level, this section assesses the coherence with the project objectives and its contribution. According to the CPF, key outcomes are: i) support to better water and irrigation management; and ii) support to agricultural policies and institutional capacity building. The project addresses the policy and management dimensions at the core of the improvement of the sector as well as the creation of capacities at institutional level. In this sense, the definition of institutional is broad, referring not only to client institutions but also to other stakeholders (such as the Irrigation Associations).

FAO’s regional result/priority area “Countries in the Asia Pacific address water scarcity in agriculture and strengthen their capacities to improve the water productivity of agricultural systems and water management enhancing” was successfully translated into action in this project. The project seeks to improve capacities on the ground in order to improve or enhance the management of irrigated agriculture.
59 This project directly contributes to FAO’s new Strategic Objectives SO2 and SO3 (2014), which are to: i) increase and improve the provision of goods and services from agriculture, forestry and fisheries in a sustainable manner; and ii) reduce rural poverty. In the long-term, the objective is to increase access to irrigation and therefore to agricultural productivity by improving the capacity of institutions in Afghanistan. Given the potential of the agricultural sector in Afghanistan and its potential for job creation, the project is also coherent with SO3.

60 The following sub-sections present the evaluation findings by FAO’s Capacity Development Framework interventions: individuals, enabling environment and organizations.

3.2 Individual level

EQ2: To what extent did the project target beneficiaries to enhance their skills and knowledge?

Finding 5: The training responds to clear knowledge and skills gaps in the Irrigation Department in a number of technical areas including design, operation, policies, regulations and the use of geographic information systems. In-class and on-the-job-training effectively transferred knowledge and skills to beneficiaries. On-the-job-training have been highly valued by both Irrigation Department and DAIL staff as well as by Irrigation Associations. However, the lack of a conducive environment at provincial level undermined the potential of the training as well as the overall institutional integration, planning and oversight.

61 The Irrigation Department has faced and not yet overcome the two main issues in relation to staff: i) there is a lack of qualified staff to carry out the necessary functions, and ii) the relevant and available staff are not in positions sufficiently related to their knowledge and background. One example is the DAIL staff with no training on how to create and work with Irrigation Associations. The project has fulfilled a role in training this staff but no ex post follow-up has been performed to determine whether the impact on the ground translates into institutional strengthening at service delivery level.

62 Since 2012 and through the Capacity Building for Results Facility, the World Bank has supported the Government in improving the capacity and performance of selected line ministries responsible for National Priority Programmes. The support of CBRF is fundamental to strengthen the institutions and, as explained in the recommendations, there are clear linkages with capacity development projects since CBRF addresses the lack of staff described above. Since CBRF was stopped for a while and final recruitment has only recently taken place, these linkages could not be developed during project implementation. The World Bank project would be relevant to a new project phase, as capacity development would be an important component. The extension of the project could have a more targeted audience consisting of the newly recruited staff.

63 Apart from the surveys prior to and after the training, it has not been possible to find evidence of the use of skills acquired at government level. Ideally, the Results Matrix could have measured the improvement in design works, operation and maintenance, or the construction of irrigation systems as a result of the training. However, there is no evidence of this. Only two cases of good cooperation in the design of irrigation schemes between provinces and central level were mentioned. According to the Institutional Analyses and Capacity Development assessment finalized in July 2015, the review of sub-projects completed by the Irrigation Department revealed that the capacity to survey and design sub-projects was gradually improved. However, contracted staff in this project carried out almost all of the design and estimation work.

64 The Institutional Analysis process included an assessment of the skills and knowledge of existing staff in the Irrigation Department and DAILs in English and Dari. The objective was also to use this assessment as a baseline to monitor the progress of the staff, although no update on the evolution in the acquisition of skills per individual/beneficiary was performed. This makes it difficult to assess the career plans of the professionals or new employees. This is understandably difficult due to the mobility of staff seeking better opportunities. This also explains the recent effort of the Government and donors to have a systematic salary
65 On-farm water management is very relevant in Afghanistan to improve the efficiency in water use but also to provide adequate irrigation to specific crops and modernize irrigation techniques in general. Therefore, trainings at crop level, land levelling and canal lining are very relevant. The project successfully trained staff and farmers in these techniques through the introductory programme and field demonstration days. A total of five study tours and trainings in Japan and Iran were carried out. JICA proposed Iran as a training facility due to the presence of a JICA hub in the country and similarities in irrigation issues and language between both countries. Geographic information system and remote sensing trainings were carried out in Iran. In Japan, the trainings were on technical irrigation management aspects and on-farm water management.

66 Although study tours were welcomed by the beneficiaries, some lost efficiency due to unclear communication of the contents. Finally, there were some asymmetries among the staff regarding their knowledge of English and basic computers skills, which affected the learning curve in each of the trainings. English language training is important for staff, as there are more resources available in this language. There were some issues with parts of the study tours, particularly the second training in Iran which did not correspond to what was initially proposed by JICA’s resource centre there. Some beneficiaries complained about the second training in Iran being insufficient, as adequate equipment was not provided during the class. The project team was informed about this problem and it was reported to JICA. During the focus group discussion, it was mentioned that the content (which was proposed by the training centre) did not take into consideration the different participant levels. As a result, trainers repeated contents already known by the beneficiaries. The coordinator at project level could not have anticipated this. This overlap was perceived by the participants as a lack of consideration by the Iranian counterpart.

Box 3: Number of participants and topics covered by type of training

<table>
<thead>
<tr>
<th>Name</th>
<th>Trainings</th>
<th>Participants</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skills Development Training</td>
<td>11</td>
<td>266</td>
<td>English, GIS, IT skills.</td>
</tr>
<tr>
<td>Introductory Training</td>
<td>15</td>
<td>313</td>
<td>Design irrigation structures, spate irrigation, crop water requirements and institutional aspects of irrigation.</td>
</tr>
<tr>
<td>Field Days</td>
<td>14</td>
<td>237</td>
<td>Grapes, potato, vegetables and tomato harvesting; discharge and flow measurement; laser land levelling.</td>
</tr>
<tr>
<td>On-the-job-training</td>
<td>9</td>
<td>224</td>
<td>Identification and mapping; feasibility assessment; establishment of Irrigation Associations; Technical surveys; Engineering design; Procurement Management, Construction Implementation, Management Handover; Operation and Maintenance.</td>
</tr>
<tr>
<td>Workshops</td>
<td>20</td>
<td>583</td>
<td>Consultations on the irrigation database, irrigation policy, farmers’ training manual, working procedure and manual of Irrigation Department; overall review workshops for manuals and recap workshops of trainings.</td>
</tr>
<tr>
<td>Trainings Abroad</td>
<td>9</td>
<td>92</td>
<td>Advanced GIS, on-farm water management, remote sensing; Irrigation-related conferences.</td>
</tr>
<tr>
<td>Farmers’ Training/Exposure visits</td>
<td>6</td>
<td>138</td>
<td>On-farm irrigation techniques; sustainable irrigation methods; operation and maintenance of irrigation systems.</td>
</tr>
</tbody>
</table>

67 The on-the-job-training aimed to train irrigation staff on the skills needed from the beginning to the end of an irrigation project. This meant training them on: formulation, implementing, managing, monitoring and evaluating irrigation sub-projects. This training was delivered through the on-the-job-training modality to help the staff gain practical knowledge, as well as the opportunity to apply the tools and techniques learned. The
on-the-job-training were comprehensive and theoretically helped the staff have a common understanding and baseline on the following topics: i) site identification (socio-economic and agronomic surveys); ii) technical survey and design; iii) preparation of tender documents; iv) construction and supervision; v) training on canal operation and maintenance; vi) monitoring and evaluation. There was no clarity on whether the 224 participants actually performed tasks on any of the topics mentioned above. From a skills transfer perspective, the on-the-job-training context is useful as it facilitated on the ground experience for Irrigation Department and Ministry of Agriculture, Irrigation and Livestock staff on technologies such as lining (Badam Bagh Research Station) or, in the case of Zer Daraka, on: diagnostic analysis, survey design, construction supervision and quality control, operation and maintenance (see completion reports for both pilot projects).

68 The project also financed the development of 13 manuals (the initial target was ten), of which three have been published; however, not all of them were translated into the local languages. While technical committee in charge of supervising the content prior to publication ensured a good quality output, the overall control process resulted in delayed delivery. The manuals were useful for introducing design standards across provinces, particularly for newly recruited staff. However, there is no analysis yet on the use of the manuals, and they have not yet been distributed widely to the provinces. In some interviews and through the desk review the evaluation team found that several donors and agencies are producing different manuals on engineering design (with different approaches). They contain asymmetries in quality and are not efficient in terms of resource use. One pending activity is the training of Irrigation Department staff in the use of manuals.

**Box 4: Training manuals prepared**

<table>
<thead>
<tr>
<th>Manual type</th>
<th>Title</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technical</td>
<td>Irrigation Terminologies Commonly used in Afghanistan</td>
<td>P</td>
</tr>
<tr>
<td></td>
<td>Surface Irrigation Design</td>
<td>F</td>
</tr>
<tr>
<td></td>
<td>General Technical Specifications for Irrigation Construction Works</td>
<td>BP</td>
</tr>
<tr>
<td></td>
<td>Laser Land Levelling</td>
<td>D</td>
</tr>
<tr>
<td></td>
<td>Drip Irrigation Design and Installation (#5)</td>
<td>D</td>
</tr>
<tr>
<td></td>
<td>Operation and Maintenance of Surface Irrigation Systems</td>
<td>B</td>
</tr>
<tr>
<td>Procedural</td>
<td>Irrigation Sub-Project Implementation Guidelines</td>
<td>F</td>
</tr>
<tr>
<td></td>
<td>Guidelines for Implementation of Water Management Field Demonstration</td>
<td>F</td>
</tr>
<tr>
<td></td>
<td>Guidelines for Establishment MIS System for Irrigation Sector</td>
<td>D</td>
</tr>
<tr>
<td>Training (In Dari and Pashtu)</td>
<td>Efficient Irrigation Techniques at Farm Level</td>
<td>P</td>
</tr>
<tr>
<td></td>
<td>Suitable Irrigation Method for Different Soil Conditions</td>
<td>P</td>
</tr>
<tr>
<td></td>
<td>Operation and Maintenance of Surface Irrigation Systems</td>
<td>F</td>
</tr>
<tr>
<td></td>
<td>Operating and Maintaining of Drip Irrigation Systems</td>
<td>F</td>
</tr>
</tbody>
</table>

Legend: Finalized (F), Published (P), BP (Being Published), Drafted (D)

69 According to project stakeholders and beneficiaries, participation in the training sessions had a positive impact on coordination amongst beneficiaries, in this case, mainly government institutions. DAIL and Irrigation Department staff considered that the trainings helped clarify roles and supported the dialogue on project stages, such as project design, between provincial staff and Irrigation Department. However, difficulties in communicating and sending draft design still persist. At output level, it was difficult to prove that the project-based dialogue that started during the training had translated into any specific outcomes.

70 While it is easier to track the impact of the training at organizational and individual levels, it is impossible to see any impact among the different organizations or even in cross-agency coordination. In the irrigation sub-sector reform document, many of the institutional gaps identified during the project formulation are still present three years later. This means that Irrigation Department’s limited staff, lack of clarity on regulations at policy level and insufficient budget impacted the organization and did not take advantage of individuals
with better skills. Regarding policy, planning, monitoring and evaluation, there are two dimensions to consider, the first is the actual performance in the implementation of the specific irrigation projects; the second is the functioning of Irrigation Department. For the latter, the database (if correctly used) provides accurate information and can help easily track the needs, plan and monitor irrigated areas. However, there is no information management (database) expert or monitoring and evaluation officer in place to link delivery at field level with overall institutional performance.

71 The evaluation team met the coordinator of a previous FAO project, “Women in Agriculture Development for Improved Household Food Security and Nutrition” (GCP/AFG/069/GER). The female beneficiaries from this project participated in on-the-job-training on crop harvesting in the research station Badam Bagh. The importance of women in agriculture needs to be reflected at institutional levels. Some projects have succeeded in doing so, such as the National Horticulture and Livestock Programme which, through 46 female extension workers, has provided extension services nationwide to 368 female producer groups with almost 10,000 members.

3.3 Organizational level

EQ3: To what extent has the project improved the performance of the Irrigation Department and DAILs of the Ministry of Agriculture, Irrigation and Livestock in formulating, managing, monitoring and evaluating irrigation systems development projects?

Finding 6: The project performed well in the number and scope of outputs delivered, particularly in training-related activity pillars and working group meetings. By training individual staff, the project has contributed to improving the overall knowledge and skills of the institutions. Moreover, it has elevated the perception of other institutions (within and outside the Ministry of Agriculture, Irrigation and Livestock) regarding the role and relevance of the Irrigation Department. Trainings have also facilitated internal coordination and generally a higher level of interaction between the central and provincial levels, despite the lack of staff. Nevertheless, there is scope to further support major changes at the organizational level.

Finding 7: Although the project has been efficient in establishing a partnership with Kabul University to prepare training manuals, there are few partnerships with other organizations such as non-governmental organizations or the private sector.

Finding 8: The pilot projects have been successful in building canals, rehabilitating old systems and modernizing some others as part of on-the-job-training in pilot sites. Furthermore, the creation of Irrigation Associations in the two districts was successful and fully aligned with the Water Law provisions.

72 The project lasted four years during which 79 capacity building activities were conducted with a broad range of beneficiaries. There were 1,906 participants in the trainings and 460 net participants (with some individuals participating in multiple trainings). The trainings included: introductory trainings (e.g., laser land levelling, geographic information system, management information system); English and computer skills; and on-the-job-training (e.g., on technical survey and plotting of irrigation schemes). As part of the deliverables, the project supported consultative workshops on a range of topics (e.g., national irrigation policy, manual design, irrigation sector reform) and field projects (see Appendix 5). The project contributed at the organizational level with the creation of the database and a resource centre with documents available for consultation.22 The training manuals are also of relevance at organizational level, as they constitute a tool to harmonize knowledge and methods across the institution.

73 In general, Irrigation Department and Ministry of Agriculture, Irrigation and Livestock have a positive view of the project and are keen to keep receiving support in the same areas of work. However, the evaluation team did not find clear evidence of the impact of the project by looking at Irrigation Department’s improvement or outcomes on the ground.

22 The resource centre has a link in the CDIS Output two website with the list of documents available: www.cdis2-mail.org/resources/Default.aspx
Nevertheless, as a result of the project, Irrigation Department and DAILs have a better knowledge of design, construction, rehabilitation and maintenance at project level as well as participatory methods for irrigation management (e.g. the participatory irrigation management workshop), resulting from project activities across the four areas targeted by the project. However, one further step is needed to translate the acquired knowledge into action. There is a gap between the gradual acquisition of skills at the individual level and the final capacity of the institution to use and capitalize on new knowledge and translate it into results at the organizational level (i.e. improvement of Irrigation Department performance in delivering and managing irrigation interventions, across all its functions). Although high staff turnover can explain the lack of absorptive capacity of skills to have impact, there are also other aspects to consider such as:

- a lack of access to equipment, which makes it difficult for staff in the provinces to send and receive adequate feedback from Kabul;
- there is no knowledge at provincial level of certain policy processes, and the necessary tools are not in place (e.g. irrigation database);
- there are no clear performance objectives; this complicates the incentives for staff to deliver.

74 The project team did not have a strategy to work at institutional level, with more focus on the policy and the training that at meso level. Connections among the three capacity development levels and among the implementation of different activities became even more difficult once the project started. This was mainly due to: i) changes in leadership in the government side; ii) lack of Irrigation Department staff; and iii) short project duration. As stated in the Back-To-Office Report of December 2014, the Irrigation Department should have been restructured into three main divisions: Planning, Monitoring and Evaluation; Engineering and Irrigation Development Department; and the Irrigation Management Division. All of them were to work cooperatively to facilitate the alignment of activities and functions. The evaluation team recognized this was not an easy task due to the frequent changes in senior level positions. Through targeted outputs and activities, the project was successful in enhancing organizational performance. However, progress was slower at the organizational level and in the enabling environment, as compared with progress at the individual level. This hindered the efficient use, adoption and monitoring of the new skillsets acquired by Irrigation Department staff through the project. To a certain extent, this explains why the project moved ahead faster on trainings, manuals, geographic information system, the information management system, and the resource centre, but did not achieve long-lasting institutional changes for a better service delivery system in Irrigation Department.

75 For example, there is no evidence of an effort at institutional level to make trained staff accountable or follow-up with staff attending the on-the-job-trainings to assess the use of the acquired knowledge. The staff should have been monitored and coached more closely, while at the same time making sure they embody the institutionalization of knowledge and skills, and improve Irrigation Department’s work. The evaluation team acknowledges that this is a difficult task and concluded that there is not yet enough ownership on the part of the Irrigation Department; thus additional support is needed from the project team to implement small but strategic changes.

76 The Ministry of Agriculture, irrigation and Livestock and development partners (the World Bank, Asian Development Bank, United States Agency for International Development) have emphasized the relevance of the project in strengthening the main stakeholders from Irrigation Department to DAILs and Irrigation Associations. However, stakeholders expressed concerns regarding the overall planning of training activities and the prioritization of beneficiaries as well as the actual impact in terms of strengthening Irrigation Department. An obvious example of impact would be the gradual increase in irrigated land that could occur in small but well distributed increments across the country, thanks to the more qualified staff; however, this is not suggested from any of the meetings or reports. For example, if one staff has received 10 or 13 trainings, Irrigation Department management could expect, with the right conditions in place, to see a change in the participant’s output. However, there is no formal process to track this type of use, which could facilitate a more comprehensive management of Irrigation Department, linking staff with objectives and overall service delivery.
As stated in the Water Law, the Irrigation Associations are an integral part of modernizing the sub-sector at on-farm level. Irrigation Associations need to receive support for the creation of Irrigation Associations as well as training (e.g. on-farm management and the management, operation and maintenance of irrigation systems). The project has provided support to two Irrigation Associations which the evaluation team had the opportunity to visit. Both are located near Kabul to facilitate the support of the project staff. The project staff helped water users get organized and facilitated the selection of the Irrigation Association head. Over the last four years, around 80 Irrigation Associations have been created and registered in the country with the support of on-farm water management staff or Irrigation Department provincial staff in the province of Nangarhar. While this information has been gathered through interviews there is no record of it in the documentation. In exceptional circumstances such as the conflict-affected area of Takhar, Irrigation Department has succeeded in responding to the demand of water users to create an Irrigation Association in an anti-government controlled area. The evaluation team gathered this information through conference calls and no evidence is reflected in the results framework. The project team did not mention it either. In the second case, sensitivities in the province did not allow for full disclosure information such as naming the head of the Irrigation Associations or even the district where it has been created. However, this evidence seems to suggest that there may be some connection between the training of DAIL staff and the work with Irrigation Associations.

Although irrigation staff responded to Irrigation Department at the provincial level, in practice it was difficult to establish collaboration among the different irrigation projects. Participants in the focus groups (government and project staff) confirmed that they collaborated closely and staff in the provinces sent designs for revision to Kabul staff. There seemed to be an increase in staff awareness on the need to collaborate, but this has not translated into measurable results.

The project has partnered with the Afghanistan Technical Vocational Institute (ATVI) for some of the trainings and the associated training manuals on irrigation techniques as well as with Prosperity Group for the installation and demonstration of drip irrigation systems. ATVI is affiliated with the University of Kabul. Apart from the service contract procured with two private companies, there were no other partnerships with other organizations such as NGOs or the private sector, which could have been useful in a second phase. Potential partnerships with private sector through small-scale public-private partnerships are elaborated in the Recommendations section. The evaluation team found evidence that Irrigation Department had requested training for the private sector (according to project staff presentations), which suggests that this could be an avenue to explore.

The training component of the project was not embedded within the institution. To start with, there was no capacity development specialist within the Irrigation Department (as the Final Report also confirms), thus limiting ownership and accountability by the Department.

At the organizational level, the project did not specifically contribute to mainstreaming gender in terms of beneficiaries. In addition, Irrigation Associations are composed of men and the Irrigation Department and DIALs staff are mainly men. This is also due to the staff composition, cultural aspects and the specificities of the sector itself. For cultural reasons, it is unlikely that Irrigation Associations will be led by women in the near future. The recommendations address this issue by suggesting training female extension workers or newly recruited female staff (under the CBRF Fund).

The project also includes two pilot projects, which provided support to the creation of Irrigation Associations in two districts. The project targeted the management committee of the Irrigation Association that includes the head, the accountant and treasurer. When targeting farmers in a particular area, the project trained farmers under the corresponding Irrigation Association. The on-farm water management, a larger project financed by the World Bank that has a specific component to support the creation and training of Irrigation Associations across the country, could have had positive synergies with the training of Irrigation Department staff and support to Irrigation Associations by linking the availability of skilled staff to the World Bank’s project component. This would have facilitated synergies among the creation of Irrigation Associations, the rehabilitation of schemes and even additional on-the-job-trainings across the country.
The project was successful in creating a compiled irrigation database in geographic information system and a management information system, which was presented to the evaluation team by the project leader. The database of irrigation projects maps out the state of irrigation in the country. The work of the geographic information system specialist has been detailed and extensive. Data is now easily accessible online in a user-friendly format. The interviews and desk review show that the database is not being used yet to help planning and implementation of irrigation works, not even at senior management level or in the sector working group. The final report of the project also confirms that one more step is needed for staff to use the database. Without doubt the current database offers a good resource that, if updated regularly and diffused widely, can serve as a very useful planning and monitoring tool as stated in the monitoring and evaluation paper prepared by the project.

3.4 Enabling Environment

EQ4: What were the outcomes of the political and technical consultations, conducted within the project framework, at policymaking level?

Finding 9: The project has supported the consultation process through the different working groups by providing indirect support to discussions on coordination, policy and planning. The aim of this activity was to improve the policy environment for addressing inter-institutional issues in the water sector, and to make Irrigation Department capable of understanding and translating national policies and strategies into programmes. The overall donor and sub-sector dialogue and the projects provide support to two working groups to facilitate policy dialogue and coordination. FAO’s role was to support this policy dialogue, and it did so by providing inputs to the discussions as well as administrative support. However, in the framework of a possible extension of this project or future similar ones, there is scope to enhance FAO’s facilitating role in supporting the Government in leading the policy dialogue with all stakeholders involved (including the donor community), to the extent requested by the Government itself.

Finding 10: The Irrigation Department is more empowered to request specific support for training and to address its needs thanks to project activities. This was the case with Irrigation Department requesting support to draft the National Irrigation Programme and the Irrigation Sector Reform document. At the enabling environment level, there is still some scope to support the Government in clarifying accountability schemes of each concerned institution active in the water management sector, for specific sub-sector results.

The irrigation sector is a sub-sector of the water sector; as such, it is vulnerable to governance risks regarding both upstream management with the corresponding authorities and management of water use by the communities. To successfully manage water and irrigation, good coordination is needed between a multiplicity of stakeholders to manage upstream and downstream water systems given the multiple uses of water (from energy to agriculture and industry to direct human consumption).

The overlapping on some responsibilities between the Ministry of Energy and Water and Ministry of Rural Rehabilitation and Development has affected the efficient allocation of resources and implementation of activities at field level. It also affects donor allocations, as they devote a significant amount of money to well-established and stronger ministries like the Ministry of Energy and Water and Ministry of Rural Rehabilitation and Development. There has been an ongoing debate on whether the policy should be so detailed as to include a specific roadmap for the implementation of the strategy. At the time of the evaluation, the Irrigation Department director had cleared a final National Irrigation Programme23 (without a specific roadmap), but it is still pending approval by the Ministry and the Assembly. As stated in the IACAR and the Agriculture Sector Review, and confirmed by all the stakeholders interviewed, there is a need for the Government to develop and pass subsequent laws and by-laws in line with the national Water Law. This legal framework should clarify the institutional setting of the irrigation sub-sector, including the identification of a single institution/ministry responsible for irrigation development, and the consolidation of models for on-farm water management entities (Irrigation Associations and Mirabs) among others.

23 Financed by the World Bank through on-farm water management.
Afghanistan has two working groups for the irrigation sub-sector: i) the Irrigation Working Group (IWG) under the sector-wide coordination mechanism of the Ministry of Agriculture, irrigation and Livestock; and ii) the Irrigation Thematic Group (ITG) under the Supreme Council of Land and Water (SCoLW). ITG includes all ministries working in the water sector as well as chief donors and partners. Although IWG is considered the sector-wide coordination group, in practice it seems that ITG assembles the actors and has a broader scope on water management issues, including the irrigation sub-sector. The project provided support by developing the Terms of Reference (ToRs) of these groups and doing the Secretariat’s work. As per the ToRs, IWG is supposed to meet every month; however, it has not due to other commitments of the Irrigation Department Director or to a lack of a substantial agenda to discuss. Donors and international organizations were included in the ToRs as members of IWG. However, they are much more active in the sector-wide ITG under SCoLW. Each group has met three times. ITG reports are sent to SCoLW. There is no clear connection yet between the discussions in IWG and the sector-wide ITG. A specific Joint Technical Committee is responsible for the supervision of all CDIS components.

Box 5: Irrigation sub-sector coordination mechanisms

<table>
<thead>
<tr>
<th>Irrigation Working Group (IWG)</th>
<th>Irrigation Thematic Group (ITG)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goal: to support the Ministry of Agriculture, Irrigation and Livestock’s concerned authorities in making technically sound and sustainable decisions on issues related to the irrigation sector in Afghanistan.</td>
<td>Goal: to support SCoLW in making sound and sustainable decisions on issues related to the irrigation sector by providing a platform for better coordination between all institutions and professionals in the sub-sector.</td>
</tr>
<tr>
<td>Members</td>
<td>Members</td>
</tr>
</tbody>
</table>

The project has provided substantial administrative support to the policy dialogue on the irrigation sub-sector. One of the objectives of the support was to facilitate planning and sub-sector reform as well as coordination on other relevant issues. At the time of the evaluation, no policy or plan for the irrigation sector had been delivered yet. While the project has provided support to the preparation of the Irrigation Sub-Sector Reform (December, 2016) and the National Irrigation Programme in 2015, there are no results from these processes and both documents are awaiting endorsement. This might be also due to changing conditions.

24 Terms of Reference for the Irrigation Working Group and the Irrigation Thematic Group.
leadership in the Irrigation Department during the initial years of project implementation. According to progress reports, an initial National Irrigation Programme was presented in the irrigation sector workshop at the end of 2015, but there was no further discussion after that. An FAO consultant hired through the on-farm water management World Bank project has prepared the final National Irrigation Programme to be presented to the Irrigation Thematic Group in 2017. The workshops have contributed to discussions but they are not clearly linked to the actual policy draft. The Irrigation Sector Reform proposal was discussed in a previous Irrigation Thematic Group meeting. There is an existing National Irrigation Policy proposal, developed with funding support from the on-farm water management, which is still pending endorsement by the Supreme Council on Land and Water (Appendix 7 summarizes the draft dated 16 May 2017 and provided by the World Bank).

The project has also financed the Proposal on Institutional Reform of Irrigation Sub-Sector in Afghanistan (December, 2016). The Minister of Ministry of Agriculture, Irrigation and Livestock (following up on a similar process developed for Ministry of Energy and Water under the President’s initiative) led the process with the support of the Irrigation Department Director and team, mainly from the project, JICA and FAO’s country office through the Investment Centre Division (TCI). The project financed the technical support from an irrigation expert based in FAO Rome. The proposal, developed after two missions to Afghanistan, includes a roadmap and detailed proposal for institutional reform of the irrigation sub-sector. The document describes the positions in Irrigation Department with no variation from the last version of the IACAR (December 2015). At the time of the evaluation there had also been no progress because the CBRF recruitment process took a long time. However, the selection process to recruit staff has been finalized with new staff waiting to be on-board.

3.5 Sustainability and lessons learned

EQ5: How sustainable are the project’s achieved results at enabling environment, organizational and individual level?

Finding 11: The sustainability of project results is at risk due to the current national financial situation. However, Irrigation Department is improving as a result of more stable leadership and will likely receive further support from the donor community (especially considering the importance of irrigation and agriculture in the country). The Project Task Force could continue providing expertise and support to the sector at policy and inter-ministerial levels in order to increase the sustainability of project results.

Finding 12: The project design (including the risk matrix) did not capture significant constraints that could affect the sustainability of project results, such as political volatility, staffing constraints and absorptive capacity. Finally, the evaluation team identified the need to fully develop a monitoring and evaluation system, at both project and institutional levels to guide decision-making and day-to-day management.

The sustainability of the results achieved by the project is directly related to the context and the political economy of the country. Given the divisions between institutions and the dependence on foreign aid, the assessment on sustainability is low. In addition, Irrigation Department does not own the roadmap for capacity development, as a capacity development strategy is not embedded into institutional programmes and regulations as a permanent part of their activities. This negatively affects the sustainability of project results. As highlighted by FAO staff in the country office, beneficiaries and other donors, Irrigation Department is (after a long period of volatility) gaining momentum as a key player in the sector and in line with its attributed responsibilities. If the right resources are put in place, and everything seems to indicate that this is being done (e.g. scaling up of on-farm water management project, continuation of AD support, overall donor increased support), leading the change process within the context could bring positive results at enabling environment level.

25 It was discussed in the Irrigation Thematic Group in two meetings during 2016. Feedback from representatives from Ministry of Energy and Water, Ministry of Agriculture, Irrigation and Livestock and Asian Development Bank and other participants confirmed the need to clarify the responsibilities between institutions to avoid duplication but keeping an integrated overview of the water sector. The importance of using resources such as the irrigation database was also emphasized.
As described in the context section above, the high political volatility and the ongoing conflict impact leadership positions. As a result, the fiscal situation in Afghanistan is such that the sector requires continued support from both financial and technical donors, because the Government has decreased the budget allocations to Ministry of Agriculture, Irrigation and Livestock due to the economic slowdown. At a 2016 donors conference on Afghanistan, partners committed to support the Afghan government further in the implementation of its reform agenda and the dialogue on political reconciliation. At the central level, Irrigation Department is better prepared to lead some processes than DAIL is.

On the monitoring and evaluation side of the project, as mentioned previously, the results matrix has not been completed with actual baselines, objectives and achievements. This has made reporting complicated, with overlap and lack of clarity deriving from the revision of multiple reports. The project has helped build capacity at individual level but there is still a shift to be made to translate this knowledge into actual results at the organizational level, directly impacting sustainability. For example, the Ministry of Agriculture, Irrigation and Livestock, the monitoring and evaluation department and the evaluation team had a brief meeting with the director during which the lack of methodologies and cross-departmental coordination was made evident. This highlights the importance of training Irrigation Department staff on monitoring and evaluation, as well as the institutionalization of monitoring and evaluation (with specific responsibilities) through a dedicated division within the Irrigation Department. This could have been an area of great impact, as suggested in the IACAR and the back-to-office reports.

Taking steps to address these issues requires leadership and further support from the project, but also depends on the actual spending on public investment allocated to infrastructure development. Establishing synergies with other projects is fundamental. The evaluation team considers that FAO has strong potential and it is well placed to continue its support to a sector that is key for agricultural growth. Implementing projects in contexts such as Afghanistan presents significant challenges. However, the large number of active donors and the amount of funding available can lead to change in conflict-affected and fragile countries, if well leveraged (e.g. prioritization of investments based on social variables and on potential economic returns). This is the case of the irrigation sector in the country, with key donors involved from upstream to downstream activities.

Sustainability can be ensured not only as a result of available funding but through adequate decision making processes. The finalization of the National Irrigation Programme and the approval of the ISR can facilitate inter-ministerial coordination, the better allocation of resources and enhance the accountability mechanisms and results per institution. Moreover, the identification of roles and funding to be received should facilitate the management of water resources and the reporting of results. Resolving these institutional bottlenecks is a milestone as this is a recurrent source of conflict.

As an important donor in Afghanistan with other ongoing projects besides CDIS, JICA can lead the donor community in this process of change at the institutional level. However, due to JICA's security-related limitations when it comes to presence in the country (no more than five international staff at a time on the ground), FAO could complement and support this role. If other donors decide to take the lead, like the World Bank is doing, FAO's role could also be relevant in this coordination effort and in catalysing additional financing.

EQ6: What lessons learned can inform future similar FAO and/or JICA projects?

There are four main key lessons that can be learned from implementation of this project. They could be applied to similar projects implemented in similar contexts:

• The achievement of capacity development outcomes (in particular at environment and organizational level) takes longer in conflict countries than in others. It is fundamental to reflect this in the capacity needs assessment, project design and risk matrix.
• Given cultural implications of gender issues in Afghanistan and its many nuances, projects

26 See http://www.consilium.europa.eu/en/meetings/international-summit/2016/10/05/
27 Other donors include United States Agency for International Development (USAID), the World Bank or the Asian Development Bank.
implemented in the country might highly benefit from a dedicated FAO strategy on how to mainstream gender in similar contexts.

- The mix of in-class and on-the-job-training ensures a higher degree of adoption of knowledge and techniques.
- The introduction of information management systems and processes (such as coordination groups or databases) can be instrumental in moving towards an evidenced-based policymaking and implementation.
4. Conclusions and recommendations

4.1 Conclusions

Based on the evidence gathered during the evaluation, the country and sector context, and the identified lessons learned, the team has prepared the below conclusions and recommendations. At the time of the mission (21-28 April 2017) there was an ongoing discussion on the possibility of extending the project, reducing the number of activities and adding and/or emphasizing others. The following conclusions and recommendations are aimed at improving the impact of the project in the event of an extension.

**Conclusion 1.** The project responded clearly to national capacity development needs in its two main areas of work: policy and skills development. Overall, institutional transformation and governance development – in this case, support for the development of good governance of the water sector – can only be achieved in the long-term. Thus, the project objective of contributing to better governance of the sector, as well as improving staff capacities, was very ambitious considering the two-year project duration and the country and sector context.

**Conclusion 2.** Targeting capacity development of the Irrigation Department was found relevant to country needs given the capacity development needs of the institution. Interviews with the authorities, donors and beneficiaries, as well as the data on the sub-sector challenges, clearly indicate the need to continue supporting the irrigation sub-sector across the board.

**Conclusion 3.** Widespread organizational change was not yet achieved due in part to the frequent changes in leadership. The political and administrative environment has impacted the initiatives at the policy and enabling environment levels. Nevertheless, there is a general consensus that the current leadership has the potential to enact change, including reforms of the sector. The current President is supporting the restructuring of the sector, in particular the water sector reform prepared for the Ministry of Energy and Water, and has requested the Ministry of Agriculture, Irrigation and Livestock to conduct a similar reform at the irrigation sub-sector level. Therefore, it is important to take advantage of the existing momentum to clarify policies, competences and scope to improve inter-ministerial coordination.

**Conclusion 4.** Despite the time constraints and difficulties in mobilizing staff, the project was effective in conducting training activities and workshops, and raising awareness among the participants. However, the evaluation team considers that the project has not been strategic enough when broadening the scope of beneficiaries; although knowledge and skills have been widely diffused, there were beneficiaries who play no clear role in the delivery of irrigation activities or projects. Pilot Projects at the two districts have been very well received by the respective targeted beneficiary Irrigation Associations and have contributed to increasing the irrigated land surface and efficiency in water use.

**Conclusion 5.** Few women have benefited from the project activities. IACAR did not include a gender assessment and the project lacked a gender analysis or gender strategy. Considering the role of women in agriculture, this was a missed opportunity. Nevertheless, in one of the pilot projects, women farmers benefited from several trainings in the research centre. Continued support for the women who benefited from the previous FAO project helped to sustain their learning progress.

**Conclusion 6.** The Irrigation Department has not used resources such as the Irrigation Database even though it is easily accessible and could be of great use to support the decision making process (planning and prioritizing interventions). Considering that Irrigation Department does not yet have a strong monitoring and evaluation framework, this tool could support a strict monitoring activity that can help identify gaps and actions being implemented, and could facilitate management within the ministry and inter-ministerial coordination.
4.2 Recommendations

Under each recommendation, the evaluation team provides suggested actions. In the framework of a possible extension or future similar project, some of them could be taken into consideration and included as activities in the project results matrix.

Recommendation 1. In order to create an environment conducive to the efficient functioning of Irrigation Department and Ministry of Agriculture, irrigation and Livestock, the Project Task Force should support the Ministry in clarifying the roles and responsibilities for all water management-related institutions. The Project Task Force should also help to promote inter-ministerial coordination and to strengthen DAILs. This will in turn have a positive impact on the sustainability of project results, agricultural productivity and job opportunities. The current context is now more adequate to move this agenda forward, in coalition with key donors and under Government leadership.

Suggested actions:

- The project could facilitate an initial discussion within the Irrigation Thematic Group to determine how the inter-ministerial coordination should take place, particularly if the National Irrigation Programme and Irrigation Sector Reform projects are endorsed.
- The project could support the Government in clarifying policies and procedures (including roles in the design and implementation of irrigation projects) among the different public agencies active in the sector.
- Considering the complexity and wide range of issues to be addressed in the water management and irrigation sector, additional support (i.e. dedicated consultant) should be provided to the Chief Technical Adviser to support the advocacy and technical work on inter-ministerial coordination, policy and planning.
- The Irrigation Department could have a stronger role in analysing, regulating, planning and monitoring irrigation projects, and not just in their implementation. It is suggested to Irrigation Department to move in this direction with the support of the Project Task Force. It is also suggested to set specific objectives at provincial level, which can then be monitored through the Irrigation Database.
- The project could support the Government to develop a strategy to improve communication and information sharing between Irrigation Department and DAILs. This should be based on a dedicated assessment of information, communication and equipment needs, both in Irrigation Department and DAILs. This would help quality control of services delivered, supervision and monitoring.
- The Project Task Force could support Irrigation Department in providing all of the provinces, or at least the regions, the necessary equipment (e.g. central stations) to conduct project design, implementation and monitoring work. It should also grant access to information systems such as the irrigation database.
- The Central Management Unit should include capacity development activities, supported by different donors, in irrigation projects to increase value for money of FAO activities and their impact on the irrigation sub-sector.

Recommendation 2. In order to ensure the sustainability of capacity development activities, the Ministry of Agriculture, Irrigation and Livestock should establish a unit responsible for the design and implementation of a capacity development plan as well as for the overall management of training activities.

Suggested actions:

- Ministry of Agriculture, Irrigation and Livestock and CDIS coordinators could be a good entry point to implement this recommended action.
- Should this be possible, in order to ensure capacity development-related services are provided to all Ministry of Agriculture, Irrigation and Livestock departments, the

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28 The Central Management Unit has been created under Ministry of Agriculture, Irrigation and Livestock to consolidate all the Project Implementing Units managing irrigation projects. The objective is to increase efficiency in the coordination to ensure complementarity and synergies across projects.
Capacity Development of the Irrigation Department of the Ministry of Agriculture

The project could support the Government in the establishment of a cross-cutting capacity development unit inside the Ministry – not just for Irrigation Department, but for all departments. Since other departments, such as the Extension Services, can significantly complement the role of Irrigation Department but present knowledge and skills gaps, this could also be an efficient way to foster internal coordination while addressing capacity development needs across the Ministry.

- The project should support the concerned Ministries and Directorates to embed capacity development strategies and plans into institutional programmes and regulation as a permanent part of their activities.
- The project could also promote the use of the irrigation database to assign responsibilities and objectives to staff in a realistic way, provided adequate resources are put in place in a timely manner. This could be piloted in some provinces. It would be useful to establish a simple monitoring tool that includes the main objectives to be achieved for each trained staff. These steps could be part of an operations manual for Irrigation Department, which is easy to understand and implement.
- The training manuals, drafted with the support of the project, could also cover additional themes such as: culvert design, drawings and water reservoir designs. To avoid duplication in the preparation of manuals by different donors, the capacity development unit could manage this activity and ensure that: i) there are no overlaps; ii) there are agreed-upon methodologies; iii) all manuals respond to the higher standard; and iv) are translated in the local languages or English training is provided to ensure all staff can use them.
- A professional technical committee managed by the capacity development unit could ensure that all quality controls are in place and that reviews are made on time and in parallel with trainings.
- Capacity development activities could also engage extension services in Ministry of Agriculture, Irrigation and Livestock, as well as in Ministry of Energy and Water, to maximize the use of staff in the provinces.

Recommendation 3. To ensure a positive impact and the sustainability of project results, it is recommended to the Project Task Force and JICA to build on and coordinate with other donors’ projects in supporting a long-term change process within Irrigation Department, Ministry of Agriculture, irrigation and Livestock and other ministries. This would also include the coordination of support to Irrigation Associations.

Suggested actions:

- In order to move towards the Government’s ownership of capacity development processes and sustainability of results, the project could eventually provide support to Ministry of Agriculture, Irrigation and Livestock/Irrigation Department in establishing winning “inclusive coalitions”, with all donors and implementing partners active in the sub-sector. This could be done through the coordination mechanisms in place, such as the Irrigation Thematic Group, but also in dialogue with other project activity/team leaders working with the Ministry of Energy and Water or the Ministry of Rural Rehabilitation and Development to ensure the orderly reform of the sector.
- For future on-the-job-training activities, it is suggested that the project leverage and coordinate with other existing rehabilitation projects, while capacity development projects should help with the transfer of knowledge and skills. This will expand the scope of beneficiaries while reducing the cost of rehabilitation, providing more funds for capacity development activities across the country.

Recommendation 4. It is recommended to the Project task Force to address in its capacity development activities the knowledge and skills needed to manage a larger sector, due to the addition of the private sector or NGO participation. Both sectors would benefit from each actor’s respective strengths, resulting in improved public sector delivery and the development of the private sector itself.

Suggested actions:

- The project could support the Government in the implementation of a public-private partnership framework. Similar partnerships are already in place and led by the Ministry of Finance and the Ministry of Equipment. Since the Government has the need to
strengthen its public investment management capacity, looking at successful examples of public-private partnerships in the country (e.g. health and hospitals) can help the team plan specific activities to reinforce Irrigation Department’s capacity in the use of this instrument.

- The evaluation team suggests that the Project Task Force explore the possibility of implementing small public-private partnerships, not necessarily long-term, with the support of other donors. While there is a lack of institutional and individual capacity, the project could help with the training and approaches including, for example, the possibility of managing seed funding for small-scale solutions provided by the private sector. NGOs could provide services to the government under a form of public-private partnership asking for much lower rates of return, and could provide grant funding. They may be even better placed that purely private sector firms.29

- In the medium- to long-term the above would entail the creation of a procurement unit inside the Irrigation Department and possibly the establishment of partnerships with the private sector (e.g. the West Delta public-private partnership irrigation project in Egypt and Chavimochic Irrigation Project funded by the World Bank). While the evaluation team acknowledges this action might be implemented only in the medium- to long-term, the project could start supporting the Government in developing the necessary skills to build these kinds of partnerships with a view towards improving the public sector delivery and boosting the development of the private sector itself.

Recommendation 5. It is recommended to the Project Task Force to strongly promote gender equality and empowerment issues, in collaboration with the Government and Ministry of Agriculture, Irrigation and Livestock in particular. It will be important to align specific future project activities with the recent National Women’s Economic Empowerment Programme and Plans30 and the FAO Gender Policy.31

Suggested actions:

- Considering a possible extension, the Project Task Force could prepare an in-depth gender needs assessment on the opportunities and constraints in addressing gender issues in the irrigation sector in the country.
- Possible ways to mainstream gender issues could start with:
  - including gender issues in the training programmes in order to increase the knowledge about women’s role in agriculture and strengthen targeted participants’ skills in mainstreaming gender empowerment during irrigation projects’ design, implementation and monitoring;
  - increasing opportunities for women (such as extension workers) to access learning opportunities and including training of existing women’s interest groups at community level, during on-the-job-trainings.

- The Project Task Force could draw from other experiences such as the World Bank’s work with women at the community level in Afghanistan through the National Solidarity Program (NSP), or the Capacity Building for Results Trust Fund financed by the World Bank (the latter in terms of plans for the recruitment of women).32

Recommendation 6. It is recommended to the Project Task Force, to ensure that future projects contributing to a larger programme (i.e. the possible extension of this project) include a specific results framework and risk matrix, tailored to the project specific objectives, outcomes and country features. This will enable effective project monitoring, including a causal chain between the activities and the outcomes and impact.

29 See https://pppknowledgelab.org/countries/cambodia
31 The document is available at http://www.fao.org/docrep/017/i3205e/i3205e.pdf
Suggested actions:

- A second framework that connects a given project with the overall group of projects could be easily designed in parallel and revised as needed. This is in line with the quality requirements for project preparation and project cycle in FAO.

Recommendation 7. The project and Ministry of Agriculture, Irrigation and Livestock/Irrigation Department should set clear criteria to strategically select target beneficiaries at individual level. The targeted beneficiaries should be those who are in the position to generate an impact within a given institution or sector after the training is completed.

Suggested actions:

- A close and strategic collaboration could take place with the Extension Services, when possible.
- Trainings could be prepared in packages to facilitate the acquisition of relevant skills per each staff in a coherent and progressive manner.
- In this respect, the capacity development unit of the Ministry of Agriculture, Irrigation and Livestock mentioned in Recommendation 2 could set criteria for the selection of beneficiaries and align training progress with the capacity needs assessment and staff career development of Irrigation Department and DAILs staff.
- The selection of beneficiaries could be carried out in collaboration with the human resources team to ensure the staffing that enhanced capacities will be taken into account for career development purposes. In this sense, a virtuous circle could be created between organizational vision, human resources policy, selection, training, performance and career evolution.
- In order to address the individual capacity needs in parallel with the institutional capacity needs and objectives, the Irrigation Department and the project could take into consideration the following suggested criteria while selecting training participants:

Profile of the trainees:

- make sure to include participants who have or will have (after the training) a key position in Irrigation Department which allows them to positively impact the work of the organization, by applying the knowledge and skills learned;
- make sure to also include participants who have or might have (after the training) a more stable position in Irrigation Department over time;
- select the participants in line with the capacities that need to be strengthened: make sure to include in the training participants working on specific areas which need to be strengthened inside Irrigation Department (as identified in the capacity needs assessment or by management);
- include in the trainings engineers or civil engineers as well as socio-economists, high achieving students in their final year of university and recent graduates who could potentially join the Ministry of Agriculture, Irrigation and Livestock or new recruited staff under the World Bank CBRF, who could help in addressing needs identified in the capacity needs assessment.

Career development:

- the background of the trainees should match the content and objectives of the trainings (as identified in the capacity needs assessment). If the training is a basic one, it is suggested to avoid including staff with a two-year master’s degree. They could better serve the organization as trainers, or by receiving more advanced trainings. An alternative could be to include training of trainers to foster sustainability.
5. Appendices

Appendix 1. Evaluation matrix

<table>
<thead>
<tr>
<th>Evaluation Questions</th>
<th>Indicator and Judgement</th>
<th>Methods/Tools</th>
<th>Sources</th>
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<tbody>
<tr>
<td>Design - EQ1: To what extent has the project responded to pre-existing needs and capitalized on existing capacities?</td>
<td>#Increase in staff (no target) #Increase in the number of beneficiaries</td>
<td>Institutional Analysis and Capacity Development Assessment Report (IACDA); Interviews with key informants</td>
<td>FAO staff; project team; Government counterparts (Ministry of Agriculture, Irrigation and Livestock); beneficiaries; donors.</td>
</tr>
<tr>
<td>1. Did the project adequately address the constraints, mainly regarding staffing, at central and local level?</td>
<td>The project responded to capacity needs as stated by stakeholders</td>
<td>IACDA; Interviews with key informants; agriculture and sector review documents; project documents; interviews with key informants</td>
<td></td>
</tr>
<tr>
<td>2. Is the project work plan appropriate to address identified capacity needs and goals in irrigation systems and water resources management as well as in irrigation project implementation?</td>
<td>From desk review, qualitative analysis of stakeholders' views and analysis of changes/adaptive management at institutional level</td>
<td>Interviews with key informants; agriculture and sector review documents; project documents; interviews with donors</td>
<td></td>
</tr>
<tr>
<td>3. Does the project design cover the three dimensions of capacity development (enabling environment, organizations and individuals) establishing virtuous connections among them?</td>
<td>Desk review and qualitative analysis of interviews with stakeholders</td>
<td>Institutional Analysis and Needs Assessment; Interviews with key informants; agriculture and sector review documents; project documents; interviews with key informants</td>
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<tr>
<td>4. Were project beneficiaries clearly identified?</td>
<td># of female beneficiaries</td>
<td>Project report documents; focus groups; interviews key informants; assessments on gender issues in Afghanistan</td>
<td></td>
</tr>
<tr>
<td>5. Were gender equality and youth participatory dimensions addressed in the project design?</td>
<td>Desk review and interviews. Assessment of partnerships, trainings, meetings of working groups - # of collaborative partnerships (in practice) established</td>
<td>Interviews with key informants</td>
<td></td>
</tr>
<tr>
<td>6. Did the project capitalize on other projects on irrigation or irrigation-related capacity development interventions (FAO or non-FAO)? Have overlaps been avoided and synergies established?</td>
<td>Review of the Matrix</td>
<td>Review of documents</td>
<td></td>
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<td></td>
<td>Capacity Development of the Irrigation Department of the Ministry of Agriculture</td>
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<tr>
<td>8.</td>
<td>Was the activities revision in 2015 the result of the project effort to adapt to changed Irrigation Department and national needs?</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Review of the activities and interviews with key stakeholders and project team.</td>
<td>Review of documents (concept note Phase II) and interviews with key informants</td>
<td></td>
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</tbody>
</table>

**Enabling environment – EQ2: What are the outcomes of the political and technical consultations, conducted within the project framework, at policymaking level?**

<table>
<thead>
<tr>
<th></th>
<th>Qualitative assessment of the results at enabling level (policies, plans, working dynamics)</th>
<th>Review of project outputs; review minutes of meetings of sector working group; interviews key informants</th>
</tr>
</thead>
<tbody>
<tr>
<td>9.</td>
<td>How are the identified results at policymaking level enhancing the enabling environment?</td>
<td>Review of project outputs; review minutes of meetings of sector working group; interviews key informants</td>
</tr>
<tr>
<td></td>
<td>Sector assessment reviews and qualitative assessment of coherence with proposed policy and dialogue</td>
<td>Review of sector assessments on agriculture and irrigation; review and analysis of Institutional Analysis and Needs Assessment; review of other donor’s projects</td>
</tr>
<tr>
<td>10.</td>
<td>Is this in line with national needs and priorities on irrigation systems management?</td>
<td>Review of outputs at policy level and interviews with stakeholders</td>
</tr>
<tr>
<td>11.</td>
<td>Has there been any improvement in the capacities of stakeholders in designing and implementing policies and regulations?</td>
<td>Assessment of outputs Assessment of implementation</td>
</tr>
<tr>
<td>12.</td>
<td>To what extent has inter-ministerial coordination and institutional integration being promoted in terms of irrigation policy/programme development and implementation?</td>
<td>Qualitative Assessment of Interviews with stakeholders; review of minutes of working group meetings</td>
</tr>
<tr>
<td>13.</td>
<td>Did the project contribute to cooperation among key actors in the country in irrigation management systems?</td>
<td>Qualitative assessment - Interviews</td>
</tr>
<tr>
<td>14.</td>
<td>Are the targeted institutions better positioned to assess their own needs and request ad hoc support?</td>
<td>Institutional response to the IACAR (staffing; capacity development)</td>
</tr>
</tbody>
</table>

**Organizations level – EQ3: To what extent has the project improved the performance of the Irrigation Department and DAILs of the Ministry of Agriculture, Irrigation and Livestock in formulating, managing, monitoring and evaluating (M&E) irrigation management systems development projects?**

<table>
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<tr>
<th></th>
<th># of Partnerships (Total: two)</th>
<th>Review of project documents; interviews with key informants</th>
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<tbody>
<tr>
<td>15.</td>
<td>What partnership has the project established, with particular reference to national organizations (NGOs, research institutes, private companies)?</td>
<td>Review of project documents; interviews with key informants</td>
</tr>
<tr>
<td>16.</td>
<td>To what extent the roadmap for institutional strengthening and capacity development plan for the Irrigation Department contributed to Irrigation Department and DAILs of Ministry of Agriculture, Irrigation and Livestock empowerment?</td>
<td>Institutional response to the IACAR (staffing; capacity development)</td>
</tr>
</tbody>
</table>
17. To what extent the on-the-job-trainings contributed to Irrigation Department and DAILs capacity development needs? What were the outcomes achieved in the on-the-job-training pilot sites, in terms of improved on-farm water management technologies?

| The on-the-job-training responded to knowledge gaps in Irrigation Department, DAILs and other stakeholders. Particularly on new irrigation techniques and engineering design, construction supervision |
| Field visit to pilot projects; progress reports; training reports; interviews with key informants; focus groups; interviews with donors |

18. To what extent has the established database regarding irrigated agriculture contributed to improve Irrigation Department capacities in the planning and development of irrigation plans and programmes in the country?

| Evidence of the use of the irrigation database – review of documents, interviews with stakeholders. The databases is not known by all staff and it has not been used for planning or M&E |
| Analysis of the database; interviews with key stakeholders |

19. Does the organization perceived itself as better positioned and skilled to cover its role and perform its duties? If this is the case, what examples in this respect could be identified?

| Qualitative assessment of interviews |
| Interviews with key informants; assessment of results vs. Needs Assessments |

20. To what extent other government institutions and donors perceive this change?

| Qualitative assessment of interviews with development partners and Irrigation Department staff |
| Face-to-Face interviews |

21. Have other institutions expressed interest in capacity development opportunities due to their involvement in the training?

| Qualitative assessment of interviews with development partners and Irrigation Department staff |
| Interviews with key stakeholders |

22. Did the Irrigation Department make efforts to mobilize further human and financial resources as a result of a better planning?

| Current recruitment under CBRF |
| Interviews with key stakeholders |

23. How and to what extent did the roadmap lessons learned from the other project activities?

| Qualitative assessment of interviews |
| Interviews with key stakeholders |

24. To what extent have women been involved in the above-mentioned capacity development process and benefited from it in terms of access to capacity building and employment opportunities?

| Qualitative assessment and quantitative assessment of female participation in trainings. Gender mainstreaming is weak |
| Interviews with key stakeholders; progress reports; training reports |

25. Which new knowledge and skills have Irrigation Department, DAILs staff and farmers acquired?

| Review of trainings – knowledge acquired of a large set of skills |
| Training reports; progress reports; interviews key informants; focus groups; interviews with other donors |

26. What new skills in planning, implementing and monitoring irrigation-related projects did the participants value most?

| On-the-job-trainings – design, geographic information system, English, O and M |
| Training reports; progress reports; interviews key informants; focus groups; interviews with other donors |

Individuals level – EQ4: To what extent did project target beneficiaries enhance their skills and knowledge?

<p>| Review of trainings – knowledge acquired of a large set of skills |
| Training reports; progress reports; interviews key informants; focus groups; interviews with other donors |</p>
<table>
<thead>
<tr>
<th>Question</th>
<th>Method</th>
<th>Respondent</th>
</tr>
</thead>
<tbody>
<tr>
<td>27. To what extent have they used in their work the new knowledge/skills acquired? If so, what examples can be identified?</td>
<td>No examples – Qualitative Assessment in Focus Groups</td>
<td>Training reports; progress reports; interviews key informants; focus groups; interviews with other donors</td>
</tr>
<tr>
<td>28. Did the participation in training sessions improve target beneficiaries' coordination and leadership skills?</td>
<td>Qualitative assessment – improvement but very slow</td>
<td>Training reports; progress reports; interviews key informants; focus groups; interviews with other donors</td>
</tr>
<tr>
<td>29. To what extent did the on-the-job-training and technical manuals produced offer to target beneficiaries comprehensive experience, guidance and knowledge material ensuring the standardization of good and quality practices?</td>
<td>Review of on-the-job-training's content, Manuals content and interviews with stakeholders. The manuals and on-the-job-training fill knowledge gaps and set standards. Need for further diffusion</td>
<td>Training reports; progress reports; interviews key informants; focus groups; interviews with other donors; assessment of manuals</td>
</tr>
<tr>
<td><strong>Sustainability and lessons learned - EQ5: How sustainable are the project’s achieved results at enabling environment, organizations and individuals level?</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30. Are there any changes in enabling environment, individuals’ capacities and Irrigation Department/ DAILs performance that are likely to foster sustainability and replication of project activities, after the project completion? To what extent is this attributable to the project?</td>
<td>Individual trainings have increased capacity in Irrigation Department</td>
<td>Progress reports; interviews key informants; focus groups; interviews with donors</td>
</tr>
<tr>
<td>31. Have national and local institutions been prepared to carry out the activities after the project completion? What financial arrangements have been made to carry out the activities after the project?</td>
<td>Institutions are better positioned to absorb financial resources to carry out activities. Financial arrangements with Development Partners (project-based)</td>
<td>Interviews with key informants</td>
</tr>
<tr>
<td>32. What are the plans/strategies of Irrigation Department in coordination with the Ministry of Agriculture, Irrigation and Livestock to continue the improvement of the capacity and results of the Directorate?</td>
<td>Policies and programmes waiting for approval</td>
<td>Interviews with key informants</td>
</tr>
<tr>
<td>33. Are capacity development activities (in all forms) embedded in the planning of the Ministry of Agriculture, Irrigation and Livestock?</td>
<td>Qualitative Assessment indicates that not yet but progressing in this direction</td>
<td>Interviews with key informants</td>
</tr>
<tr>
<td><strong>EQ6: What lessons learned can inform future similar FAO and/or JICA’s projects?</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>34. What priority needs should still be addressed in the country in terms of inter-ministerial coordination and support to the reform of the Afghan Irrigation Sector?</td>
<td>Judgement</td>
<td>Interviews with key informants</td>
</tr>
</tbody>
</table>
## Appendix 2. Mission agenda (22-28 April 2017)

<table>
<thead>
<tr>
<th>Day</th>
<th>Time</th>
<th>Purpose</th>
<th>Person</th>
<th>Venue</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Day 1:</strong></td>
<td>22 April</td>
<td>06:40 AM (flight lands)</td>
<td>Sonia Sanchez picked up by FAO assigned driver</td>
<td>Kabul Airport to GV</td>
<td>Kabul</td>
</tr>
<tr>
<td></td>
<td>08:00-12:30</td>
<td>Check-in at GV, take rest and freshen up</td>
<td>Sonia Sanchez</td>
<td>GV</td>
<td>Kabul</td>
</tr>
<tr>
<td></td>
<td>12:30-13:30</td>
<td>Lunch</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>13:30-15:00</td>
<td>Prepare checklist of information to be collected</td>
<td>Sonia Sanchez</td>
<td>GV</td>
<td>Kabul</td>
</tr>
<tr>
<td></td>
<td>15:00-18:00</td>
<td>Meeting for finalization of the mission programme</td>
<td>Sonia Sanchez, Zalmay Khaliqi, Laxman Sharma</td>
<td>GV</td>
<td>Kabul</td>
</tr>
<tr>
<td><strong>Day 2:</strong></td>
<td>23 April</td>
<td>08:00-08:30</td>
<td>Meeting with project manager/FAOR Operations</td>
<td>FAOR Office</td>
<td>Ministry of Agriculture, Irrigation and Livestock (MAIL Compound, Kabul)</td>
</tr>
<tr>
<td></td>
<td>08:30-09:00</td>
<td>FAO-Rep briefing</td>
<td>Tomio Shichiri (FAO Rep), Sonia Sanchez, Zalmay Khaliqi, Suman Sijapati</td>
<td>FAOR Office</td>
<td>MAIL Compound, Kabul</td>
</tr>
<tr>
<td></td>
<td>09:00-09:30</td>
<td>Security Briefing</td>
<td>Sayed Walid/ Miguel, Sonia Sanchez, Zalmay Khaliqi</td>
<td>FAOR Office</td>
<td>MAIL Compound, Kabul</td>
</tr>
<tr>
<td></td>
<td>09:30-10:00</td>
<td>Introduction to the project staff and discussion on the mission programme and finalization of the participants for the focus group discussion</td>
<td>Evaluation team, project staff an consultants</td>
<td>Project Office, Pamir Building 5th Floor</td>
<td>MAIL Compound, Kabul</td>
</tr>
<tr>
<td></td>
<td>10:00-12:30</td>
<td>Presentation on overview of the project activities by the Chief Technical Adviser and discussion</td>
<td>Evaluation team, project staff and consultants</td>
<td>Meeting Hall, Pamir Building 8th Floor</td>
<td>MAIL Compound, Kabul</td>
</tr>
<tr>
<td></td>
<td>13:30-14:00</td>
<td>CDIS Project Leader Policy Adviser</td>
<td>Mr Masataka Nakahara</td>
<td>CDIS Project Office at Pamir Building 3rd Floor</td>
<td>MAIL Compound, Kabul</td>
</tr>
<tr>
<td></td>
<td>14:00-14:30</td>
<td>Meeting with Irrigation Director</td>
<td>Dr Haseeb Payab</td>
<td>ID Director’s Office, Pamir Building 7th Floor</td>
<td>MAIL Compound, Kabul</td>
</tr>
<tr>
<td></td>
<td>14:30-16:30</td>
<td>One-to-one meetings with project staff</td>
<td>Project staff and trainers</td>
<td>Project Office, Pamir Building 5th Floor</td>
<td>Kabul</td>
</tr>
<tr>
<td>Day 3: 24 April (Monday)</td>
<td>Time</td>
<td>Activity</td>
<td>Location</td>
<td>Location Notes</td>
<td></td>
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<tr>
<td></td>
<td>09:00-10:00</td>
<td>Travel: Field Visit to Zer Darak Irrigation Scheme, (Pilot Project)</td>
<td>Sonia Sanchez, Zalmay Khaliqi, Rafiullah Rahmani, Mohammad Asif and Jawad Darwish</td>
<td>Deh Sabz District, Kabul</td>
<td></td>
</tr>
<tr>
<td></td>
<td>10:00-11:30</td>
<td>Meet with Irrigation Association (IA) members and Community of Zer Darak Irrigation scheme and collect feedback regarding the project activities and support</td>
<td>Sonia Sanchez, Zalmay Khaliqi, Rafiullah Rahmani, Mohammad Asif, Jawad Darwish and members of IA</td>
<td>Deh Sabz District, Field</td>
<td></td>
</tr>
<tr>
<td></td>
<td>11:30-12:30</td>
<td>Field visit to Badam Bagh Pilot Project and discussion with the Farm Staff</td>
<td>Sonia Sanchez, Zalmay Khaliqi, Rafiullah Rahmani, Mohammad Asif, Jawad Darwish</td>
<td>Kabul District, Field</td>
<td></td>
</tr>
<tr>
<td></td>
<td>12:30-13:30</td>
<td>Lunch</td>
<td></td>
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<td></td>
</tr>
<tr>
<td></td>
<td>13:30-14:00</td>
<td>Travel: Field Visit to Shaheedullah Canal Irrigation Scheme, (Pilot Project)</td>
<td>Sonia Sanchez, Zalmay Khaliqi, Rafiullah Rahmani, Mohammad Asif and Jawad Darwish</td>
<td>Mir Bacha Kot District, Field</td>
<td></td>
</tr>
<tr>
<td></td>
<td>14:00-16:00</td>
<td>Meet with IAs and Community of Shaheedullah Canal Irrigation scheme and collect feedback regarding the project activities and support</td>
<td>Sonia Sanchez, Zalmay Khaliqi, Rafiullah Rahmani, Mohammad Asif, Jawad Darwish and members of IA</td>
<td>Mir Bacha Kot District, Field</td>
<td></td>
</tr>
<tr>
<td></td>
<td>16:00-17:00</td>
<td>Return back to Kabul</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Day 4: 25 April (Tuesday)</td>
<td>09:00-10:30</td>
<td>Focus group discussion with the Trainees of Irrigation Agronomy-related topics</td>
<td>Zalmay Khaliqi, Sonia Sanchez, Mohammad Asif, Rafiullah Rahmani</td>
<td>Irrigation Directorate Meeting Hall, Pamir Building 8th Floor, MAIL Compound, Kabul</td>
<td></td>
</tr>
<tr>
<td></td>
<td>10:30-12:00</td>
<td>Focus group discussion with the Trainees of Irrigated Engineering related topics</td>
<td>Zalmay Khaliqi, Sonia Sanchez, Jawad Darwish, Abdul Rauf Reshtin</td>
<td>Irrigation Directorate Meeting Hall, Pamir Building 8th Floor, MAIL Compound, Kabul</td>
<td></td>
</tr>
<tr>
<td></td>
<td>12:00-12:30</td>
<td>Review of the discussion points</td>
<td>Zalmay Khaliqi, Sonia Sanchez</td>
<td>Project Office, Pamir Building 8th Floor, MAIL Compound, Kabul</td>
<td></td>
</tr>
<tr>
<td></td>
<td>12:30-13:30</td>
<td>Lunch</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>13:30-16:15</td>
<td>Focus group discussion with the Trainers/Project staff</td>
<td>Zalmay Khaliqi, Sonia Sanchez</td>
<td>Irrigation Directorate Meeting Hall, Pamir Building 8th Floor, MAIL Compound, Kabul</td>
<td></td>
</tr>
<tr>
<td></td>
<td>16:15-16:30</td>
<td>Visit to the Irrigation Resource Centre and briefing</td>
<td>Zalmay Khaliqi, Sonia Sanchez</td>
<td>Irrigation Resource Center, Pamir Building 5th Floor, MAIL Compound, Kabul</td>
<td></td>
</tr>
</tbody>
</table>
| Day 5  
| 26 April  
| (Wednesday) |
| 09:00-10:00 | Continued discussion with the trainers | Zalmay Khaliqi, Sonia Sanchez | ID/MAIL | Kabul |
| 10:00-11:00 | Debriefing to Deputy Minister and Senior Irrigation Advisor to the DM | H.E Fahimullah Ziaee, Masoom Hamdard, Sonia Sanchez, Zalmay Khaliqi, | ID/MAIL | Kabul |
| 11:00-12:30 | Review and compilation of information collected | Evaluation team: Sonia Sanchez and Zalmay Khaliqi | ID/MAIL | Kabul |
| 12:30-13:30 | Lunch |  |
| 13:30-14:00 | Meeting with the M&E Director | Sonia Sanchez, Zalmay Khaliqi, Abdul Reshtin | M&E Directorate | Kabul |
| 14:00-15:00 | Debriefing to Irrigation Department Director | Dr Haseeb Payab | ID, Pamir Building 7th Floor | Kabul |
| 15:00-16:30 | Review of the information collected, clarifications and report writing | Evaluation team/Chief Technical Adviser/Project Manager | Project Office, Pamir Building 5th Floor | Kabul |

| Day 6  
| 27 April  
| (Thursday) |
| 08:30-09:30 | Meeting with the Resource partner (TBC) | Mr Nishida Yuichi, Resident Representative, Japan International Cooperation Agency (JICA) | JICA Office | Kabul |
| 10:30-11:00 | Meeting USAID | Mohammad Junaid Sahibzada, Sonia Sanchez, Zalmay Khaliqi, Suman Sijapati, | USAID office | Kabul |
| 11:30-12:30 | Meeting ADB | Mohammad Ayubi, Sonia Sanchez, Zalmay Khaliqi, Suman Sijapati, | ADB office | Kabul |
| 13:30-14:00 | Lunch |  |
| 13:30-15:30 | Debriefing/Discussion to with FAOR Operations | Evaluation team/Chief Technical Adviser/FAOR Operations | FAOR | Kabul |
| 20:00-20:30 | Debriefing/Discussion with FAO Representative | Sonia Sanchez and Tomio Shichiri | GV | Kabul |

| 28 April  
| (Friday) |
| Departure | 08:30 (flight time) | Drop off at the Airport at 6:30 | Drop off by assigned FAO driver | Kabul |
Appendix 3. Theory of Change

1 The Theory of Change (ToC) presented below intends to be conceptually clear by not containing congested boxes with several inputs, outputs or causal links. The assumption is derived from the project’s objective, specifically output two, but also linked to a specific ultimate outcome of Capacity Development and Institutional Strengthening (CDIS). The evaluation team considers that output two could make a significant contribution, in light of other actions within CDIS and the ensemble of donors’ projects, to this output. One assumption is that capacity development processes take longer in fragile and conflicted countries than elsewhere (see section 1.3 on methodology). A second assumption is that ownership on the part of the client is key to ensure that the capacity is created and embedded within the institution. A last assumption is that there is some level of absorptive capacity in the client institutions.

2 The project addresses three key areas: policymaking, skills development and monitoring. It intends to cover: 1. Relevant staff, country-wide, from the client institution; 2. Other relevant staff involved in the irrigation sub-sector. Within ‘policymaking’ we can group several activities in support of policy-dialogue (support to working groups, sector coordination, assessments). On the skills development side we have all the training, training of trainers and know-how, in the form of manuals, delivered by the project. Finally, on the Monitoring side, we find the creation of an irrigation database and monitoring and evaluation proposal for Irrigation Department. The ultimate objective is to help the Irrigation Department to actually formulate and implement irrigation projects as well as improve its management process.
### Appendix 4. List of people interviewed

<table>
<thead>
<tr>
<th>Focus Groups</th>
<th>Organization</th>
<th>Position/Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Muhammad Arif</td>
<td>DAIL Wardak</td>
<td>Head of Irrigation</td>
</tr>
<tr>
<td>Habibullah Aein</td>
<td>DAIL Ghazni</td>
<td>Design Engineer</td>
</tr>
<tr>
<td>Mohibullah Abid</td>
<td>ID</td>
<td>Social Economist</td>
</tr>
<tr>
<td>Mohammad Nazir Sharifi</td>
<td>ID</td>
<td>Social Economist</td>
</tr>
<tr>
<td>Mr Ezatullah</td>
<td>ID</td>
<td>Design Engineer</td>
</tr>
<tr>
<td>Mr Wahidullah</td>
<td>ID</td>
<td>Design Engineer</td>
</tr>
<tr>
<td>Mr Rafiullah</td>
<td>DAIL Kabul</td>
<td>Irrigation Deputy Head</td>
</tr>
<tr>
<td>Sayed Qurban Ali</td>
<td>ID</td>
<td>Irrigation Engineer</td>
</tr>
<tr>
<td>Mohammad Mosa</td>
<td>ID</td>
<td>Monitoring Engineer</td>
</tr>
<tr>
<td>Batour Amiri</td>
<td>ID</td>
<td>Site Engineer</td>
</tr>
<tr>
<td>Abdul Halim Alvi</td>
<td>ID</td>
<td>Site Engineer</td>
</tr>
<tr>
<td>Jamal Nasir</td>
<td>ID</td>
<td>Design Engineer</td>
</tr>
<tr>
<td>Rafiullah Berya</td>
<td>DAIL (?)</td>
<td>Irrigation Technology Engineer</td>
</tr>
<tr>
<td>Janana, Engineer</td>
<td>ID</td>
<td>Engineer</td>
</tr>
<tr>
<td>Zaiton Ahmadzai</td>
<td>CLAP Project</td>
<td>Engineer</td>
</tr>
<tr>
<td>Abdul Murid</td>
<td>DAIL Nangarhar</td>
<td>Engineer</td>
</tr>
</tbody>
</table>

**Individual Interviews**

<table>
<thead>
<tr>
<th></th>
<th>Organization</th>
<th>Position/Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>H.E. Fahimullah Ziaee</td>
<td>MAIL</td>
<td>Deputy Minister</td>
</tr>
<tr>
<td>Mr Masood Hamdard</td>
<td>MAIL</td>
<td>Advisor Deputy Minister</td>
</tr>
<tr>
<td>Dr Haseeb Payab</td>
<td>MAIL</td>
<td>Irrigation Director</td>
</tr>
<tr>
<td>Mr Masataka Nakahara</td>
<td>JICA</td>
<td>CDIS Project Leader Advisor</td>
</tr>
<tr>
<td>Mr Nishida Yuichi</td>
<td>JICA</td>
<td>Resident Representative, JICA</td>
</tr>
<tr>
<td>Mr Tomio Shichiri,</td>
<td>FAO Field Office</td>
<td>Resident Representative</td>
</tr>
<tr>
<td>Mr Moeen Siraj</td>
<td>FAO Field Office</td>
<td>Project Manager</td>
</tr>
<tr>
<td>Mr Mohammad Junaid Sahibzada</td>
<td>USAID Kabul</td>
<td>Project Manager</td>
</tr>
<tr>
<td>Mr Toru Konishi, Senior Economist, Pakistan.</td>
<td>World Bank</td>
<td>Senior Economist, Task Team Leader OFWB</td>
</tr>
<tr>
<td>Zhijun Chen</td>
<td>FAO HQ</td>
<td>?</td>
</tr>
<tr>
<td>Dr Qayoum Karim</td>
<td>Kabul University</td>
<td>Professor and Trainer in the project</td>
</tr>
<tr>
<td>Dr Waf-u-Rahman</td>
<td>Kabul University</td>
<td>Professor and Trainer in the project</td>
</tr>
<tr>
<td>Suman Sijapati</td>
<td>FAO</td>
<td>Chief Technical Advisor</td>
</tr>
<tr>
<td>Abdul Resthtin</td>
<td>Project Staff</td>
<td>Knowledge Management Specialist</td>
</tr>
<tr>
<td>Mohammad Asif,</td>
<td>Project Staff</td>
<td>Natural Resources Management Specialist</td>
</tr>
<tr>
<td>Jawad Darwih</td>
<td>Project Staff</td>
<td>Agronomist</td>
</tr>
<tr>
<td>Laxman Sharma</td>
<td>Project Staff</td>
<td>Consultant (Training Manuals)</td>
</tr>
</tbody>
</table>
## Appendix 5. Trainings, participants and summary of programmes

<table>
<thead>
<tr>
<th>Name of the trainings</th>
<th>No. of participants</th>
<th>Objectives</th>
</tr>
</thead>
</table>
| Skill development training             | 266                 | The participants (Irrigation Department (ID), DAIL and other related organizations staff) skills developed in the following topics:  
• English language skill development trainings: trainings have been conducted for ID and DAIL staff in order to develop their language skills.  
• Geographic information system (GIS) skill development trainings: the trainings have been conducted to ID and DAIL engineers in order to create irrigation database in their both central and provincial offices, Web-based GIS technology/online GIS to provide information regarding irrigation sources, Metadata, Hydrological data creation, preparation of Maps using Desktop GIS, data sources and pictures |
| Introductory training                  | 313                 | The participants (ID, DAIL and other related organizations staff) received introductory trainings and enhanced their related knowledge in the following topics:  
• High efficiency irrigation system: trainings have been conducted to ID and DAIL staffs in order introduce the on-farm irrigation techniques.  
• Training on capacity building and strengthening of Irrigation Associations (IAs): this training has been conducted for introduction to institution aspects of irrigation.  
• Training on design of irrigation structures: introduction to irrigation-related topics.  
• Spate irrigation training (Flood base): introduction to land and water management topics.  
• Online Live Presentation on Spate Irrigation Training Course: introduction to land and water management topics.  
• Participatory Irrigation Management (PIM) Training: Introduction to Institutional Aspects of Irrigation.  
• Practical Training for irrigation Engineers on Quality Assurance and Quality Control: Introduction to Irrigation Engineering Related Topics.  
• Training on Construction Supervision and Management: Introduction to Irrigation Engineering Related Topics.  
• Training on Survey and Design: Introduction to survey related Topics.  
• Training on Field Irrigation Application Methods: Introduction to Land and Water Management Topics.  
• Training on Field Irrigation Application Methods: Introduction to Land and Water Management Topics.  
• Training on Basic Concept of Soil Fertility and its Interface with Irrigation: Introduction to Land and Water Management Topics.  
• Training on Crop Water Requirement and its Application to Irrigation: Introduction to Land and Water Management Topics.  
• Training on Laser Land Levelling for Improving On-farm Water Management: Introduction to Land and Water Management Topics.  
• Training on Field Irrigation Application Methods: Introduction to Land and Water Management Topics.  |
| Field days                             | 237                 | Participants conducted field days and introduced new irrigation techniques and technologies as follows:  
• Field Day on Drip Irrigation Orchard Nursery Practical Training: Introduction to New Irrigation Technology.  
• Field Day on Tomato Harvesting Stage: Irrigation and Agronomic Practices for Tomato Crop.  
• Training on Irrigation and Agronomic Practices for Grapes Orchard: Irrigation Technology.  
• Field Day on Drip irrigation: Irrigation and Agronomic Practices for Grape.  
• Field Day on Laser Land Levelling: Laser Land Levelling.  
• Field day at Badam Bagh Research Station to demonstration the vegetable cultivation: Irrigation and Agronomic Practices for Vegetable Crop.  
• Field Day on Harvest of Potato Crop: Irrigation and Agronomic Practices for Potato Crop.  
| On the job training | 224 | **On-the-Job-Training (OJT) have conducted to the participants in the following topics:**  
- OJT on Hand over of Zer Darak irrigation Scheme: Operation and Maintenance of irrigation systems.  
- On Job Training on Procurement of Irrigation Schemes: procurement topics.  
- OJT Workshop on Feasibility and Site Selection: Feasibility Assessment and Scheme Selection.  
- OJT on Construction and Supervision of Irrigation Schemes: Construction Supervision.  
- On-the-Job Training on Irrigation Scheme Design: Engineering Design Topics.  
- On the job training on technical survey and plotting of irrigation schemes: Technical Survey.  
- On the Job Training on Diagnostic Analysis of Pilot Irrigation projects: Diagnostic Analysis.  
- Establishment and strengthening of Irrigation Association: Establishment of Irrigation Association. |
| Workshops | 583 | **The following Workshops have been conducted for the recap, review and consultative issues for the irrigation systems and related manuals:**  
- Consultative Workshop on Implementing Irrigation Projects: Consultative Workshop.  
- Knowledge Sharing Workshop on Japan Training: Recap Workshop.  
- Consultative Workshop on Fields of Irrigation Database: Consultative workshop/  
- Consultative Workshop on Irrigation Policy - different Regions of Afghanistan: Consultative workshop.  
- Workshop on exchange meeting for the participants of Japan training: Recap Workshop.  
- Review Workshop of Past Trainings in Japan: Recap workshop.  
- Discussion Workshop on Design Manual: Review workshop.  
- Regional Workshop on National Irrigation Policy: Consultative Workshop.  
- Recap Workshop for the Irrigated Agriculture Planning, Implementation and Management Course in Japan: Recap Workshop. |
| Abroad trainings | 92 | **Abroad trainings have been conducted and enhanced the capacity of trainers and trainees in the following topics:**  
- GIS and RS International Advanced Training: Third-country Training on GIS advance topics.  
- Irrigation Project Planning, Implementation and Management: Capacity building trainings in Japan.  
- On-Farm Water Management Training in Iran: irrigation systems.  
- Application of Remote Sensing and GIS in Irrigation: Third-country Training.  
- ICID Conference on Innovate to Improve Irrigation Performance: Irrigation Related International Conferences. |
| farmers' training | 138 | **The trainings conducted to the Farmers and enhanced their capacities and experiments in following related areas:**  
- Operation and Maintenance of Drip Irrigation system: Operation and Maintenance of irrigation systems.  
- Exposure Visit to Nangarhar: Exposure visit to observe best irrigation practices.  
- Training for Deh Sabz and Mir Bachakot Irrigation Association Members and Farmers on Suitable Irrigation Methods: Suitable Irrigation Methods.  
- OJT on Hand over of Zer Darak irrigation Scheme: Operation and Maintenance of irrigation systems.  
- Training for Deh Sabz and Mir Bachakot Irrigation Association Members and Farmers on On-farm Irrigation Techniques: On-farm Irrigation Techniques. |
Appendix 6. List of documents consulted

Main Documents

Project Concept Note
Project Note
Institutional Assessment and Capacity Assessment Report (July, 2014)
Amendment 1 to the Contract Agreement between JICA and FAO for CDIS
Project Results Matrix
Project Risk Matrix

Other Documents and Reports (Progress Reports)
First Semi-Annual Progress Report (December 2013 – June 2014)
Second Semi-Annual Progress Report (June-December, 2014)
Fifth Semi-Annual Progress Report (January - June 2016)
Sixth Semi-Annual Progress Report (July-December 2016)
Final Report (May, 2017)
First Quarterly Progress Report (January – March, 2015)
Second Quarterly Progress Report (June- September 2015)
Third Quarterly Progress Report (June – September 2015)
Fourth Quarterly Report (October – December 2015)
Monitoring and Evaluation Framework for Assessing the Performance of ID (December, 2014)
Proposal – Institutional Reform of Irrigation Sub-sector in Afghanistan (September, 2016)

Training and Workshop Reports

Construction Work Completion Report – Badam Bagh Research Station
Exposure Visit to Sheesham Bagh Research Station (October, 2016)
Field Day on Potato Tuber Bulking Stage
Field Day Report on Irrigation and Water Conservation (June 2015)
Seasonal Report Tomato Crop – Field Demonstration – Deh Sabz Distric (December, 2016)
Report Field Day on Grapes Harvesting Stages (October, 2016)
Report Field Day on Tomato Harvesting Stage (September, 2016)
Seasonal Report of Field Demonstration – Grapes Orchard – Mirbacha Kot District Field Plot (December, 2016)
Field Day on Irrigation Agronomy Instruments (June, 2016)
Field Day Report on Installation of Drip Irrigation – Mir Bachakot District (May, 2016)
Seasonal Report – Potato Crop (Spring, 2015)

Consultative Workshop National Irrigation Policy – Balkh Region (December, 2016)
Consultative Workshop Report on National Irrigation Policy – Heart Region (December, 2106)
Training Report on Geo-Informatics (June, 2014)
Training Report of Basic Concept of Soil Fertility and Its Interface with Irrigation (October, 2014)
Training Report “Application of Remote Sensing (RS) and GIS in Irrigation (March, 2016)
Report on Participatory Irrigation Management (PIM) (May, 2016)
Workshop on Land Laser Levelling (August, 2016)
Training Report – Spate Irrigation Online Training (October, 2016)
Report on the participation to the Second World Irrigation Forum (November, 2016)
Training Report – On-Farm Water Management- Iran (September, 2016)
Training Report on Irrigation Project Planning, Implementation and Management Training in Japan (May, 2016)
Proceeding of the Review Workshop on Japan Trainings (October, 2015)
Report on Spate Irrigation Training (December, 2016)
Training Report GIS Basic – Batch II (December, 2016)

Back-to-Office Reports

Participation in ICID Conference (October 2015)
Back-to Office Reports

Reports on the country/sector.


3 This policy seeks to (a) fill the policy gap, (b) facilitate and guide interventions in the irrigation sub-sector and (c) contribute to sustainability and more equitable distribution of benefits across irrigation systems and across agro-environments. It further recognizes the need for close coordination amongst stakeholders within the irrigation sub-sector, and the agricultural and water sectors more broadly. The Policy further aims to contribute to the country’s priorities for addressing the adverse impacts of climate change, as stipulated in Afghanistan’s Intended National Determined Contribution and other instruments.

Purpose

4 To promote the sound development of the irrigation sub-sector, to increase the productive area under irrigation, to trigger job creation and rural employment, strengthen domestic agricultural production, improve food security and address water shortage as well as problems of salinity and drainage.

Specific objectives

- rehabilitate, modernize and expand irrigated lands, particularly in informal irrigation;
- improve productivity of land and water resources use;
- strengthen the legal and institutional framework, and the capacity of stakeholders.

Four overarching policy areas

- sound investment framework and modernized irrigation infrastructure;
- sound institutional arrangement at government and community levels;
- adequate technical capacity across stakeholders;
- clear legal framework to define the role and responsibilities of the government and communities. In addition, high-level, cross-cutting policies are included.

Cross-cutting issues:

- encourage and enable involvement of relevant stakeholders at all stages of irrigation planning, development and implementation process, as well as in decision making processes in the irrigation sub-sector;
- promote and facilitate the participation of women in all aspects of irrigation management and investment decision making;
- evaluate and take into consideration the impacts of climate change and variability on irrigated agriculture, to ensure that climate change impacts are mainstreamed in sub-sector planning, that the sub-sector investments enhance the adaptive capacity and resilience of rural communities, and that hydraulic infrastructure is designed to withstand projected change;
- encourage and facilitate increased private sector involvement in irrigation development and management, particularly the national private sector, to accelerate the achievement of irrigation sub-sector goals and objectives, including engagement in technical studies, construction, operation and management, rehabilitation and other support requirements.
6. List of Annexes


Annex 1. Terms of Reference